Factors relating to nurse satisfaction with communication during the bedside handover[☆]

Rina Karmila, Hanny Handiyani[*], Shanti Farida Rachmi

Faculty of Nursing, Universitas Indonesia, Depok, West Java, Indonesia

Abstract
Objective: This study is to describe the factors related to nurse satisfaction with communication during the bedside handover in the hospitals in Banda Aceh.
Method: This research used a descriptive correlation design with a cross-sectional approach. The data retrieval instruments used based on the General Self-Efficacy Scale instrument, the Handover Evaluation Scale (HES), and the Ferguson questionnaire.
Results: The results showed that there was a significant relationship between communication during the bedside handover, as perceived by the nurse, and nurse satisfaction ($p = 0.001$; $r = 0.829$), and showed that significant relationships between age, length of employment, self-efficacy, a nurse's job satisfaction.
Conclusion: The most dominant factors related to nursing satisfaction during the bedside handover were communication during the bedside handover variables. This study can be used as an evidence base regarding nurse satisfaction with communication during the bedside handover process to improve the quality of care and patient safety.
© 2019 Published by Elsevier España, S.L.U.

Introduction

Nurse satisfaction can be a driving force in improving work skills, the quality of care, and the communication provided by nurses to patients. The satisfaction of nurses with the care they provide to patients can improve performance, the quality of care, and communication with patients, which is an important aspect of the quality of hospital services.[1] Nurses who are dissatisfied with the nursing care they provide negatively affect the quality of care, which adversely affects patient satisfaction and loyalty to the hospital.[2] The handover is a key activity to ensure the continuity of nursing care in patients and patient safety.[3,4] Handover communication errors are major factors in patient safety incidents. Communication errors were reported as a major contributing factor in more than 70% of all sentinel events, and communication errors that occurred during the patient

handover led to 12% of all patient safety incidents.[5,6] In addition, 489 sentinel events were caused by communication errors in 2014.[7]

Nurse satisfaction during the handover is important in improving service quality by ensuring the continuity of a patient's nursing services, especially with regard to communication during bedside handovers. The problem is that nurses are not yet satisfied with the communication applied during the bedside handover, which has led to the non-optimal implementation of the bedside handover. Research shows that the percentage of nurses who are not satisfied with the handover process between nursing shifts is around 22% in the UK and 61% in France, which causes the handover process to be non-optimal.[8] On average, nurses are not satisfied with the implementation of bedside handovers because they are believed to take a long time, so the implementation of communication during the bedside handover becomes ineffectiv.[9] In fact, 33.1% of nurses agreed or strongly agreed that information relevant to patient care was lost during the handover and that this would affect nurse satisfaction and the continuity of patient care.[3]

The relationship between effective communication implementation and nurse satisfaction is the key to the success of the handover process. Research found that nurse satisfaction increased after communication during the bedside handover.[10] Specifically, the frequency of the provision of a concise report containing information relevant to the patient's condition increased from 38% to 77.8%, and report accuracy increased from 72.4% to 83.4%. Communication during the bedside handover will improve the accuracy of information delivery, the fulfillment of nurse responsibilities, and patient involvement.[9,11,12]

The relationship between communication during the bedside handover and nurse satisfaction has never been studied in Indonesia, especially in Aceh, while nurse satisfaction itself is still a global issue that must be considered by governments and all health service agencies as a quality measurement of the nursing services provided. Effective communication during the bedside handover is one of the goals of patient safety and is required by the Indonesian government for any healthcare facility. Therefore, it is very important to conduct research on the relationship between the implementation of communication during the bedside handover and nurse satisfaction as a quality measurement of the health services provided and patient safety. This study focuses on nurses' perceptions of the implementation of communication during the bedside handover, as well as the characteristics of the nurses, including age, gender, level of education, length of employment, career success, and self-efficacy. The purpose of this study was to describe factors relating to nurse satisfaction with communication during the bedside handover in the hospitals in Banda Aceh.

Method

This research used a descriptive correlation design with a cross-sectional approach. This research was conducted in three hospitals in Banda Aceh, namely Hospital A, Hospital B, and Hospital C. The sample used in this study included 303 nurses. All nurses worked in inpatient wards (non-intensive), had a minimum of Nursing Diploma, and had been working for at least 3 days. In this research project, probability sampling via computer randomization techniques using the Excel program was adopted.

The independent variable in this study was communication during the bedside handover; the dependent variable was nurse satisfaction; and the confounding variables were the age, gender, education level, career ladder, length of employment, and self-efficacy of the nurses. The method of data retrieval used in this study was the questionnaire. The researchers were assisted by 20 enumerators, namely executive nurses with a minimum level of education and students who frequently conducted research. The data retrieval instruments used in this study consisted of questionnaires about the characteristics of nurses and the General Self-Efficacy Scale instrument developed by Aristi Born, Ralf Schwarzer and Marthias Jerussalem, consisting of ten statements scored on a Likert scale.

The questionnaire's statements about nurses' perceptions of the implementation of communication during the bedside handover were modified by the researchers based on survey instruments and the Handover Evaluation Scale (HES), created by Dr. Beverly O'Connell University, and have been approved by those concerned. The researcher grouped the statements in this questionnaire based on the communication phases proposed by Peplau (pre-interaction, orientation, work, and termination). These consisted of 20 statements scored on a Likert scale. This questionnaire was developed from the Ferguson questionnaire. All of the questionnaires have been tested for validity using a sample of 30 nurses. The correlation technique used was *Pearson Product Moment* correlation. The researchers also conducted a reliability test using *Cronbach's alpha*. The reliability test results derived using the *Cronbach's alpha* of the instruments used to measure communication during the bedside handover was 0.845, while for the instrument used to measure nurse satisfaction, the *alpha* value was 0.770. Both questionnaires were declared reliable.

The data analyses conducted in this study were univariate, bivariate, and multivariate. The univariate analysis was carried out by presenting categorical data, such as gender, education level, and career level, in the form of frequency and proportion distributions, while numerical data, such as the level of nurse satisfaction, the application of communication during the bedside handover, age, working period, and self-efficacy were presented in the form of median, standard deviation, and maximum and minimum values, with a 95% confidence level (CI).

The implementation of bivariate analysis in this study begins with a data normality test. The results of the data normality test of the independent and dependent variables in this study showed that all data were not normally distributed, so the researchers used Spearman's rank correlation test and the Mann–Whitney test. The multivariate analysis used in this study adopted a linear regression model to determine the factors that most influence nurse satisfaction with communication during the bedside handover.

As an ethical consideration, all the instruments used were discussed in advance with the supervisor and examined via the Nursing Faculty ethics licensing process and the hospital nursing field before being disseminated. Data retrieval was carried out while considering research ethics. The researchers respected the dignity of respondents as human

Table 1 Overview of nurse satisfaction with communication during the bedside handover.

Variables	Median	SD	Min–Max	95% CI
Nurse satisfaction				
Hospital A	35	2.45	31–41	35.07–35.75
Hospital B	37	3.44	30–44	36.34–37.92
Hospital C	37	1.64	33–39	35.77–37.15

beings by conducting informed consent by the respondent in advance to participate in voluntary research. Researchers also maintained the confidentiality of respondents in terms of their identity (*anonymity*) and data (*confidentiality*).

Results

Nurse satisfaction with communication during the bedside handover in the three hospitals in Banda Aceh has not reached targets, specifically the minimum service standard of 90% (Table 1). Table 2 illustrates that nurses' perceptions of the implementation of communication during the bedside handovers in the three hospitals in Banda Aceh indicated that such communication was good enough (above 80%). The majority gender of the nurses in the three hospitals in Banda Aceh was female, with 238 female nurses (78.5%). The most common education level was DIII nursing, achieved by as many as 235 nurses (77.6%), and the most common level of career attainment was PK I and PK II, achieved by as many as 147 nurses (48.5%) (Table 3). The mean age of nurses in the hospitals in Banda Aceh was over thirty years old. The mean length of employment was more than five years, and the highest self-efficacy among nurses was observed in hospital C, with a score of 35 (87.5% of the total value). The lowest score was 19, and the highest score was 40 (Table 4).

The relationship between the independent variables and the dependent variable

The results of the study on 303 nurses showed that there was a significant relationship between communication during the bedside handover, as perceived by nurses, and nurses' satisfaction at hospitals in Banda Aceh. The strength of the relationship was strong ($p = 0.001$; $r = 0.829$).

There was a significant relationship between nurse age and satisfaction at the hospitals in Banda Aceh, though the strength of the relationship was weak ($p = 0.001$; $r = 0.236$). There was no significant relationship between gender and nurse satisfaction at the hospitals in Banda Aceh, as indicated by a p-value $= 0.381$. The bivariate analysis of other factors found no significant relationship between the level of education and the satisfaction of nurses at the hospitals in Banda Aceh, as indicated by $p = 0.439$. There was no significant relationship between career attainment and nurse satisfaction at the hospitals in Banda Aceh, as indicated by $p = 0.387$. There was a significant relationship between the length of employment and nurse satisfaction at hospitals in Banda Aceh, though this relationship was weak ($p = 0.001$; $r = 0.197$). There was a significant relationship between self-efficacy and nurse satisfaction at the hospitals in Banda

Aceh, with the strength of this relationship being moderate ($p = 0.001$; $r = 0.340$).

The researcher conducted a multivariate analysis to identify the most dominant factors affecting the satisfaction of nurses using linear regression. The results indicate that the most dominant factor affecting nurse satisfaction is communication during the bedside handover (Beta $= 0.793$) (Table 5).

Discussion

Nurse satisfaction

The results of the nurse satisfaction analysis on communication during the bedside handover indicated that the level of nurse satisfaction with communication during the bedside handover in the three hospitals in Banda Aceh was still below 90%. This is in line with the research who stated that most nurses were not satisfied with the communication delivered during the bedside handover.[1] This illustrates that the level of responsibility of nurses during the implementation of effective communication during the bedside handover is not optimal or that the transfer of information about the condition and status of patient care has not been relevant or not adequate.

There are still nurses who are not satisfied with the bedside handover process. This is in line with who stated that nurses' satisfaction with the communication delivered during the bedside handover was influenced by the delivery of adequate information from one nurse to another.[11,12]

The results regarding nurse satisfaction with the bedside handover at the three hospitals in Banda Aceh prove that communication during bedside handovers has not been effectively implemented by the nurses. Effective communication that is implemented optimally during the bedside handover will increase nurses' satisfaction with the implementation of bedside handovers, which will improve the quality of the bedside handover process. The proper communication during the bedside handover has an impact on patient results.[13] A nurse will feel satisfied when the patient receives high-quality healthcare, and this will increase the responsibility and accountability of the nurses in implementing bedside handovers.

Communication during the bedside handover, as perceived by nurses

The results of the analysis illustrates that the value of nurses' perceptions of communication during the bedside handover at hospitals is still not optimal, especially during the work phase. There are still nurses perceived that nurses plan their own patient care needs without involving the patients, information about the patient's nursing care is not in accordance with his or her needs, and relevant and important information is not delivered at the time of the bedside handover. Before study states that 40% of nurses perceive that nurses often provide irrelevant information about a patient's condition.[14] The delivery of adequate and effective information between nurses during the bedside handover is very important so that every nurse on duty can

Table 2 Overview of nurse perception of communication during bedside handover.

Variables	Median	SD	Min–Max	95% CI
Perceptions of nurses of communication during the bedside handover				
Hospital A	62	5.67	52–79	62.76–64.32
Hospital B	66	5.83	53–76	65.02–67.70
Hospital C	65	5.14	51–72	61.79–66.13
Pre-interaction				
Hospital A	11	1.23	7–12	10.28–10.62
Hospital B	10	1.13	8–12	9.95–11.00
Hospital C	11	1.46	7–12	9.95–10.47
Orientation				
Hospital A	19	2.15	15–25	19.15–19.75
Hospital B	21	1.99	15–23	20.12–21.03
Hospital C	20	2.21	16–24	18.65–20.51
Work				
Hospital A	20	2.45	14–28	20.23–20.90
Hospital B	21	3.00	16–28	21.34–22.72
Hospital C	21	2.87	14–24	19.37–21.80
Termination				
Hospital A	13	1.49	10–16	12.87–13.28
Hospital B	14	1.33	9–16	13.24–13.85
Hospital C	14	1.47	10–15	12.80–14.04

Table 3 Overview of gender, level of education, and career attainment of nurses.

Variables	Hospital A		Hospital B		Hospital C		Total	
	n	%	*n*	%	*n*	%	*n*	%
Gender								
Male	33	16.2	29	38.7	3	12.5	65	21.5
Female	171	83.8	46	61.3	21	87.5	238	78.5
Education level								
DIII	164	80.4	56	74.7	15	62.5	235	77.6
Ners	40	19.6	19	25.3	9	37.5	68	22.4
Career attainment								
PK I	107	52.5	30	40.0	10	41.7	147	48.5
PK II	88	43.1	45	60.0	14	58.3	147	48.5
PK III	9	4.4	0	0	0	0	9	3.0

effectively provide nursing care to patients according to their needs.[15–17]

The relationship between communication during the bedside handover, as perceived by nurses, and nurse satisfaction

The results of the study indicated that there was a significant relationship between communication during the bedside handover, as perceived by nurses, and nurse satisfaction at the hospitals in Banda Aceh. The results of this study are in line with research by Cairns and Jeffs, which stated that there is a significant relationship between nurses' perceptions of the implementation of communication during the bedside handover and nurse satisfaction. Increasing nurse satisfaction regarding the implementation of bedside handover communication will improve the implementation of the bedside handover.[10,12] Increased nurse satisfaction with the bedside handover process will increase the responsibility of nurses in terms of conveying relevant information about the condition of the patient so that they can manage their patients effectively. This will increase nurse satisfaction.

This is in line with the statement Baker that the implementation of the bedside handover will increase nurse satisfaction, which will ensure the delivery of relevant information about the patient's condition, patient trust, the nurse's sense of responsibility to provide effective and efficient information, and solid teamwork.[11] Effective communication during the bedside handover is related to

Table 4 Overview of age, length of employment, and self-efficacy of nurses.

Variables	Median	SD	Min–Max	95% CI
Age				
Hospital A	30	5.19	22–45	30.51–31.94
Hospital B	31	5.93	23–49	31.41–34.14
Hospital C	30	5.70	22–48	28.89–33.70
Length of employment				
Hospital A	5	3.23	1–16	5.61–6.50
Hospital B	6	4.12	3–19	6.25–8.15
Hospital C	5	3.27	3–18	4.37–7.13
Self-efficacy				
Hospital A	33	5.13	10–40	32.21–33.63
Hospital B	33	3.23	21–40	32.08–33.57
Hospital C	35	6.11	19–40	30.50–35.66

Table 5 Final stage modeling of multivariate variables associated with satisfaction.

No.	Model	B	Std. error	Beta	R square	p
(Constant)		8.531	1.068		0.699	0.001
1	Communication during bedside handover	0.381	0.016	0.793		0.001
2	Self-efficacy	0.088	0.019	0.152		0.001

nurse satisfaction and will improve the implementation of the bedside handover. The use of effective communication techniques during the handover between nursing shifts would increase nurse satisfaction because the information delivered would be more adequate and more structured, avoiding the loss of important information related to patient care.[18]

The relationship between nurse characteristics and satisfaction

The relationship between age and nurse satisfaction
The results of this study indicated that there was a significant relationship between age and nurse satisfaction with communication during the bedside handover in the three hospitals in Banda Aceh. This is in line with the results of the study which states that there is a relationship between age and nurse satisfaction with communication during the bedside handover, with older nurses being more satisfied than younger ones.[1] Research conducted by Klaus et al. also found that the age of a nurse is related to nurse satisfaction.[19]

The results of this study indicated that the average age of nurses who work in Hospital A, Hospital B, and Hospital C is 30 years, which is a productive age so that they have are likely satisfied with their work, including communication during bedside handovers. Nurses over 30 years old are more satisfied with communication during bedside handovers than nurses under 30 years old.[1] Age is one of the factors that determines how one communicates and makes decisions, as well as the quality of one's work. A person of productive age will have a high level of enthusiasm for providing quality nursing care to patients and contributing to

hospital development. Age will have an impact on how one thinks and works. The more mature a person is, the more mature he or she will be in his or her thinking, and the better his or her performance will be.[20]

The relationship between gender and nurse satisfaction
The results of this study indicated that there was no relationship between gender and nurse satisfaction at the three hospitals in Banda Aceh. This result is in line with Wuryanto research which states that there is no relationship between gender and nurse satisfaction. In addition, both female and male nurses at the three hospitals perceived that the communication process during the bedside handover was good enough (more than 75%).[21] In addition, nurses' perceptions of the importance of implementing effective communication during the bedside handover will affect their level of responsibility in terms of providing the best communication for patients, which will increase their satisfaction with the bedside handover process.[22]

The relationship between level of education and nurse job satisfaction
The results of this study showed that there was no relationship between the level of education and nurse satisfaction at the hospitals in Banda Aceh. This result is in line with the results of another study that found no relationship between the level of education and nurse satisfaction.[23,24] Level of education does not affect the satisfaction of nurses in the three hospitals in Banda Aceh. This is because most of the nurses who take part in the bedside handover are diploma nursing, so most nurses have the same understanding of the information delivered during the bedside handover and, thus, similar levels of satisfaction related to the

information conveyed. Differences in the levels of education among the nurses will affect nurses' expectations of their work. In such cases, their satisfaction levels will be different. The higher a nurse's educational level, the higher his or her desire to improve his or her performance and the care given to patients, which will affect nurse satisfaction. This is in accordance with Wuryanto which states that the higher one's educational level, the greater the challenges and responsibilities will be at work, which will increase nurse satisfaction.[21] However, because most of the nurses in the three hospitals were diploma nursing, they had the same perceptions regarding their satisfaction with communication during bedside handovers.

The relationship between career attainment and nurse job satisfaction

The results of this study showed that there was no relationship between career attainment and nurses' job satisfaction at the hospitals in Banda Aceh. These results are consistent with the results of Rizany, which found that there was no relationship between career attainment and the job satisfaction of nurses at hospitals.[23] The results of this study show that the three hospitals do not have an optimal division of tasks or clinical authority. The researcher conducted a short interview with the head of the nursing department at Hospital A, who stated that the nurse career ladder system had not been optimally implemented, because there were still nurses with high school and those with a DIV nursing background, so it was difficult to determine their career attainment because their educational backgrounds were not in accordance with Nursing Law No. 38 of 2014, which states that there are only two types of nurses, namely vocational (DIII) and professional (Ners or specialist nurses), thus making it difficult to share their clinical duties or authority. The researcher also interviewed the survey team that set up the career ladder system in Meuraksa Hospital. This was related to the career ladder system that stated that there would be only PK I and PK II in Hospital B, no policies regulating PKIII, and no scoring system in Hospital B for PK III. In the researcher's opinion, this could have affected the research results, namely regarding the lack of a relationship between career attainment and nurse job satisfaction.

Nursing career development plays an important role in increasing the competency of a nurse, allowing him or her to provide quality nursing care and improving nurse job satisfaction.[25] The career ladder system is important for nurses, allowing nurses to receive appreciation and recognition for their competencies. Such recognition can increase the motivation of nurses. Thus, the performance of nurses can improve, and quality services can be provided to patients.

The relationship between length of employment and nurse satisfaction

The results of this study showed that there was a significant relationship between the length of employment and nurse job satisfaction at the hospitals in Banda Aceh. These results are consistent with before study, which states that the length of employment is related to job satisfaction among nurses.[24,26] Nurses' job satisfaction can be influenced by nurses' work experience. It can be associated with the length of employment; the longer the period of employment for a particular person, the more skill he or she will have on the job. The average length of employment at the three hospitals in Banda Aceh is more than five years. Job satisfaction can be influenced by the length of employment among nurses. Nurses who have more than five years of experience feel more satisfied than nurses who have worked for less than 5 years.[27]

The relationship between self-efficacy and nurse job satisfaction

The results of the study showed that there was a significant relationship between self-efficacy and nurses' job satisfaction. These results are in line with before studies, which find that there is a relationship between nurses' self-efficacy and individual nurse characteristics and nurse job satisfaction.[28,29] The results of this study show that the self-efficacy of nurses in the three hospitals in Banda Aceh is above 80%. The job satisfaction of nurses regarding the implementation of communication during the bedside handover is also good, with the average percentage at the hospitals being above 80%. The assumption of the researchers was that the self-efficacy of the nurses in these three hospitals was high and that the nurses' job satisfaction regarding the implementation of communication during bedside handovers was also high. The high self-efficacy of nurses will cause nurses to work more skillfully, provide good nursing care to patients, implement effective communication during bedside handovers, and focus on patient recovery and safety. Nurses' self-efficacy influences their self-confidence and ability to provide patient-centered care, collaborate with patients and families in providing good nursing care, and formulate the overall goals of a patient care plan.[29]

Nurses with high self-efficacy will be able to carry out the bedside handover process properly, gather important and relevant information related to the conditions of patients who will be transferred during bedside handovers, recommend appropriate interventions for patients, involve patients in determining care plans, and improve safety patient by using the right information. This is in line with Heslin, which states that high levels of self-efficacy will increase the capacity of staff to collect relevant information, make the right decisions, and then take appropriate actions.[30]

The most dominant factor associated with nurse satisfaction

The results of the analysis of the most dominant factors related to nursing satisfaction at the hospitals in Banda Aceh showed that the most dominant were the variables related to communication during the bedside handover. The bedside handover process is important for nurses because through this process, can help provide the best nursing care for patients, ensure patient safety through the transfer of relevant information about the patient's condition, ensure patient safety and comfort, plan patient care needs together with patients, and increase teamwork. When all responsibilities are met by nurses correctly, the nurses will feel satisfied with their work. This is in line with before studies, which states

that the bedside handover is an important process for nurses and the best opportunity to ensure patient safety, foster relationships of trust with patients, and improve teamwork.[11,31]

The results of this study can be used by nursing managers as an evidence base in terms of assessing nurses' satisfaction with communication during the bedside handover process. Nursing managers must ensure nurse job satisfaction and thus appropriate work behavior and quality of care.

The results of this study have implications for students of nursing leadership and management in terms of learning and understanding the importance of nurse satisfaction as an indicator of the quality of nursing services in hospitals. The concept of communication relations during the bedside handover and its effect on nurse satisfaction, as seen in this study, can serve as a reference in the discussion of effective communication in handover. The results of this study can be used as preliminary data by future researchers and become a reference in future research in the field of leadership and nursing management related to the effect of nurses' self-efficacy on the effectiveness of communication during bedside handover or the impact of effective communication during the bedside handover on patient safety. Further research conducted via different methods could enrich the science of nursing management in Indonesia, especially in Aceh.

This study had certain limitations. One of the limitations was that the majority of data collection on nurse respondents was conducted on PK I and PK II nurses. Few nurse respondents had PK III, and this affected the results. Another limitation was the lack of demographic data on patient respondents, especially data on gender. There was one hospital at which all the respondents were women, so there was no relationship between sex and patient satisfaction during the bedside handover at that hospital.

Conflict of interests

The authors declare no conflict of interest.

Acknowledgment

References

1. Principe IC. Examining nurse satisfaction with a bedside handover report process. Walden University; 2017. Available from: http://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=4642&context=dissertations [Internet].

2. Mailam A. The effects of nursing care on overall patient satisfaction and predictive value on return-to-provider behavior: a survey study. Qual Manag Health Care. 2005;14:116–20, http://dx.doi.org/10.1097/00019514-200504000-00007.

3. Moreno-casbas MT, Alonso-poncelas E, Gómez-garcía T, Martinez-madrid MJ, Escobar-Aguilar G. Perception of the quality of care, work environment and sleep characteristics of nurses working in the National Health System. Enferm Clín (Engl Ed). 2018;28:230–9, http://dx.doi.org/10.1016/j.enfcli.2018.01.001.

4. Catalano K. Hand-off communication does affect patient safety. Plast Surg Nurs. 2009;29:266–70, http://dx.doi.org/10.1097/PSN.0b013e3181c20136.

5. Vinu M, Kane B. The use of a digital structured format for nursing shift handover to improve communication. In: Proceeding of 2016 IEEE 29th international symposium on Computer-Based Medical Systems (CBMS). USA: IEEE; 2016. p. 70–5, http://dx.doi.org/10.1109/CBMS.2016.72.

6. Pronovost PJ, Thompson DA, Holzmueller CG, Lubomski LH, Dorman T, Dickman F, et al. Toward learning from patient safety reporting systems. J Crit Care. 2006;21:305–15, http://dx.doi.org/10.1016/j.jcrc.2006.07.001.

7. Joint Commission. Sentinel event statistics released for 2014; 2015. Available from: http://www.jointcommission.org/assets/1/23/jconline_April_29_15.pdf [Internet].

8. Meissner A, Hasselhorn H, Behar M, Nezet O, Pokorski J, Gould D. Nurses' perception of shift handovers in Europe – results from the European nurses' early exit study. J Adv Nurs. 2007;57:535–42, http://dx.doi.org/10.1111/j.1365-2648.2006.04144.x.

9. Chaboyer W, McMurray A, Wallis M. Bedside nursing handover: a case study. Int J Nurs Pract. 2010;16:27–34, http://dx.doi.org/10.1111/j.1440-172X.2009.01809.x.

10. Cairns LL, Dudjak LA, Hoffmann R, Lorenz H. Utilizing bedside shift report to improve the effectiveness of shift handoff. J Nurs Adm. 2013;43:160–5, http://dx.doi.org/10.1097/NNA.0b013e318283dc02.

11. Baker SJ. Bedside shift report improves patient safety and nurse accountability. J Emerg Nurs. 2010;36:355–8, http://dx.doi.org/10.1016/j.jen.2010.03.009.

12. Jeffs L, Acott A, Simpson E, Campbell H, Irwin T, Lo J, et al. The value of bedside shift reporting enhancing nurse surveillance, accountability, and patient safety. J Nurs. 2013;28:226–32, http://dx.doi.org/10.1097/NCQ.0b013e3182852f46.

13. Hedstrom R. RN to RN shift report: moving to the bedside; 2013. Available from: https://pdfs.semanticscholar.org/7698/ec79711b004c2e4c3afe5e04f6e692d1237e.pdf%0A%0A [Internet].

14. O'Connell, Macdonald K, Kelly C. Nursing handover: it's time for a change. Contemp Nurse. 2008;30:2–11, http://dx.doi.org/10.5172/conu.673.30.1.2.

15. Kerr D, Lu S, McKinlay L. Bedside handover enhances completion of nursing care and documentation. J Nurs Care Qual. 2013;28:217–25, http://dx.doi.org/10.1097/NCQ.0b013e31828aa6e0.

16. Reinbeck BDM, Fitzsimons V. Improving the patient experience through bedside shift report. Nurs Manag. 2013;44:16–7, http://dx.doi.org/10.1097/01.NUMA.0000426141.68409.00.

17. Welsh CA, Flanagan ME, Ebright P. Barriers and facilitators to nursing handoffs: recommendations for redesign. Nurs Outlook. 2010;58:148–54, http://dx.doi.org/10.1016/j.outlook.2009.10.005.

18. Karmila R, Handiyani H, Adiningtyaswati E. Description of nursing shift handover implementation in one of provincial public hospitals in DKI Jakarta province. Int J Med Pharm Res. 2018;8:39–48.

19. Klaus SF, Ekerdt DJ, Gajewski B. Job satisfaction in birth cohorts of nurses. J Nurs Manag. 2012;20:461–71, http://dx.doi.org/10.1111/j.1365-2834.2011.01283.x.

20. Robbins SP, Judge TA. Organizational behavior. 17th ed. Edinburgh: Pearson; 2017.

21. Wuryanto E [unpublished thesis] Hubungan lingkungan kerja dan karakteristik individu dengan kepuasan kerja perawat di rumah sakit umum daerah tugurejo semarang. Depok: Universitas Indonesia; 2010.

22. Smith LD. Communication process improvement among bedside nursing staff on a skilled nursing rehabilitation unit. Grand Valley State University; 2016. Available

from: http://scholarworks.gvsu.edu/kcon_doctoralprojects [Internet].

23. Rizany I [unpublished thesis] Hubungan implementasi manajemen penjadwalan dinas perawat terhadap kepuasan perawat beberapa rumah sakit di Jakarta. Depok: Universitas Indonesia; 2017.

24. Al-Dossary R, Vail J, Macfarlane F. Job satisfaction of nurses in a Saudi Arabian university teaching hospital: a cross-sectional study. Int Nurs Rev. 2012;59:424–30, http://dx.doi.org/10.1111/j.1466-7657.2012.00978.x.

25. Hariyati RTS. Perencanaan pengembangan dan utilisasi tenaga keperawatan. 1st ed. Jakarta: Rajawali Pers; 2014.

26. Hayes B, Bonner A, Pryor J. Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. J Nurs Manag. 2010;18:804–14, http://dx.doi.org/10.1111/j.1365-2834.2010.01131.x.

27. Al Maqbali MA. Factors that influence nurses' job satisfaction: a literature review. Nurs Manag. 2015;22:30–7, http://dx.doi.org/10.7748/nm.22.2.30.e1297.

28. Molinari DL, Monserud M. Rural nurse cultural self-efficacy and job satisfaction. J Transcult Nurs. 2009;20:211–8, http://dx.doi.org/10.1177/1043659608330350.

29. Tyler S, Bourbon E, Cox S, Day N, Fineran C, Rexford D, et al. Clinical competency, self-efficacy, and job satisfaction. J Nurses Staff Dev. 2012;28:32–5, http://dx.doi.org/10.1097/NND.0b013e318240a703.

30. Heslin PA, Klehe UC. Self efficacy. Encyclopedia industrial/organizational psychology, vol. 2. Thousand Oaks: Sage; 2006. p. 705–8.

31. Thomas L, Porter PD. Blending evidence and innovation improving intershift handoffs in a multihospital setting. J Nurs Care Qual. 2012;27:116–24, http://dx.doi.org/10.1097/NCQ.0b013e318241cb3b.