



## DEVELOPMENT OF NURSE ROLE MODEL IN IMPROVING PATIENT SAFETY

Afeus Halawa\*, Setiawan, Bustami Syam

Faculty of Nursing, Universitas Sumatera Utara, Indonesia

### Article Information

Received: 17 December 2020

Revised: 20 May 2021

Accepted: 27 June 2021

### \*Corresponding Author

Afeus Halawa

[afeushalawa@gmail.com](mailto:afeushalawa@gmail.com)

### DOI

10.20884/1.jks.2021.16.2.1616

### ABSTRACT

Patient safety is an action to prevent or minimize the danger for the patient in health care services. Some of the adverse events experienced by patients during hospitalization might be caused by the unclear nurse's role in patient safety. Therefore, a model of the nurse's role in patient safety was needed. The purpose of this study was to develop a model of nurse's role in improving patient safety at the Deli General Hospital, Medan, Indonesia. This is a qualitative research with an action research approached involving 15 participants with criteria of associate nurses, a minimum length of working in the hospital for 2 years, and willingness to become research participants. Data collection was conducted through focus group discussion (FGD), observations, and a questionnaire about the nurse's role in patient safety. The data obtained were analyzed using content analysis and simple statistics. The result of this study was a model of the nurse's role in improving patient safety, with the outcome of increasing the knowledge of associated nurses. It can be concluded that proper implementation is important to raise awareness in preventing injuries in patients.

Keywords: Associate nurse; nurse role model; patient safety



ISSN : 1907-6637

e-ISSN : 2579-9320

### INTRODUCTION

WHO (2017) estimated that 1 in 10 patients admitted to a ward of hospital acquired injury, in addition it was estimated that 42.7 million of the 421 million patients treated worldwide have an adverse event. WHO (2020) recorded 134 million adverse events that occur each year, 2.6 million deaths per year due to unsafe services. Four out of 10 patients in inpatient and outpatient wards were injured. Based on the National Patient Safety Committee report, there were 7.465 incidents worldwide regarding patient unsafety from 2015 to 2019; there were 38% of near misses, 31% of non-injuries, and 31% of unexpected incidents in 2019 (Daud, 2020). The impact of the incident resulted in losses that cost about \$ 42 billion per year.

In low- and middle-income countries, hospitalization caused 134 deaths each year as well as 2.5 million adverse events that contribute to deaths annually. It was estimated that 5.7% to 8.4% million patients died each year due to poor quality of care (NASEM, 2018). WHO (2017) reported that 8% of patients had injuries, 83% had potential injuries, and 30% resulted in death (World Health Organization, 2017). Incidents regarding patient safety in Korea were 9.2% injuries and 7.4% of 5,744,566 hospitalized patients died as

a result of bad treatment (Jang et al., 2017). Based on hospital records in Vietnam, it was reported that there were 5.9% to 10.9% of infections resulting from hospitalization, meanwhile, in Indonesia, it was estimated that 20.4% of medication errors occurred in inpatient rooms during hospitalization (Slawomirsk & Auraaen, 2017).

Previous incidents of patient insecurity should encourage hospitals to pay attention to patient care management by preventing adverse events considering that patient safety is a priority in providing services in health services. One strategy to improve patient safety is to increase the involvement of nurses Carthon et al., (2019). Nurses play a major role in patient safety given that they are directly responsible for the continuity of patient care (Khater et al., 2015). Nursing intervention programs should be designed based on patient needs (Manning et al., 2016) and refer to the patient's knowledge and perception of safety culture and organizational commitment (Im & Park, 2018).

The application of the primary care delivery model has proven to be effective in improving the quality of nursing care delivery. Smolowitz et al. (2015) found that this model was effective in providing patient-centered care through

integrated services. At Deli Hospital, there are still near injury incidents, where the patient fell while trying to go to the bathroom. Therefore, it is necessary to design an incident prevention program. This study aimed to develop a model of the nurse's role in patient safety.

## METHOD

### Study design

The action research method used in this study, which uses 4 research stages Kemmis et al. (2014), that are reconnaissance stage, planning stage, acting and observing stage, and reflecting stage.

### Participant

Participants were 15 associate nurse who were obtained by a purposive sampling technique, where the nurses had the following inclusion criteria: 1) associate nurse in the Emergency Room, Intensive Care Unit, Operating Room, and Inpatient Room at Deli General Hospital, Medan, Indonesia, 2) length of time working in the hospital for at least 2 years, and 3) willing to be research participants.

### Instruments

The instrument used aims to determine the difference in the average knowledge before and after the application of the nurse role model. The instruments consist of a focus group discussion (FGD) guideline, an observation, and a questionnaire that had been scientifically tested by three experts in patient safety with a Content Validity Index (CVI) of 0.99. In addition, the observation and distribution of the questionnaire about the nurse role in patient safety was also conducted.

### Data collection

The study was conducted from March to August 2020, with the online FGD data collection method using Zoom meetings for approximately 60 minutes per session.

### Data analysis

The quantitative data obtained from the measurement of knowledge were analyzed by a descriptive statistic. Qualitative data were analyzed using content analysis.

### Ethical consideration

This research has received permission from the Research Ethics Committee with No: 78 / KEP/USU/2021. Ethical considerations in this study were ensuring the confidentiality of the data collected and asking the participants to sign the informed consent.

### Trustworthiness

Trustworthiness used credibility and was conducted using a member check technique, that was the researchers provided research data in the form of a theme matrix to be read by participants at the data validation stage to obtain certainty or objectivity of the data in this study.

## RESULT

The demographic characteristics of the 15 participants show that most of the participants (9 or 60.0%) were aged > 30 years, had Nursing Diploma III education level (8 or 53.3%), and had worked for >2 years (9 or 60.0%). The frequency distribution of participant demographic data at the Deli General Hospital can be seen in Table 1.

**Table 1. Characteristics of participants (n=15)**

Characteristics	f	(%)
<b>Age (years old)</b>		
21-25	1	6.7
26-30	5	33.3
> 30	9	60.0
<b>Level of education</b>		
Diploma III of Nursing	8	53.3
Bachelor of Nursing	4	26.7
Ners	3	20.0
<b>Working period (months)</b>		
24-36	2	13.3
37-48	4	26.7
> 48	9	60.0

### Reconnaissance stage

The results of data collection at this stage were four themes, including 1) implementation of patient safety in the room, 2) supporting factors in implementing patient safety, 3) inhibiting factors in implementing patient safety, and 4) expectations related to the implementation of patient safety.

The results of knowledge measurement using a questionnaire showed that most of the participants had sufficient knowledge (8 or 53.3%), while the knowledge of the other seven respondents (46.7%) was categorized as good knowledge with an average value of 14.5. The distribution of participant knowledge at the Deli General Hospital can be seen in Table 2.

**Table 2. Knowledge of participants in the reconnaissance stage (n = 15)**

Knowledge	f	%	Mean
Good	7	46.7	
Enough	8	53.3	14.5
Less	0	0	

Based on data collection at the reconnaissance stage, two findings were found consisting of: 1) the knowledge of the nurse in charge of the role in improving patient safety was mostly in the sufficient category (53.3%), and 2) there was no role model of the nurse in improving patient safety.

### Planning stage

At this stage, the researchers and participants discussed the preparation of the tentative role model of staff nurses, continuing with the planning schedule for nurse role models in patient safety.

### Acting and observing stage

The observation results from the first stage of implementation showed that the nurses were in charge of educating patients but not re-evaluating. This is not in accordance with existing role models, in which after providing information or educating patients and families, nurses must evaluate their understanding.

### Reflecting stage

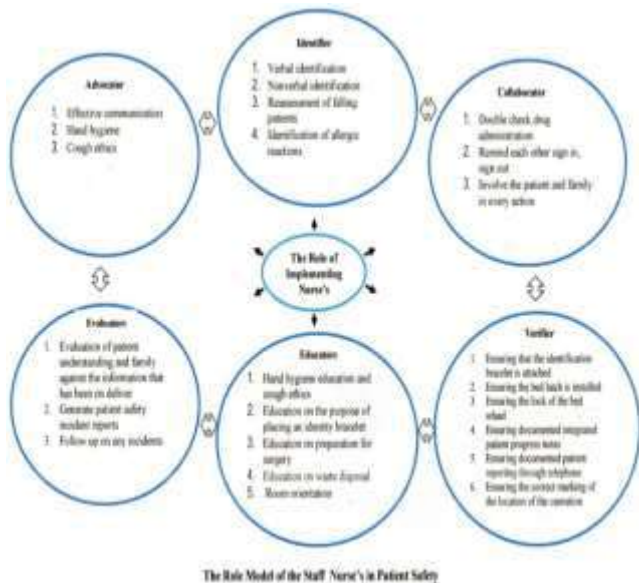
The results of the FGD found a supporting factor in the implementation, that is, the cooperation between nurses in the rooms and the head of the room who provide positive support. The results of the measurement of knowledge showed that all nurses have good knowledge in conducting patient safety with an average score of 19.2. Detailed information can be seen in Table 3.

**Table 3. Knowledge of participants in the reflecting stage (n = 15)**

Knowledge	f	%	Mean
Good	15	100	
Enough	0	0	19.2
Less	0	0	

**Outputs of action research**

The output of this study was a model of the nurse role in patient safety. This role model consists of 6 roles with 24 items as follows: 1) advocator, consisted of effective communication, hand hygiene, and cough ethics, 2) identifier, consisted of verbal identification, nonverbal identification, reassessment of falling patients, and identification of allergic reactions, 3) collaborator, consisted of double check drug administration, reminding each other sign in surgery, sign out surgery, and involving the patient and family in every action, 4) verifier, consisted of ensuring that the identification bracelet is attached, ensuring the bed latch is installed, ensuring the locking of the bed wheel, ensuring documented integrated patient progress notes, ensuring documented patient reporting through telephone, and ensuring the correct marking of the location of the operation, 5) educator, consisted of hand hygiene education and cough ethics, education on the purpose of placing an identity bracelet, education on preparation for surgery, and education on waste disposal and room orientation, and 6) evaluator, consisted of evaluation of patient understanding and family against the information that has been given, generating patient safety incident reports, and following up on any incidents.



**Outcomes of action research**

The impact of this research was in the form of increasing the knowledge of the nurses in implementing patient safety in the rooms. Before the application of the nurse role model, 66.7% of the participants have good knowledge and 33.3% of participants have sufficient knowledge. After the application of the nurse role model, 100% of the participants declared that they have good knowledge. The average value before and after implementation is 15.9 and 19.2, respectively. The increase in participants' knowledge about the nurse role in patient safety at the Deli General Hospital can be seen in Table 4.

**Table 4. Participants' knowledge improvement (n = 15)**

Knowledge	Before implement ation		After implement ation		Mean	
	f	%	f	%	Pre	Post
Good	10	66.7	15	100		
Enough	5	33.3	0	0	15.9	19.2
Less	0	0	0	0		

**DISCUSSION**

The first stage of developing a nurse role model in patient safety that we did was to approach participants by mingling and creating intimacy to gather information about problems and jointly find solutions to overcome the problems that arise. Tappen (2016) argued that it is necessary to build a trusting relationship between researchers and participants in collecting data to gain a deep understanding of the culture, language, and perceptions of the group being studied. This is in line with the opinion of Korstjens and Moser (2018) which stated that long-term involvement will build a relationship of mutual trust and openness in obtaining information or data.

Furthermore, the data were validated by triangulating as suggested by Fusch et al., (2018) who stated that, in qualitative research, researchers must triangulate to analyze data obtained from various sources to obtain appropriate information. The problems that arose in data collection through FGD were the absence of a role model for implementing nursing care to improve patient safety and the lack of knowledge of participants about the application of patient safety.

A role model in patient safety is needed to depict the roles that must be performed by the nurses in charge to prevent adverse events. Carter et al. (2018) stated that the role of nurses has been proven in improving patient safety in hospitals. The results of measuring knowledge using a questionnaire showed that most of the participants had good knowledge regarding patient safety (10 or 66.7%), while others had sufficient knowledge (5 or 33.3%), with an average value of 15.9. Knowledge is important in providing services as revealed by Chang et al., (2019) who noted that knowledge was the most important factor in preventing falls in the hospital, therefore nurses' knowledge needs to be improved through continuous education. Knowledge was the key to solving existing problems (Bartosiewicz et al., 2019).

At the planning stage, the researchers developed a plan to formulate a role model, a socialization model, and implement a nurse role model in patient safety. Therefore, it was important to maintain coordination through good communication with participants. This notion is confirmed by Hegney and Francis (2015) which stated that the factors that determine the success of action research are the commitment between the researchers and other parties, the routine agenda for reporting the course of activities, as well as goal expectations and the integrity of the research methodology. Vanagas and Stankevič, (2015) Iso support the idea that to achieve the plan's objectives, it is important to maintain coordination through communication between members, thereby improving the implementation of the plan. In the acting and observing stage, we conducted an FGD and measured the participants' knowledge about the implementation of patient safety in the hospital rooms. From the results obtained, we compared the results of this study with previous studies related to research methods, nurse role, and patient safety. According to Gibbs et al., (2017), it is necessary to include literature reviews as a reference or

thought material in critically analyzing the relationship between a research and other different studies. Literature review in research is important because it can include a critical analysis of the relationship between the research conducted and previous studies (Mongan-Rallis, 2018).

Based on the observation of the first round of implementation, it was found that the existing tentative model had not been implemented because nurses were not used to being exposed to the patient safety implementation based tentative model. This is in line with Johnston et al., (2019) who stated that increasing the frequency of performance will have an impact on service quality so that patients are protected from adverse events.

The implementation of interventions in the long term makes the participants sensitive about the importance of providing proper care in patient management (Moura et al., 2018). A longer involvement in the intervention can change and improve the therapeutic relationship, as well as increase the awareness and knowledge of nurses (Moreno-Poyato et al., 2019).

Uncooperative patients and families lead to unexpected achievements. Redley and Waugh (2018) stated that patient and family involvement greatly determines the success of achieving quality services. According to Bishop and Macdonald (2017), patient involvement was an important aspect of patient safety practice. Patient involvement creates a conducive environment to openness in providing information. This was supported by Clavel and Pomey (2020) who stated that to improve the quality of health care and services, the main strategy was to involve patients. This was the important basis for the nurse role model implementation to improve patient safety because nurses directly interact with patients for 24 hours.

At the reflecting stage, we evaluated the research activities that have been conducted. Kemmis S, McTaggart R, and Nixon R (2014) stated that the reflecting stage was a stage to understand the processes, problems, issues, and obstacles that occur in strategic action by considering the various situations that arose.

This study produced output in the form of a nurse role model of patient safety. Malley et al. (2015) argued that the role of nurses is essential for the success of the intervention. The involvement of nurses in the care process is the main key to the success of achieving the goals that have been set (Gutierrez et al., 2018). For instance, nurses have contributed, been key in implementing the intervention, and maximizing the impact of the action on drug prescribing errors (Norwood et al., 2015).

Missed nursing care can be prevented or managed by the application of patient safety culture intervention (Kim et al., 2018). Nurses have a role to motivate and educate patients and families to do activities that support the care process (Jang et al., 2017). As a nurse, it is necessary to ensure the safety of every action given to patients to avoid adverse events. Nurses become patients' protectors from adverse events while they were being treated in health care facilities (Kennedy and Kennedy, 2018).

To avoid events that threaten patient safety, nurses are suggested to collaborate with other health professionals. Wilson et al. (2016) stated that it is necessary for every member of the professional team to interact and collaborate with other parties so that security in practice can be

achieved. Torrens et al. (2020) revealed that the successful application of the role of nurses in providing health care is the result of building collaborative relationships with other health professionals. Good communication is the key to the success of good collaboration practices, therefore common goals can be achieved. For example, Park et al. (2018) revealed that good and effective communication in health care facilities has encouraged hygiene in improving patient safety. In addition to collaborating with other professionals, nurses also need to collaborate with patients and families to obtain accurate information.

According to Movahedi et al., (2016), the role of nurses in their relationship with patients is designed according to the needs of the patient. If the patient's needs are properly identified and the relationship between the nurse and patient is improved, the quality of care will increase. Nursing documentation is an important aspect and responsibility of nurses regarding accountability in health services. On the other hand, unclear information causes errors in providing actions that result in separate losses for patients (Tajabadi et al., 2020).

The outcome of this study was an increase in the nurse's knowledge about the role in implementing patient safety. The knowledge of the nurse before and after implementation of a good criterion was 66.7% and 100%, respectively, with an average score of 15.9 and 19.2, respectively. The results were in line with the research by França et al., (2019) which stated that the implementation of interventions has been effective in increasing knowledge; the more often a person gets information, the better his compliance with health preventive measures. Participants who are involved in the implementation will experience an impact in the form of increased knowledge (Setiawan et al., 2020). This is supported by Amiri et al., (2018) study that stated that individuals who are continuously exposed to the same information tend to have good knowledge. Knowledge impacts skills in practice improvement.

#### Limitations of the study

This action research was carried out in one cycle, so that researcher have not seen a major change in the application of the associate nurse role model in improving patient safety the implementing nurse role model in an effort to improve patient safety in hospital. Therefore, it was necessary to conduct action research in the long term (three cycles) so that changes in the behavior of nurse can be seen on a large scale.

#### CONCLUSION AND RECOMMENDATION

This study produced output in the form of the role model of staff nurse in patient safety with the results of the nurses' knowledge improvement. Appropriate implementation is essential to raise awareness in the prevention of incidents of injury to patients. It is hoped that the hospital management can apply the nurse's role model in patient safety as a guideline in managing patient safety in the hospital ward.

#### REFERENCES

- Amir Aslani, B., & Ghobadi, S. (2016). Studies on oxidants and antioxidants with a brief glance at their relevance to the immune system. *Life Sciences*, 146, 163–173. <https://doi.org/10.1016/j.lfs.2016.01.014>
- Amiri, M., Khademian, Z., & Nikandish, R. (2018). The effect of nurse empowerment educational program on patient safety culture: A randomized controlled trial.

- BMC Medical Education*, 18(1), 1–8. <https://doi.org/10.1186/s12909-018-1255-6>
- Bartosiewicz, A., Łuszczki, E., Róžański, A., & Nagórska, M. (2019). Analysis of determinants of readiness for professional development among Polish nurses. *International Journal of Environmental Research and Public Health*, 16(10), 1–12. <https://doi.org/10.3390/ijerph16101800>
- Bishop, A. C., & Macdonald, M. (2017). Patient involvement in patient safety: A qualitative study of nursing staff and patient perceptions. *Journal of Patient Safety*, 13(2), 82–87. <https://doi.org/10.1097/PTS.0000000000000123>
- Carter, S., Clifton, P. M., & Keogh, J. B. (2018). Effect of intermittent compared with continuous energy restricted diet on glycemic control in patients with type 2 diabetes: A randomized noninferiority trial. *JAMA Network Open*, 1(3), e180756. <https://doi.org/10.1001/jamanetworkopen.2018.0756>
- Carthon, J. M. B., Hatfield, L., Plover, C., Dierkes, A., Davis, L., Hedgeland, T., Sanders, A. M., Visco, F., Holland, S., Ballinghoff, J., Del Guidice, M., & Aiken, L. H. (2019). Association of nurse engagement and nurse staffing on patient safety. *Journal of Nursing Care Quality*, 34(1), 40–46. <https://doi.org/10.1097/NCQ.0000000000000334>
- Chang, K., Lee, T., & Jung, M. (2019). The effect of knowledge, attitude and perceptions of patient safety culture on fall prevention activities in mental hospital nurses. *Journal of the Korea Academia-Industrial cooperation Society*, 20(5), 372–383. <https://doi.org/10.5762/KAIS.2019.20.5.372>
- Clavel, N., & Pomey, M.-P. (2020). Enhancing patient involvement in quality improvement: How complaint managers see their roles and limitations. *Patient Experience Journal*, 7(3), 112–118. <https://doi.org/10.35680/2372-0247.1460>
- Daud, A. W. (2020). Sistem Pelaporan Insiden Keselamatan Pasien. *Perhimpunan Rumah Sakit Seluruh Indonesia*, 8(Oktober), 169–180. [https://persi.or.id/wp-content/uploads/2020/08/materi\\_drarjaty\\_ereport\\_web060820.pdf](https://persi.or.id/wp-content/uploads/2020/08/materi_drarjaty_ereport_web060820.pdf)
- De França, I. S. X., Coura, A. S., de Sousa, F. S., Aragão, J. da S., Silva, A. F. R., & Dos Santos, S. R. (2019). Acquiring of knowledge about sexual health by blind people: An action research. *Revista Latino-Americana de Enfermagem*, 27. <https://doi.org/10.1590/1518-8345.3006.3163>
- Fakhr-Movahedi, A., Rahnavard, Z., Salsali, M., & Negarandeh, R. (2016). Exploring nurse's communicative role in nurse-patient relations: A qualitative study. *Journal of Caring Sciences*, 5(4), 267–276. <https://doi.org/10.15171/jcs.2016.028>
- Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19–32. <https://doi.org/10.5590/josc.2018.10.1.02>
- Gibbs, P., Cartney, P., Wilkinson, K., Parkinson, J., Cunningham, S., James-Reynolds, C., Zoubir, T., Brown, V., Barter, P., Sumner, P., MacDonald, A., Dayananda, A., & Pitt, A. (2017). Literature review on the use of action research in higher education. *Educational Action Research*, 25(1), 3–22. <https://doi.org/10.1080/09650792.2015.1124046>
- Gutierrez, L. de S., Santos, J. L. G. Dos, Peiter, C. C., Menegon, F. H. A., Sebold, L. F., & Erdmann, A. L. (2018). Good practices for patient safety in the operating room: nurses' recommendations. *Revista Brasileira de Enfermagem*, 71(1), 2775–2782. <https://doi.org/10.1590/0034-7167-2018-0449>
- Hegney, D. G., & Francis, K. (2015). Action research: changing nursing practice. *Nursing Standard (Royal College of Nursing (Great Britain) : 1987)*, 29(40), 36–41. <https://doi.org/10.7748/ns.29.40.36.e8710>
- Im, S., & Park, M. J. (2018). The effects of patient safety culture perception and organizational commitment on patient safety management activities in general hospital nurses. *Journal of Digital Convergence*, 16(6), 259–270. <https://www.koreascience.or.kr/article/JAKO201819757620266.page>
- Jang, H.-E., Song, Y., & Kang, H.-Y. (2017). Nurses' perception of patient safety culture and safety control in patient safety management activities. *Journal of Korean Academy of Nursing Administration*, 23(4), 450. <https://doi.org/10.11111/jkana.2017.23.4.450>
- Johnston, L. D., Miech, R. A., O'Malley, P. M., Bachman, J. G., Schulenberg, J. E., & Patrick, M. E. (2019). Monitoring the Future: National survey results on drug use 1975-2018. 2018 Overview: Key findings on adolescent drug use. *The National Institute on Drug Abuse at The National Institutes of Health*, 1–104.
- Kemmis S; McTaggart R; Nixon R. (2014). *The Action Research Planner: Doing Critical Participatory Action Research*. Singapore: Springer. <https://doi.org/10.1007/978-981-4560-67-2>
- Kennedy, G., & Kennedy, F. (2018). Surgical Agency. *Kennedys' Simulations for Negotiation Training*, 25(1), 157–163. <https://doi.org/10.4324/9781315251127-16>
- Khater, W. A., Akhu-Zaheya, L. M., Al-Mahasneh, S. I., & Khater, R. (2015). Nurses' perceptions of patient safety culture in Jordanian hospitals. *International Nursing Review*, 62(1), 82–91. <https://doi.org/10.1111/inr.12155>
- Kim, K. J., Yoo, M. S., & Seo, E. J. (2018). Exploring the influence of nursing work environment and patient safety culture on missed nursing care in Korea. *Asian Nursing Research*, 12(2), 121–126. <https://doi.org/10.1016/j.anr.2018.04.003>
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124. <https://doi.org/10.1080/13814788.2017.1375092>
- Malley, A., Kenner, C., Kim, T., & Blakeney, B. (2015). The role of the nurse and the preoperative assessment in patient transitions. *AORN Journal*, 102(2), 181.e1-181.e9. <https://doi.org/10.1016/j.aorn.2015.06.004>
- Manning, M. Lou, Pfeiffer, J., & Larson, E. L. (2016). Combating antibiotic resistance: The role of nursing in antibiotic stewardship. *American Journal of Infection Control*, 44(12), 1454–1457. <https://doi.org/10.1016/j.ajic.2016.06.023>

- Mongan-Rallis, H. (2018). *Guidelines for writing a literature review*. <https://www.d.umh.edu/~hrallis/guides/researching/litreview.html>
- Moreno-Poyato, A. R., Delgado-Hito, P., Leyva-Moral, J. M., Casanova-Garrigós, G., & Montesó-Curto, P. (2019). Implementing evidence-based practices on the therapeutic relationship in inpatient psychiatric care: A participatory action research. *Journal of Clinical Nursing*, 28(9–10), 1614–1622. <https://doi.org/10.1111/jocn.14759>
- Moura, L. V. C., Pedreira, L. C., Menezes, T. M. de O., Gomes, N. P., Coifman, A. H. M., & Santos, A. de A. (2018). Management of elderly people with Stroke: strategies based on action research. *Revista Brasileira de Enfermagem*, 71(6), 3054–3062. <https://doi.org/10.1590/0034-7167-2017-0915>
- Norwood, C. W., Biviji-Sharma, R., Knotts, A., Omenka, I., Stone, C., & Purviance, D. (2015). Fighting prescription drug abuse through state policy. *Journal of Addictions Nursing*, 26(4), 203–207. <https://doi.org/10.1097/JAN.0000000000000097>
- Park, K. O., Park, S. H., & Yu, M. (2018). Physicians' experience of communication with nurses related to patient safety: A phenomenological study using the Colaizzi method. *Asian Nursing Research*, 12(3), 166–174. <https://doi.org/10.1016/j.anr.2018.06.002>
- Setiawan, S., Elizadiani Suza, D., & Arruum, D. (2020). Development of a patient safety round guideline for nurse managers: Action research study in Indonesia. *Kontak*, 22(3), 159–164. <https://doi.org/10.32725/kont.2020.025>
- Slawomirsk L, Auraaen A, & K. N. (2017). The Economics of patient safety. Maret. <https://www.oecd.org/els/health-systems/The-economics-of-patient-safety-March-2017.pdf>
- Smolowitz, J., Speakman, E., Wojnar, D., Whelan, E. M., Ulrich, S., Hayes, C., & Wood, L. (2015). Role of the registered nurse in primary health care: Meeting health care needs in the 21st century. *Nursing Outlook*, 63(2), 130–136. <https://doi.org/10.1016/j.outlook.2014.08.004>
- Tajabadi, A., Ahmadi, F., Sadooghi Asl, A., & Vaismoradi, M. (2020). Unsafe nursing documentation: A qualitative content analysis. *Nursing Ethics*, 27(5), 1213–1224. <https://doi.org/10.1177/0969733019871682>
- Tappen, R. M. (2016). *Advanced nursing research: From theory to practice*. Jones & Bartlett Publishers.
- Torrens, C., Campbell, P., Hoskins, G., Strachan, H., Wells, M., Cunningham, M., Bottone, H., Polson, R., & Maxwell, M. (2020). Barriers and facilitators to the implementation of the advanced nurse practitioner role in primary care settings: A scoping review. *International Journal of Nursing Studies*, 104, 103443. <https://doi.org/10.1016/j.ijnurstu.2019.103443>
- Vanagas, R., & Stankevič, J. (2015). Impact of coordination for organization process. *Intellectual Economics*, 8(2), 112. <https://doi.org/10.13165/ie-14-8-2-08>
- Wilson, A. J., Palmer, L., Levett-Jones, T., Gilligan, C., & Outram, S. (2016). Interprofessional collaborative practice for medication safety: Nursing, pharmacy, and medical graduates' experiences and perspectives. *Journal of Interprofessional Care*, 30(5), 649–654. <https://doi.org/10.1080/13561820.2016.1191450>
- World Health Organization. (2017). *Patient safety: making health care safer*. WHO/HIS/SDS/2017.11. <https://apps.who.int/iris/bitstream/handle/10665/255507/WHO-HIS-SDS-2017.11-eng.pdf?sequence=1&isAllowed=y>
- World Health Organization. (2020). World Patient Safety Day Goals 2020-21. Health Worker Safety: A Priority for Patient Safety. *Who/Uhl/hs/2020.8*. <https://apps.who.int/iris/rest/bitstreams/1330722/retrieve>