

SBAR Report Competency and Communication Clarity of Handover in Korean Nursing Students

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Abstract

This study aims to grasp the current condition of handovers of practical tasks among nursing students as well as specific items of handovers and the communication clarity. A questionnaire-based survey was conducted on handover experience among 137 individuals who had experience of clinical practice and were senior students at three nursing colleges located in A, B, and C districts. Among them, 27 were chosen for convenience sampling, and their statements were recorded for a descriptive analysis. It turned out that 10.2% of the respondents took an education course of handovers as part of their practical trainings, and that the level of self-confidence for handovers was 2.91 ± 2.12 points. The preferred education methods about handovers included simulations (40.9%), role plays (24.8%), and lectures (13.9%) in the order. In the SBAR-based analysis of handover items, it turned out that there were few statements on vital signs (40.7%) and advice (59.3%), and that the clarity in communication of handover contents was of the middle level as high as $2.30 (\pm 0.42)$ points. The findings of this study indicate the necessity of education on handovers as part of practical training for nursing students as well as efforts to enhance the clarity of communication in utilization of specific SBAR tools.

Keywords: Handover, Nursing, Student, Communication, SBAR

1. Introduction

Since a nursing organization is likely to interact not only among nurses but also with various occupations including doctors in a hospital, communication skills of nurses are essential to handle practical tasks. Effective communication skills help in finding solutions to patients' problems and enhance students' self-confidence of taking care of patients [1]. Ineffective ways of communication negatively affect mortality rates, abnormal cases, near miss cases, and financial loss in healthcare fields as well as complaints among patients [2]. In addition, communication problems impair relations among doctors and nurses and cause frustrations and stress as well [3].

According to the Joint Commission on Accreditation of Healthcare Organizations [4], handover problems were one of the major causes of incidents that involved harm from 1995 to 2006, and among these, critical cases resulted mainly from a communication problem. Handovers are essential for patient safety since they are to maintain the continuity of nursing by delivering accurate information on patient conditions, nursing records, and recent changes [5-6]. According to one domestic research by Kim, *et al.*, [7], 5.7% of the participant nurses were sure that they implemented the handover process appropriately and 12.1% were sure that they took over the duties properly, which indicates that even clinical nurses doubted the precision of handovers. Besides, most nurses expressed dissatisfaction with handovers [8], regarding time of handovers, unnecessary or inaccurate contents, lack of confidence, lack of standardized tools, and so

forth [6-7]. Since the importance of patient safety was recently emphasized in Korea, attention has been paid to handovers as well.

Still, research is limited to the actual condition of handovers [7] and application of recordings to handovers for improvement [9], and the necessity to develop a standardized guideline for handovers is emphasized to enhance the efficiency of nursing tasks and maintain patients' safety [6].

According to Collins [10], nurses who have graduated are required to develop capabilities to notify doctors of an emergency situation of patients, which requires assessment on importance of matters, skills of clear reporting, managing and predicting the order of emergency situations. These factors, however, have hardly been included in educational intervention for communication skill improvement among nurses.

Student nurses may not fully understand what a good handover is in terms of structure and content, when and to whom a handover needs to be provided, etc. They may feel not fully capable of handovers for such reasons as lack of practicing opportunities, *etc.* Besides, in observation of undesirable handover practices, they recognize the risk of the insufficiency of acceptable standards and have little self-confidence and discernment in personally practicing handover skills [10]. Even if a curriculum may provide nursing students with opportunities of communication and report experiences, students feel difficult to put such skills into practice clinically due to their worry about patients' safety. In addition, nursing students are not certain about where to learn and develop such skills, where to practice such skills with safety secured, and how to acquire and develop skills to transfer knowledge related to handovers in practical tasks. In reality, therefore, it is challenging for students to develop capabilities to handle information of handovers.

The approach of SBAR (Situation, Background, Assessment, and Recommendation) for handovers helps in structuralizing given information [11] and improving knowledge and self-confidence among students practicing handovers in safe circumstances [5]. Recently, it was reported by a domestic research that after an education program of SBAR was conducted among nurses, their communication clarity, the medical staff's satisfaction, information organizing skills, and patients' safety were all improved [12]. In particular, communication clarity, which is required to emphasize imminent problems and present them in a logical order, turned out to be improved most significantly after the application of the SBAR program. However, there are few domestic hospitals that adopt SBAR tools in handovers, and there are few researches on this matter either. It is necessary to verify if SBAR is substantially effective and to provide nursing students with opportunities to learn and demonstrate handover methods and contents in a specific and standardized way.

Accordingly, this study aims to grasp the current condition of handover communication that nursing students actually experience in clinical practice, analyze handover contents by means of SBAR, and thus provide the basis for the development of handover communication strategies and education programs in the future.

2. Study Objective

This study is to grasp the actual experience of handovers communication in clinical practice among nursing students. Specific objectives are as follows:

- 1) To grasp the current condition of handovers among nursing students.
- 2) To analyze handover items available among nursing students by means of SBAR.
- 3) To examine the degree of communication clarity in handovers among nursing students.

3. Methods

3.1. Study Design

This descriptive study is designed to grasp the current condition of handovers communication in practical lessons for nursing students and to examine specific items of handovers and the degree of communication clarity.

3.2. Participants

This study is conducted among senior students at three nursing colleges in A, B, and C districts who had experiences of clinical practice. They signed on the agreement of research participation voluntarily. 137 in total participated in the survey about handover experiences, and 27 were chosen in a way of convenience sampling for handover recording.

3.3 Measurements

3.3.1. Current Condition of Handovers: The survey items are on the object age, sex, handover experience, demand for education, self-confidence in handovers, and opinions on patients' safety. The level of confidence in handovers was measured by means of VAS; the higher score in the 10-point scale, the higher level of confidence in handovers.

3.3.2. SBAR Handover Items: As part of nursing work, a handover is for a nurse to give information about the nursing tasks, direct and indirect, to the shift worker [13]. This is an important process of information exchange to maintain the quality, safety, and continuance of nursing work [14]. In this regard, SBAR is a standardized form of process suggested to facilitate communication between medical teams. The major items are on the situation, background, assessment, and recommendation [15]. In this study, it is indicated with 'Yes' when a certain SBAR item is included in a nursing student's handover, and 'No' when one is not.

3.3.3. Communication Clarity: Communication clarity indicates the extent that an information delivery, presents his or her intentions to the other nurse accurately and understandably [16]. To assess communication clarity, this study adopts a version of the tool of Marshall, Harrison & Flanagan [17] revised by Cho [12] for nurses. Point 1 indicates 'Not at all,' and point 5 'Very much' in the Likert 5-point scale. It includes 8 questions, and the higher score, the higher level of communication clarity. To check the tool's reliability before the analysis of students' handovers, a test was conducted among two assessors and the level of communication clarity was assessed by means of a practice scenario. As a result, the reliability of the two assessors on 8 items was between .72 and .93. The reliability of the communication clarity assessment tool adopted in this study can be expressed with Cronbach's $\alpha = .70$.

4. Data Collection

The data was collected between February and June 2015. The senior students were informed of the study objectives and procedures prior to the clinical practice, and those who agreed to participate in the research were selected as the objects. A questionnaire-based survey was conducted among the students on the experience of handovers. After a practice, a handover was demonstrated with one patient's case, and the process was recorded.

5. Data Analysis

The quantitative data collected in this study was processed by means of SPSS 20, a statistical processing program. Characteristics of variables related to the objects' handover experience were analyzed based on the real quantity, percentage, and basic statistics; handover items of nursing students were analyzed based on the real quantity and percentage; and the reliability of assessors and tools was determined based on Pearson's correlation and Chronbach alpha.

6. Ethical Consideration

The examination of the research ethics review committee of J University preceded the research (IRB No: JJNU_IRB-20150115-HR-001-01). Prior to the recording, research objects were asked about willingness of research participation and informed of the option of withdrawal, anonymity, privacy, necessity of recording, and storage and disposal methods of recording files and manuscripts. They filled in and signed on the written form of agreement. Voluntary participation was a prerequisite and the questionnaire was not distributed to those who did not agree with it. They were informed that there would be no disadvantage if they chose not to participate. Private information in the collected data was never used for other purposes than the research itself, and participant records were managed with numbers instead of names.

7. Result

7.1 General Characteristics & Handover-related Characteristics of Research Objects

126 of the objects were female (92%) and the average age was 21.6. Regarding handover-related education opportunities, 89.8% replied 'never' or 'I do not remember whether I had any.' 10.2% replied that they participated in a handover education program. Among 14 who replied that they had received handover education, 8 replied that the education session was 60-minute long. They also said that handover education was given mainly in a way of nurse observation. 57.7% had no experience of handovers, and 34.3% replied that they were aware of the necessity to improve the process of handovers in practical lessons. 58.4% replied that they were not sure (Table 1).

The score of self-confidence of handovers among students (range: 1~10) was 2.9(\pm 2.12) point on average. As for patients' safety and the importance of handovers, 86.1% answered, "very important," and 13.1% important in general, which indicates that they were highly aware of the importance. As for the necessity of handover education, 54% answered, "highly necessary," and 43.1% "necessary." As for items that they found very challenging in handovers between nurses, 50.4% replied "direction of treatment" (other information to be delivered, mediation after patient assessment, *etc.*) and 40.9% "patients' situation (current condition, treatment, medicines, examination result, the use of a drainage bag or a catheter (drainage bag or catheter), *etc.*). As for the most challenging aspect in reporting to a doctor, 56.9% replied "Direction of treatment (other information to be delivered, mediation after patient assessment, *etc.*)" and 32.8% patients' situation (current condition, treatment, medicines, examination result, the use of a drainage bag or a catheter, *etc.*).

It turned out that preferred methods of handovers included simulations (40.9%), role plays (24.8%), and lectures (13.9%) in that order. As for the necessity of handover improvement that they felt as students, 58.4% replied "I don't know," and then 34.3% "necessary." As for the direction of handover improvement, 40.6% wanted both a written handover protocol and each department's template.

Table 1. General and Handover-Related Characteristics (N=137)

Variables	Category	N(%)	M±SD	
Gender	Male	11(8.0%)		
	Female	126(92%)		
Age(years)			21.6±1.04	
Education related to handover	None	110(80.3)		
	Don't know	13(9.5)		
	Yes (n=14)	30min	3(2.2)	
		60min	8(5.8)	
Missing		3(2.2)		
Education Methods (multiple responses)	Verbal explanation	1		
	Clinical practice	2		
	Observation of nurse's behavior	8		
	Education from head nurse	4		
Direct experience about handover	None	79(57.7)		
	Yes	58(42.3)		
Recognition of the need to improve handover	Agree	47(34.3)		
	Not agree	10(7.3)		
	I don't know	80(58.4)		
Handover confidence	Visual Analog Scale (0-10)	(0-8)	2.91±2.12	
Recognition of the handover related to patient safety	very important	118(86.1)		
	important	18(13.1)		
	So so	0		
	not important	1(0.7)		
	Never important	0		
Recognition of the handover education	very necessary	74(54.0)		
	Necessary	59(43.1)		
	So so	3(2.2)		
	Not necessary	1(0.7)		
	never necessary	0		
Difficult Items related to handover between Nurses	Patients' situation (current condition, treatment, medicines, examination result, the use of a drainage bag or a catheter (Drainage bag or catheter, etc.)	56(40.9)		
	Patients' background (medical history, associated disease, etc.)	5(3.6)		
	Patients' assessment (patient name, diagnosis, operation name, vital signs, awareness condition, etc.)	7(5.1)		
	Direction of treatment (Other information to be delivered, mediation after patient assessment, etc.)	69(50.4)		

Difficult Items in reporting to doctors	Patients' situation (current condition, treatment, medicines, examination result, the use of a drainage bag or a catheter, etc.)	45(32.8)	
	Patients' background (medical history, associated disease, etc.)	6(4.4)	
	Patients' assessment (patient name, diagnosis, operation name, vital signs, awareness condition, etc.)	8(5.8)	
	Direction of treatment (mediation after patient assessment, information to be delivered, etc.)	78(56.9)	
Preference related to handover methods	Lecture	19(13.9)	
	Simulation	56(40.9)	
	Role play	34(24.8)	
	Problem based learning	18(13.1)	
	Team based learning	6(4.4)	
	On-line learning	4(2.9)	
Improvement directions related to handover	Documented protocol	22(16.1)	
	Unit specific template	49(35.8)	
	Documented protocol plus unit specific template	63(46.0)	
	Others	3(2.2)	

7.2. Handover Items of SBAR

As for high frequency items in SBAR, 96.3% replied that the current problem was most frequently related in the area of situation, and 96.3% patients' assessment in the area of assessment respectively. As for low frequency items, 40.7% stated vital signs in the area of assessment and then 59.3% advice respectively (Table 2).

Table 2. Handover Items of SBAR (N=27)

Domains	Items	Included	N	%
Situation	Nurse information	No	3	11.1
		Yes	24	88.9
	Patient information	No	9	33.3
		Yes	18	66.7
	Present problems	no	1	3.7
		yes	26	96.3
Background	Diagnosis	no	8	29.6
		yes	19	70.4
	Past history	no	7	25.9
		yes	20	74.1
	Treatment	no	3	11.1
		yes	24	88.9
Assessment	Sign & symptom	no	1	3.7
		yes	26	96.3
	Vital signs	no	16	59.3
		yes	11	40.7
	Assessment of patient	no	1	3.7

		yes	26	96.3
	Test or lab result	no	6	22.2
		yes	21	77.8
	Present treatment	no	2	7.4
		yes	25	92.6
Recommendation	Recommendations	no	11	40.7
		yes	16	59.3

7.3. Communication Clarity Analysis

Each average of 8 questions for communication clarity assessment is presented in Table 3 below: The total average was 2.30(\pm 0.42) in the 5-point Likert Scale. The lowest score was 1.85 points (\pm 0.82) of No. 4 item. The highest average score was 2.74(\pm 0.66) of No. 6 item (Table 3).

Table 3. Analysis of Communication Clarity (N=27)

Items	Mean	SD	Min-Max. range(1-5)
A problem's urgency or appropriateness is stated	2.41	0.64	1-3
A patient's problem in urgency is clearly emphasized	2.33	0.62	1-3
Problems are properly emphasized and stated in a logical order	2.41	0.69	1-3
Vital signs are related	1.85	0.82	1-4
Important matters are clearly and simply summarized	2.30	0.72	1-4
Necessary treatments for a situation are clearly stated	2.74	0.66	1-4
Help or advice is asked for clearly and directly	2.37	0.88	1-4
Certain questions or instructions are asked for clearly	2.00	0.88	1-4
Total	2.30	0.42	1-4

8. Discussion

This study aims to examine the actual condition of handover communication among nursing students taking a course of practical training in clinical fields, handover contents among nursing students, and communication clarity. The focus of discussion is on the current condition of handovers, demands for education, and the result of handover content analysis

8.1. Current Condition of Handovers and Demands for Education

Among the respondents, only 10.2% replied that they received handover-related education during the nurse training course for nursing students, and such education was given mostly in a way of observing existing nurses' handovers in clinical practice. 42.3% replied that they had personal experience of handovers but without specific education on handovers. The level of self-confidence in handovers that the students felt was low down to 2.9 on average (in 10-point scoring). This result corresponds to the finding of Collins's research [10], where it turned out that students were not aware of essential factors for an effective handover and that they lacked confidence in delivering information to others.

97.1% of the respondents felt that handover education should be provided to enhance their confidence. As for challenges in handovers to other nurses, students stated aspects to be delivered, directions of treatment including medication after patient assessment, patients' situation such as current conditions, treatment, medicine, examination result, the use of a drainage bag or a catheter, etc. Challenges in reporting to a doctor were the same with those of challenges in handovers to other nurses. It turned out that few students found it difficult to deliver patients' background information such as medical history and associated diseases, patients' names, patient assessment including diagnosis/operation name, vital signs, and consciousness, etc. Thus, handover-related contents need to be included in practical nurse education. The major contents of handovers should include not only patients' basic information and vital signs but also details of treatment and examination, medication after assessment, directions of treatment, *etc.*

It turned out that those who received handover education preferred simulations (40.9%) and role plays (24.8%) to lectures (13.9%). According to Kesten [18], when nursing students experienced role plays after a lecture of handover methods, their handover score was higher than when only a lecture was given. Role plays have been recognized as an effective education method since they let students experience a problematic situation with little stress, make decisions and take actions accordingly, and thereby improve interpersonal communication skills [11]. Hence, it will be far more effective if future handover-related education programs include simulations where students can have role plays as if they are actual nurses in a practical situation.

There have been few handover education programs for students, and even they relied mainly on mere observation of existing nurses. While 58.4% of the respondents replied that they were not sure of the necessity of improving handovers, opinions regarding ways of improvement included the use of written handover protocols. With much emphasis on the importance of handovers in relation to patients' safety, written protocols can be utilized in student education, which is expected to enhance the effectiveness of handovers in clinical practice. In addition, the high demand for written handover protocols among students supports the idea that in order to improve the completeness and accuracy of information, there should be a consistent structure of handovers, and that a handover form should be designed specifically for each specific nursing group [19]. However, there have been few hospitals found to use an organized handover method with written instructions or checklists [6]. As the necessity of developing handover forms and checklists specifically designed for each hospital division is emphasized [20], it is necessary to develop standardized instructions for handover preparation and to utilize them in nursing education programs.

8.2. Handover Items of SBAR

Handover contents among nursing students were analyzed in reference to SBAR items. As a result, it turned out that more than 90% of the students delivered the information of patients' imminent problems in the area of situation. 88.9% included an introduction of oneself and 66.7% of the information of the patient name, department, and doctor respectively. More than 70% of the students included the area of background in their handovers. In particular, treatment aspects were more frequently included than diagnoses or medical histories. More than 90% included in their handovers patients' symptoms and assessments in the area of assessment as well as the current treatment methods while 40.7% omitted the aspects of vital signs. The recordings reveal that while students felt less difficult in delivering basic information of patients' vital signs such as blood pressure, pulses, breathing, and body temperature, they hardly informed the shift workers of such figures, normal or abnormal. This indicates that students would deliver information of disease symptoms but not changes in vital signs probably because they fail to interpret accurate vital signs properly or are ignorant of how such signs could change depending on the severity of the disease or symptoms. As the area of advice covered the

direction of future treatment and aspects that should be considered after patient assessment or by the shift worker, the frequency was the lowest among all the areas of investigation. In fact, many of these aspects were found by students to be the most difficult to deliver in handovers. In clinical practice, most nursing students would observe or listen to existing nurses taking over the work, make a presentation of the patient's case during the practical training course, or report the patient's current problems and symptoms in an education course. Aspects of mediation and assessment were handled mostly by students themselves, or the current practice or future plans of the existing nurse in charge were shared rather than delivering assessment results. Besides, nursing diagnoses or activities did not correspond to a certain patient's situation but are merely on the assumption of ordinary situations. Thus, delivering advice, *etc.* seems to be a major challenge in handovers.

8.3 Communication Clarity

Based on students' handover recordings of the given patient case, the communication clarity was assessed. The score was 2.3 points on average (total score: 5 points), a bit lower than the general level. Although it might not be appropriate to compare them directly, this score was significantly different from 3.52, the average score in the assessment of Cho [12] who analyzed the communication clarity among experienced nurses by means of SBAR. Above all, since nurses play a mediation role between various medical teams in a hospital and patients, clear communication is of great importance. The level of communication clarity indicates the extent that information delivery presents his intentions and the other accurately understands what the former states. When the level is high, it means that the structure of communication is systematized and the contents are delivered accurately [5, 16].

As for subordinate items of communication clarity, nursing students obtained the highest score regarding the item, 'I deliver the information of necessary treatments for the given situation clearly,' and the lowest score regarding the item, 'I deliver the information of vital signs.' This result is in contrast with finding Cho's research [12], where the highest score was shown in the item, 'I deliver the information of vital signs.' The score of the item, 'Important matters are clearly and simply summarized,' was also relatively low. Besides, the ability to deliver the urgency of problems or the extent of appropriateness and the ability to emphasize problems and present them in a logical order also turned out to be around the general level. In other words, nursing students are capable of delivering information on the current states, symptoms, a doctor's directions for examinations and treatments with no omission, but the level of communication clarity, that is, the ability to grasp urgent problems of a patient and present them in a logical and simple manner, was below the general level.

As for communication between medical teams in a way of handovers, improving the level of understanding as well as clarity is essential for patients' safety [21]. When nurses deliver their opinions successfully and clearly, safety problems due to miscommunication will be reduced, and so will conflicts between medical teams [10, 12]. Thus, there should be education programs to help nursing students develop skills of noticing and understanding the urgency of problems in clinical situations. In particular, as it is reported that after SBAR education, students' communication skills and information organizing abilities have been improved [11], SBAR-related methods are expected to improve students' judgment and organizing ability in handover-related education programs.

An approach to SBAR with regard to handovers will help not only in organizing information given to experts but also in developing communication skills in a training course for student nurses. Moreover, it is known that handovers in a safe environment contribute to improving students' knowledge and self-confidence [10]. Thus, it is necessary to provide education programs so that nursing students can develop abilities to

present their opinions clearly and confidently. In this respect, developing communication skills by means of SBAR forms, whose effectiveness regarding handovers has been demonstrated by current research [12], will contribute to boosting confidence among students who are worried about information omission or incompleteness in handovers as well as communication clarity [22].

A low level of clarity was shown in the area of advice among SBAR items, which requires a shift worker to ask for clear instructions or advice. Specifically, such items as 'I ask for help or advice clearly and directly' and 'I ask certain questions or ask for directions clearly' showed an especially low level of clarity [22]. Asking for advice requires the general understanding and prediction of each patient's problems. If a nurse is good in self-assertion or self-expression, it will improve his or her self-esteem and reduce anxiety in communication [12].

Many new nurses report difficulties in handling tasks at the hospital due to lack of skills [23]. Hence, if nursing students are provided with training programs to learn ways of handovers, reporting to and communicating with doctors in introduction and utilization of SBAR, it is expected that their difficulties as nurses in communicating and reporting in handovers will be significantly reduced.

9. Conclusion

This study aims to grasp the actual condition of handover communication that nursing students experience in clinical practice, analyze handover contents by means of SBAR, and thus provide a basis for improvement of handover communication among nursing students and development of education programs for them. In conclusion, nursing students feel the necessity of handover education as part of a practical training course, and efforts need to be put forth into enhancing communication clarity by utilizing specific SBAR tools. Based on the findings of this study, suggested is a research on the development and application of an education program that utilizes simulations or role plays in connection with SBAR in order to improve the quality of handover communication among nursing students as well as related education methods.

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References

- [1] S. Smith, D. Adam and P. Kirkpatrick, "Using solution-focused communication to support patients", *Nurs Stand*, vol. 25, no. 52, (2011), pp. 42-47.
- [2] A. McMurray, W. Chaboyer, M. Wallis and C. Fetherston, "Implementing bedside handover: Strategies for change management", *J Clin Nurs*, vol. 19, (2010), pp. 2580-2589.
- [3] A. H. Rosenstein and M. O'Daniel, "Disruptive behavior and clinical outcomes: perceptions of nurses and physicians", *Am J Nurs.*, vol. 105, no. 1, (2005), pp. 54-54.
- [4] "Joint Commission on Accreditation of Healthcare Organizations", *National Patient Safety Goals*, (2006), <http://www.jointcommission.org/PatientSafetyGoals/>.
- [5] D. Jennifer, "Structured communication: Improving patient safety with SBAR", *Nurs Womens Health*, vol. 13, no. 5, (2009), pp. 385-390.
- [6] E. M. Kim, M. Yu, H. Y. Lee, J. W. Ko, E. Y. Cho and E. S. Kim, "Development of nursing handoff practice guideline and standards for Korean hospital", *Journal of Korean Clinical Nursing Research*, vol. 20, no. 1, (2014), pp. 1-14.
- [7] S. H. Kim, E. M. Kim, Y. K. Choi, H. Y. Lee, M. M. Park, E. Y. Cho and E. S. Kim, "An exploration about current nursing handover practice in Korean Hospitals", *Journal of Korean Clinical Nursing Research*, vol. 19, no. 2, (2013b), pp. 181-194.
- [8] A. Meissner, H. M. Hasselhorn, M. Estryng-Behar, O. Nezet, J. Pokorski and D. Gould, "Nurses' perception of shift handovers in Europe-results from the European Nurses' early exit study", *J Adv Nurs*, vol. 57, no. 5, (2007), pp. 535-542.
- [9] M. H. Choi, Y. S. Hong and H. A. Keum, "Increasing of client satisfaction through improvement of

- handover method”, Paper presented at the meeting of the Korean Society for Quality in Health Care Autumn Conference, (2005) November; Daegu, Korea.
- [10] G. Collins, “Using simulation to development handover skills”, *Nurs Times*, vol. 110, no. 8, (2014), pp. 12-14.
- [11] C. M. Thomas, E. Bertram and D. Johnson, “The SBAR communication technique; Teaching nursing students professional communication skills”, *Nurse Educ*, vol. 34, no. 4, (2009), pp. 176-180, doi: 10.1097/NNE.0b013e3181aaba54.
- [12] H. J. Cho, “The effect of SBAR program education on a nurse’s communication clarify and self expression”, Master’s thesis, Yonsei university; Seoul, (2013).
- [13] K. J. Hwang, K. S. Lee, S. H. Kim, J. S. Lee, K. O. Lee, S. M. You, I. S. Kim, S. E. Shin and Y. H. Cho, “Adjustment of proper shift hours by improving the nursing report system”, *Clin Nurs Res*, vol. 7, no. 1, (2001), pp. 5-33.
- [14] E. Benson, C. Rippin-Sisler, K. Jabusch and S. Keast, “Improving nursing shift-to-shift report”, *J Nurs Care Qual*, vol. 22, no. 1, (2007), pp. 80-84.
- [15] “Institute for Healthcare Improvement”, (2012) SBAR technique for communication: a insituational briefing model. Retrieved, (2013) March 8, from <http://www.ihl.org/>.
- [16] [IHI/Topics/PatientSafety/SafetyGeneral/Tools/SBARTechniqueforCommunicationAsituationalBriefing Model.htm](http://www.ihl.org/Topics/PatientSafety/SafetyGeneral/Tools/SBARTechniqueforCommunicationAsituationalBriefingModel.htm).
- [17] Y. H. Park, “A study on the communication system model and recognition analysis of president-staffs communication in University”, Dissertation, Wonkwang university; Jeonbuk, (2010).
- [18] S. Marshall, J. Harrison and B. Flanagan, “The teaching of a structured tool improves the clarity and content of interpersonal clinical communication”, *Qual sat Health care*, vol. 18, no. 2, (2009), pp. 137-140.
- [19] K. S. Kesten, “Role-play using SBAR technique to improve observed communication skills in senior nursing students”, *J Nurs Educ*, vol. 50, no. 2, (2011), pp. 79-87, doi: 10.3928/01484834-20101230-02.
- [20] N. Staggers and B. M. Jennings, “The content and context of change of shift report on medical and surgical units”, *J Nurs Adm.*, vol. 39, no. 9, (2009), pp. 393-398.
- [21] E. M. Kim, M. Yu and J. W. Ko, “Development of nurse’s handover standards between hospital unit using SBAR”, *Journal of Korean Clinical Nursing Research*, vol. 21, no. 1, (2015), pp. 127-142.
- [22] S. James, S. Quirke and K. McBride-Henry, “Staff perception of patient discharge from ICU to ward-based care”, *Nurs Crit Care*, vol. 18, no. 6, (2013), pp. 297-306.
- [23] M. Yu and K. J. Kang, “A Preliminary Study on the Current State of Handovers among Nursing Students”, proceedings of the Advanced Science and Technology Letters, Jeju, Korea, vol. 104, (2015) August 19-21, pp. 29-33, <http://dx.doi.org/10.14257/astl.2015.104.07>.
- [24] H. R. Kim and I. S. Kwon, “A phenomenological study on oncology adaptation experiences of new nurses”, *Asian Oncol Nurs*, vol. 14, no. 2, (2014), pp. 127-138, <http://dx.doi.org/10.5388/aon.2014.14.2.127>.

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