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Nurses Shift Handover Instrument Development Evaluation Using SBAR Effective Communication Method

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Abstract--- *Effective communication of SBAR is a method used in patient handover performed by nurses. Communication made on patient handover by nurses is vulnerable to failure. The study aimed to develop a nurse handover shift instrument accordance to the standards. Design of this research was an explorative descriptive research with a research and development approach. The population was medical record documents in inpatient unit of Haji General Hospital Surabaya. The sample was 167 medical record documents obtained by purposive sampling based on inclusion criteria. This variable was a nurse shift handover instrument consisting of the situation, background, assessment, recommendations. Researchers used the handover checklist form as instrument. The data were then analyzed using descriptive statistically and followed by focus group discussion to develop the new instrument. The results show there were 84% incomplete components of the situation, 100% incomplete of background, 100% incomplete of assessment and 100% incomplete of recommendations. The incomplete documents are caused by the lacking of nurse's knowledge and understanding of the function of the handover instrument, duplication of documentation, differences in medical and nursing diagnoses for each patient, ineffectiveness of socialization and dissemination of instrument filling guidelines. It is necessary to revise the nurse handover shift instrument with an effective SBAR communication approach in accordance with hospital accreditation standards, so as to prevent patient safety incidents and improve the quality of nursing services.*

Keywords--- *Nursing handover instrument; effective communication; SBAR method*

I. INTRODUCTION

Patient safety is a global issue that is the main focus in health services in hospitals. Attention to this is regulated in PERMENKES No. 11 of 2017 concerning patient safety in hospitals. Implementation of patient safety contains patient safety standards, steps and objectives. The implementation of patient safety goals in hospitals aims to improve the quality of health services, reduce and minimize patient safety incidents [1].

According to hospital patient safety incident reports in Indonesia based on patient safety targets[2]there were eight variations in incidence (7.97%, n = 11). Incidents related to effective communication are caused by communication between health workers, namely nurses and laboratory staff, which is not optimal. These incidents can result in fatal

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injuries caused by inaccurate information and communication results and inaccurate examinations, which can result in misunderstandings, medication errors and actions given to patients [2].

Comparable with the results of a review conducted by Cohen and Hilligos (2010), which states that problems related to handovers are a problem in the world, in the study conducted there were 899 incidents of communication errors with 32% of communication errors during handovers [3]. In addition, according to a report submitted by the WHO (2018), there are still 11% of errors due to communication during the handover every year. According to the root cause information from the 2004-2014 Joint Commission Sentinel Database, it states that as many as 70% of sentinel events are caused by communication, where communication is ranked first cause of sentinel events in the world. The 2015 data communication rank third after human factors and leadership [4].

A review conducted by Ayala (2017) by gathering various studies found that 10.3% of the incidents that occurred with handovers were a matter of communication failure. The incident occurred because of the lack of guidelines and standards used in conducting handover and determining the information submitted [5]. Misinformation and lack of communication can have a serious impact on patients and 70% of these errors can result in serious injury, even to death or sentinel [6]

Healthcare problems that have occurred in recent decades are the result of lack of communication between nurses [7]. Communication is one of the standards used in providing nursing care to patients, the relationship between nurses and other health teams, which, if done, well can improve good interpersonal relationships [8]. One of the tools used in communicating between nurses is effective communication of situations, backgrounds, assessments, and recommendations (SBAR) [9], [10].

Based on a preliminary study conducted on September 24th, 2019, in an open interview with the Head of Nursing, the results obtained regarding handover and communication are the presence of a nurse shift handover instrument in the inpatient room. However, the nurse shift handover instrument or format has not been evaluated since it was established at Surabaya Haji Hospital. In addition, training has never been conducted with this instrument, on the use of the nurse's handover shift.

Handover by a nursing service provider is a major factor in encouraging sustainable care by providing good and safe service. Handovers conducted by nurses are vulnerable to failure in communication [10]. A good handover can reduce the occurrence of errors and can make maintenance sustainable [6]. The error that occurred in the handover was the lack of communication between shift nurses, the incomplete recording system and reporting system. Therefore, the existence of a handover instrument and the implementation of a good and standardized handover is expected to minimize the occurrence of misinformation, poor quality and reduce patient safety incidents.

Effective communication between nurses is an important requirement in providing patient-focused nursing services and is important in supporting patient safety. Thus, with this problem an effective SBAR communication instrument is needed in the implementation of nurses' shift handovers so that the service focuses on the patient in a professional manner and improves quality and patient safety [11]. SBAR is very important to be used in effective communication because it aims to improve the quality of service, reduce the occurrence of patient safety incidents, misinformation and misunderstanding between nurses [9]. Therefore, this research needs to be done as an effort to develop a nurse handover shift instrument with an effective communication approach to the background situation assessment recommendation (SBAR) of the inpatient room.

AI. METHODS

The study used exploratory descriptive research design using a research and development (R&D) approach. This research was conducted in the Inpatient Unit of Haji General Hospital Surabaya. The population was 2424 medical record documents in inpatient unit of Hajj General Hospital Surabaya from July to September 2019. The sample was 167 medical record documents obtained by purposive sampling based on inclusion criteria. The inclusion were medical record documents of inpatients unit during November until December, 2019 which treated for at least three days. This variable was a nurse shift handover instrument consisting of the situation (S), background (B), assessment (A), recommendations (R). Researchers used the handover checklist form as instrument. The data were then analyzed using descriptive statistically and followed by focus group discussion (FGD) to develop the new instrument. The FGD employed 20 nurses, consisting of associate nurses, nurses in charge, nurse unit manager, nursing head services, nursing committees, nursing quality sub committees, inpatient secretary, patient safety subcommittee and director of Haji General Hospital Surabaya. Data collection was carried out from November until December 2019 by observing nurses' handover shift instruments in the inpatient room. The study was to evaluate the nurses' handover shift instruments that are already used as material and then develop them based on hospital accreditation standards. The data gained from the instrument became the issue as material in the FGD. The FGD was conducted to obtain information, suggestions and criticisms related to the development of the nurses' handover shift instrument with SBAR approach. This research was approved by Health Research Ethics Commission of the Hajj General Hospital Surabaya with the number: 073/39 /KOM.ETIK /2019

BI. RESULT

Table 1. Results of evaluating the medical record status completeness n=167

Component	Interpretation	Completeness	
		f	%
Situation	Complete	27	16%
	Incomplete	140	84%
	Not complete	0	0%
Background	Complete	0	0%
	Incomplete	167	100%
	Not complete	0	0%
Assessment	Complete	0	0%
	Incomplete	167	100%
	Not complete	0	0%
Recommendation	Complete	0	0%
	Incomplete	167	100%
	Not complete	0	0%

Table 1 explains that most of the results are incomplete of all components. The situation (84%), background (100%), assessment (100%) and recommendations (100%) were incomplete.

Table 2. Observation results of nurses' handover shift instruments

Assessment aspect	Category	Additional information
Title	The titles that are in the handover instrument have shown that the instrument is used as a patient handover and observation media	According to the standard
Identification Standard	Patient identification components already exist, but there are some components that are rarely written down by nurses	According to the standard

Content standard	The components of the instrument use SBAR, but the component placement is not according to standard There is a duplication of writing on the patient's medical record document Not in accordance with the standard	Not according to the standard
Approvement standard	The standard or approvement consist of team leader submitting, team leader receiving and family, but for its application it is still not appropriate	According to the standard

Table 2 shows the results of observations on instruments used in hospitals and they are still not in accordance with hospital accreditation standards.

Table 3. Results of FGDs for developing inpatient room nurses' handover shift instruments with SBAR effective communication approach

Strategic Issues	Possible Causes	FGD Result	Research
Nurse's knowledge and understanding of the handover function instruments is still low	1. Nurse's assumption regarding the function of the handover instrument is still not appropriate 2. Nurse's understanding of the handover function is the same as the Integrated Patient Report (IPR) function 3. Understanding the application of handover has not been maximized	1. An easy, effective and efficient handover format is needed 2. Some nurses assume that the handover format cannot be used to tell patient care history during one shift	1. The preparation of a new instrument with the formulation of the SBAR method that is easy, effective and efficient 2. Outreach and testing of new handover instruments is carried out 3. Provide operating standard procedure and guidance for filling new instruments 4. A nursing record is made in the new handover format
Knowledge and understanding of nurses about IPR function is still low	1. Nurse's understanding of the function of the IPR is the same as the handover function	1. There needs to be an outreach on the true function of IPR 2. Some nurses assume that IPR is a tool or medium for handover 3. IPR is used as a handover tool and explains the patient's treatment history	1. Socialization of the function of IPR is carried out
Duplicate records on handover sheets and formats in medical record	1. Several items or components in the handover format contain the same components 2. No one has done a study on identifying duplicated data in the medical record format	1. Components that have duplication are minimized not to be rewritten 2. Some nurses are confused to fill in the handover format because there are some components that have been filled in other formats 3. Nurse submits duplicate data, namely weight/height, fall score, nutritional score and therapy	1. A systematic handover format is created, there is no duplication of documentation and can be made into a series of care resumes for one shift
Nurses' understanding of Indonesian Nursing Diagnoses Standard (INDS), Indonesian Nursing Intervention Standard (INIS) and Indonesian Nursing Outcome Criteria Standard (INOC) were still in low level	1. Lack of socialization regarding INDS, INIS and INOC for associate nurses	1. An update is made on INDS, INIS and INOC in the form of training or outreach to the implementing nurse 2. Some nurses are still following the old nursing documentation update	1. It is expected to be updated about INDS, INIS and INOC 2. Socialization of INDS, INIS and INOC version of Hajj General Hospital Surabaya
Handover instruments are not in accordance with the standards	1. Some SBAR components in the handover format are not appropriate	1. Need to be reviewed about the components / contents of the handover format with the SBAR method	1. The handover instrument needs to be revised according to the standard using the SBAR method

Table 3 shows the results of the FGD that have been carried out that the nurses' 'handover shift instrument that it is still not in accordance with the standards, nurses' understanding of the function of the instrument is still lacking.

IV. DISCUSSION

Situation

Evaluation of medical record documents used in the inpatient room of Surabaya Haji Hospital has some incomplete components. This is evidenced by the results of evaluations that have been carried out on the nurse handover shift instrument and that, in the component situation, there are several items that show incomplete results, namely no medical record (MR), gender, place of/ date of birth / age, address, space, allergy, day of care, score fall, pressure score, major complaints, blood pressure, pulse, temperature, respiratory rate, Glasgow Coma Scale, oxygen saturation, pain, Early Warning System (EWS) and weight or height. This is not in accordance with the statement of Bloom et al. that items that must be contained in the situation component and include the name of the patient, date of birth, date of entry, day of care, doctor in charge of care, nurse in charge of care, room name, bed number, reason of hospital admission, medical diagnosis, nursing problems that have not yet been resolved or major complaints. Current nursing problems are filled with actual nursing problems and must be continued [8], [12] . This is consistent with the results of the forum group discussion conducted by the researchers together with the head of the hospital's room and managerial who stated that the weight and height items on the handover instrument of the situation component are important to be included as one of the items for accuracy in determining nursing problems and providing further action.

Background

The background component shows that some items are incomplete, namely fluid status, food / drink intake, diet, intake, urine output, vomiting, nasogastric tube, bowel movements, drainage, blood, insensible water loss, total output, balance, and laboratory results and critical values. This is not in accordance with the statement by Bloom and Nursalam that items that must be contained in the background component are important information relating to the patient's current condition or subject matter that occurs to the patient. The information is about the interventions that have been carried out and the patient's response to any nursing problems, previous treatment history, history of allergies, laboratory results with critical values, roentgen results, history of previous illnesses, treatments that have been carried out and a summary of the overall situation [8], [12]. Some items that are not yet included in the background component must be added to the handover instrument. This aims as a basis for determining further nursing actions.

Assessment

The assessment component shows that some items are incomplete, namely the actual nursing diagnoses and risk items. This is not in accordance with Bloom and Nursalam who state that, in the assessment component, there must be results of the assessment or thoughts arising from the findings of the patient's current condition, and focus on the problems that occur at this time. The information reported on treatment status includes: vital sign, risk, pain scale, EWS, level of awareness, restrain status, Braden score, PIVAS score, nutritional status, elimination status, pressure sores and other supporting clinical information [8], [12] . Based on the standard, the items of nursing

diagnoses should not be included in the assessment component, but, rather, in the situation component. Observation results show that the items of nursing diagnoses are included in the assessment component. This shows the need for improvement and development of further instrument handovers to improve the quality of nursing services.

Recommendation

The results of observations on the recommendation component showed that some items were incomplete, namely vital sign monitor, patient and family education, position arrangement, injection therapy, oral therapy, relaxation sitractions, collaborative actions, plans that have not been carried out, signatures of team leaders who submit and signatures of the guarantor those who receive, install oxygen, mobilize, nebulizers, electrocardiographic measures, insert / remove infusions, insert / remove catheters, family signatures and room head signatures. This is not in accordance with the Bloom and Nursalam who state that in the recommendation component must contain information that provides recommendations on what should be done according to the situation, background, and assessment. The contents of the recommendations include: action plans to be taken, follow-up plans, solutions that nurses can offer to doctors, what nurses need from doctors to improve the patient's condition, and the time the nurse expects when the action occurs [8], [12] . Some items found in the recommendation component are in accordance with the standard. However, there are items that must be added to the recommendation component, namely nursing records. Nursing records function as written information that can explain the history of care that has been given to patients. Recording appropriate information on the recommendation component can determine the accuracy in determining the next plan of action and the accuracy in providing nursing care to patients.

V. CONCLUSION

The conclusion of this study is the development of a nurse handover shift instrument by adjusting several items of SBAR components and adjusting existing research and adjusting to hospital accreditation standards. The practical implication in this research is to improve the quality of nursing services by reducing the occurrence of patient safety incidents. It is hoped that this research will not misinform by making a nurse handover shift using the SBAR effective communication approach. Limitations in this study are differences in nurses' perceptions about the function of the handover shift instrument. Suggestions for further research should be carried out on the function of the actual nurse handover shift instrument and developing it toward information technology to be effective and efficient in providing care to patients.

CONFLICT OF INTEREST

No conflicts of interest have been declared.

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