ORIGINAL ARTICLE

Empowering the Implementation of Patient Handover with Increasing Nurse Knowledge and Attitude at X General Hospital Indonesia

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ABSTRACT

Introduction: In several studies it was described that ineffective communication during patient handover between the hospital departments or during shift-to-shift transfer result in discontinuity of care, inappropriate treatment, and potential risks of injury for patients. The patient handover is a professional responsibility and accountability related to nursing care. SBAR (Situation - Background - Assessment – Recommendation) method as part of the international patient safety goals(IPSGs) was developed to improve communication breakdown. Knowledge and attitude are essential factors associated with the implementation of patient handover, yet limited research was done on this. The purpose of this study was to examine the relationship between nurse knowledge and attitude toward a patient handover. **Methods:** A cross-sectional approach was applied in this study. A total of 61 nurses consisting of the head nurse, and team leaders participated in sampling technique done by simple random sampling method from the hospital database. Data collection used a structured questionnaire with a good result of validity and reliability. Univariate and bivariate test were used for data analyzing with Statistical Package for the Social Science (SPSS) Version 18. **Results:** There is a relationship between nurses' knowledge and attitude toward patient handover with OR 5.280 (1.063-26.227); OR 5.333 (1.351-21.062), respectively and statistically significant (p<0.000). **Conclusion:** Handover is a dynamic process and impacts directly on patient care. Increasing nurse knowledge and attitude are essential to enhance the implementation of patient handover. Training, seminar and intensive practice are strongly needed to build the culture of patient safety.

Keywords: Patient Handover, Nurse Knowledge, Nurse Attitude, Handover

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INTRODUCTION

Improving communication is one of the International Patient Safety Goals (IPSGs). SBAR method (*Situation - Background - Assessment - Recommendation*) and TBAK (Tulis - Baca – Konfirmasi) or Write - Read – Reconfirm is widely used in all healthcare settings (1,2). Patient handover is an essential part of communication among healthcare professionals between units-to-units or shift-to-shifts. Any kind of disruption in the process will cause interruption in the continuity of care, inappropriate treatment, and potential risks resulting in harm to the patients (3). The study from JCI revealed that 80% of all adverse events caused by inadequate handover including wrong-site, wrong-procedure, or wrong-patient surgeries, delay in treatment, medication errors, and falls (1).

The implementation of patient handover during nursing care involves professional responsibility, accountability, and legality (4). It has been already proved that the most effective patient handover is still undefined, but direct communication, structured documentation, patient involvement, and the application of technology use will support this process (5). In some cases, the sender was confused, when delivering the information to the receiver and finally reluctant to help and give patient care (6). Several studies described that ineffective handover causes adverse effects to the patients, families, and communities (1,7). This situation will lead to malpractice, and even death in the clinical settings being the highest risk of patient safety (1,7). Improving patient handover must focus on three primary factors

that deals with facilitating information management, reducing the potential errors, and increasing confidence among healthcare professionals (8).

A study in Australia found that 22% of errors are associated with miscommunication during patient handover (9). More than half (57%) of the nurses does not get involved in patient's handover process; only 36% documented the process, and 13% do not participate (10).In Indonesia44.5% of patient handover categorized as poor and the average score was only 65%.Several factors that might affect patient handover included gender, knowledge, attitude, standard operational procedures, leadership, changing shift, and peers (11-13). Communication skills need to be learned and practiced regularly by all nurses; therefore, they will be able to communicate briefly, and precisely even in critical conditions (14).

Effective communication in the health care setting requires good knowledge, skills, empathy at the time of speaking, content of message, speech behavior, confidence, and the ability to check that the information was received correctly (14). Healthcare professionals were benefited by the standardized handover tools which are established by JCI, but these tools needed adjustment and adaptation because of the variety of specialty, need, and workforce burden (15).

Based on a previous study, nurse's knowledge about patient handover is still low and performance was below 50%related with the patient handover techniques (16). The patient's general condition, medication, and nursing intervention are the main content that must be delivered during patient handover (17). However, nurses were reported to be inconsistent and lacked patient-centeredness with varying reports of patient information and dissatisfaction (18). Knowledge and attitude were critically associated factors with the implementation of patient handover, yet limited research described this; therefore, the purpose of this study was to examine the relationship between nurse knowledge and attitude toward a patient handover.

MATERIALS AND METHODS

A cross-sectional approach with descriptive analysis approach was applied in this study. This research was conducted from June to July 2019. Ethical approval for this study was obtained from the Health Research Ethics Committee, Nursing School of PPNI, West Java, Indonesia (Reference No 132/KEPK/STIKEP/PPNI/JABAR/III/2019). The population of this study consisted of the head nurse and team leader. By using simple random sampling technique, a total of 61 respondents agreed to participate. All nurses who participated were working in the inpatient room at one of X General Hospital in Purwakarta, Indonesia.

The instrument used in this study is a structured self-report questionnaire and observational report which was developed from the guideline of Joint Commission International (2016) (18). The accepted result of validity and reliability is indicating an appropriate instrument. Demographic characteristics were assessed, including age, gender, educational attainment, and work period. Knowledge and practice variable were measured by response from total of 13 and 9 questions respectively, with yes/no answer. One point was given for correct or good answer and zero points to incorrect/wrong answer. Practice variable was calculated with Likert Scale 1-5 points ranging from strongly disagree to strongly agree and 13 items of handover observation activity. The statistical model used was univariate and bivariate chi-square analysis.

RESULTS

Based on Table I it was seen that most nurses were aged between 21-40 years (n=43, 70.5%), male (n = 40, 65.6%);most nurses graduated from Diploma III (n=45, 73.8%) and had been working for 6-10 years (n=32, 52.5%). Most nurses showed good knowledge (n=47, 77%) and positive attitude (n=42, 68.9%) toward patient handover and some nurses were with poor performance in patient handover (n=37, 60.7%) (Table II).

Table 1: Demographic Characteristics of nurse toward patient handover (n=61)

Variables	Frequency (n)	Percentage (%)
Age (year)		
20 – 30	13	21.3
31 – 40	43	70.5
41 – 50	5	8.2
Gender		
Male	40	65.6
Female	21	34.4
Education		
Diploma III	45	73.8
Bachelor	11	18.0
Ners	5	8.2
Work duration (years)		
1-5	14	23.0
6-10	32	52.5
11-15	13	21.3
> 15	2	3.3

Table II: Nurse Knowledge, attitude and handover in X General Hospital Indonesia (n=61)

Variables	Frequency (n)	Percentage (%)
Knowledge		
Poor	14	23
Good	47	77
Attitude		
Negative	19	31.1
Positive	42	68.9
Patient Handover		
Poor	37	60.7
Good	24	39.3

There is a significant relationship (p = 0.013) between attitude and patient handover of nurses during clinical handover observation (OR = 5.333;1.351-21.062); therefore, nurses with negative attitudes showed 5.333 times to develop poor clinical handover (Table III). The result showed statistically significant relationship (p = 0.033) between knowledge and patient handover (OR = 5.280;1.063-21.26.227); thus nurses with poor knowledge had 5.280 times poor clinical handover performance (Table III).

Table III: Association of patient handover with nurse knowledge and attitude in General Hospital Indonesia

Variables	Patient Handover		Total	OR (95% CI)	*p-value*
	Poor	Good			
Attitude					
Negative	16	21	37	5.333	0.013
Positive	3	21	24	(1.351-21.062)	
Knowledge					
Poor	12	25	37	5.280	0.033
Good	2	22	24	(1.063-26.227)	

DISCUSSION

This study described that most nurses had good knowledge of intermediate nursing care related to patient handover, which was consistent with previous research conducted in senior nurses(19). Exchange of information occurred from nurses across clinical areas and alongside their employment status; therefore, it is required for all nurses to comprehend this process. Lack of knowledge during patient handover can cause errors in the delivery of nursing intervention (20).Training or informal education help to improve the patient handover process to ensure continuity of care and safety during critical transitions, including referral and discharge (21). The implementation of evidence-based practice through electronic handover tools and adequate infrastructure proved to be increasingly effective for communication (22).

The significant relationship between knowledge of patient handover in this study is similar to prior research among130 nurses in Makassar (14) that revealed knowledge is the most robust variables among attitude, procedure resources, colleagues, and leadership. In contrast with this, other studies described that nurses had poor knowledge of patient handover based on hospital guidelines which is caused heavy work burden (23). Study among physician emphasized that lack of prior knowledge caused lack of directive, longer duration of handover, and poor handover quality (24).

Most nurses showed a positive attitude, similar with 235 nurses in Bojonegoro (25). Both studies have similar characteristics between age, education, and work duration. However, in a previous study it was showed that 43% of nurses regularly wrote nursing intervention in medical records based on a personal standard; therefore, other nurses were unable to read, and this become a barrier in provision of care. Clinical handover had a lot of advantages, both in the form of written and verbal (bedside) communication to increase effective communication related to the patient, the disease, and follow-up procedure is necessary (26). The significant relationship between attitude and patient handover in this study indicated that nurse's attitude influence the bedside handover and it is critical aspects to handle difficult situations and to assist other nurses during bedside handover of ill patients (27).

CONCLUSION

Handover is a dynamic process and it has direct impacts on patient care. Increasing nurse knowledge and attitude are essential to enhance the implementation of patient handover. There is a strong need to adjust SBAR method from (1) guideline-based communication to changes in the work environment. Empowering the level of knowledge and attitude through workshops, e-learning, training, seminar, and intensive practice are strongly needed to build the culture of patient safety.

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REFERENCES

1. The Joint Comission. National Patient Safety Goals Effective July 2020 for the Hospital Program Goal. Jt Com [Internet]. 2020;(July):14. Available from: https://www.jointcommission.org/-/media/tjc/documents/standards/national-patient-safety-goals/2020/npsg_chapter_hap_jul2020.pdf\
2. Tutiany, Lindawati, Krisanti P. Bahan Ajar Keperawatan: Manajemen Keselamatan Pasien. Kementerian Kesehatan Republik Indonesia. Pusat Pendidikan Sumber Daya Manusia Kesehatan, Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan, Kementrian Kesehatan Republik Indonesia; 297.2017.
3. Abdellatif A, Bagian JP, Barajas ER, Cohen M, Cousins D, Denham CR, et al. Communication During Patient Hand-Overs. Jt Comm J Qual Patient Saf. 2007;33(7):439–42.
4. Safitri R. Pengaruh Teknik Komunikasi SBAR terhadap motivasi dan Kepuasan Perawat dalam Melakukan operan di Ruang Rawat Inap RSUP Dr. M. Djamil Padang Tesis Fakultas Keperawatan Universitas Andalas. 2012.
5. Smeulers M, Lucas C, Vermeulen H. Effectiveness of different nursing handover styles for ensuring

continuity of information in hospitalised patients. Cochrane Database Syst Rev. 2014;2014(6).
6. Kamil H. Handover dalam pelayanan keperawatan. Idea Nursing Journal. 2011;2(3).
7. Wong MC, Yee KC, Turner P. Clinical Handover Literature Review. eHealth Services Research Group. University of Tasmania, Australia. 2008:111-4..
8. Gordon M, Findley R. Educational interventions to improve handover in health care: a systematic review. Medical education. 2011 Nov;45(11):1081-9.
9. Johnson M, Cowin LS. Nurses discuss bedside handover and using written handover sheets. Journal of nursing management. 2013 Jan;21(1):121-9.
10. Chin GS, Warren N, Kornman L, Cameron P. Patients' perceptions of safety and quality of maternity clinical handover. BMC Pregnancy and Childbirth. 2011 Dec 1;11(1):58.
11. Baillie L, Thomas N. Changing from 12-hr to 8-hr day shifts: A qualitative exploration of effects on organising nursing care and staffing. Journal of Clinical Nursing. 2019 Jan;28(1-2):148-58.
12. Istiningtyas A. Hubungan Sumberdaya Dengan Pelaksanaan Handover Sebagai Sasaran Keselamatan Pasien. Jurnal Kesehatan Kusuma Husada. 2016.
13. Yudianto K. Faktor-faktor yang berhubungan dengan pelaksanaan operan pasien perawat pelaksana di perjan rumah sakit Dr Hasan Sadikin Bandung (Doctoral dissertation, Tesis). 2005
14. Kesrianti AM, Bahry N, Maidin A. Faktor-faktor yang mempengaruhi komunikasi pada Saat handover di ruang rawat inap Rumah Sakit Universitas Hasanuddin. Jurnal Ilmiah. 2014:13-4.
15. Spooner AJ, Aitken LM, Corley A, Fraser JF, Chaboyer W. Nursing team leader handover in the intensive care unit contains diverse and inconsistent content: An observational study. International journal of nursing studies. 2016 Sep 1;61:165-72.
16. Lám J, Safadi H, Pitás E, Belicza É. Who knows what?-About patient handover. Experiences of a Hungarian and Polish sample knowledge survey. Orvosi hetilap. 2019 Nov;160(44):1735-43.
17. Cross R, Considine J, Currey J. Nursing handover of vital signs at the transition of care from the emergency department to the inpatient ward: An integrative review. Journal of clinical nursing. 2019 Mar;28(5-6):1010-21.
18. Joint Commission International. Communicating Clearly and Effectively to Patients How to Overcome Common Communication Challenges in Health Care. 2018;11. Available from: http://www.jointcommissioninternational.org.
19. Risyati R. Faktor-faktor yang Berhubungan dengan Pelaksanaan Operan Jaga di RSUD Labuang Baji Makassar. (Doctoral dissertation, Universitas Islam Negeri Alauddin Makassar).2014
20. Humphries C, Jaganathan S, Panniyammakal J, Singh SK, Goenka S, Dorairaj P, Gill P, Greenfield S, Lilford R, Manaseki-Holland S. Patient and healthcare provider knowledge, attitudes and barriers to handover and healthcare communication during chronic disease inpatient care in India: a qualitative exploratory study. BMJ open. 2019 Nov 1;9(11).
21. Humphries C, Jaganathan S, Panniyammakal J, Singh SK, Goenka S, Dorairaj P, Gill P, Greenfield S, Lilford R, Manaseki-Holland S. Patient and healthcare provider knowledge, attitudes and barriers to handover and healthcare communication during chronic disease inpatient care in India: a qualitative exploratory study. BMJ open. 2019 Nov 1;9(11).
22. Spooner AJ, Aitken LM, Chaboyer W. Implementation of an Evidence-Based Practice Nursing Handover Tool in Intensive Care Using the Knowledge-to-Action Framework. Worldviews on Evidence-Based Nursing. 2018 Apr;15(2):88-96.
23. Angga Pramudya Su. Hubungan pengetahuan dan beban kerja perawat terhadap pelaksanaan proses timbang terima pasien. Pdf. Jurnal hospital science. 2017 nov 30;1(1).
24. Meth S, Bass EJ, Hoke G. Considering factors of and knowledge about patients in handover assessment. IEEE transactions on human-machine systems. 2013 Aug 15;43(5):494-8.
25. Maftukhin A, Nurul S. Sikap Perawat Dalam Proses Timbang Terima Di RSUD Dr. R. Sosodoro Djatikusumo Bojonegoro Attitudes of Nurses in the Process of Handover in Dr. R. Sosodoro Djatikusumo Bojonegoro. Asuhan Kesehatan: Jurnal Ilmiah Ilmu Kebidanan dan Keperawatan. 2016 Mar 10;7(2).
26. Kilic SP, Nimet Ovayolu RN, Ozlem Ovayolu RN, Ozturk MH. The approaches and attitudes of nurses on clinical handover. International Journal of Caring Sciences. 2017;10(1):136.
27. Alrajhi A, Sormunen T, Alsubhi H. Factors Affecting Bedside Handover between Nurses in Critical Care Area. Emergency Medical Services. 2013 June 3.