

Enhancing Nurse Handover: Qualitative design methodology using one-to one interviews

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Abstract- Background: The significance of improving clinical handover in relation to patient care has been acknowledged in the literature. It is important in terms of preventing medical errors and reducing patient harm. A systemic review was performed and the outcome has prompted the researcher to propose a study within the Mohamed Bin Khalifa Bin Salman Al Khalifa Cardiac Centre (MKCC).

To understand nursing handover methods and make recommendations to improve the quality of handover within the MKCC. Thus ensuring the provision of safe care for patients and lessen the risks to patient care and outcomes.

Methods: Qualitative design methodology using semi-structured interview questions with one-to-one interviews.

Findings: The results will be recorded, transcribed verbatim, coded and presented within the discussion and findings chapter with tables to display the coded main themes. The findings will be used as a guide to understand the culture of nurse handover within the cardiac centre. Recommendations of any significant changes will be discussed with head nurses and managers as part of the transitioning to the new hospital.

Conclusion: Will produce the different approaches to handover and the understanding of using evidence based best-practice methods. The study will produce new evidence that may assist in the current culture for action planning for change to best-practice methods. The overall handover system at present being used will be measured against evidence based practice methodologies.

Index Terms- Nursing, evidence-based-practice, communication, handover, SBAR, Errors.

I. INTRODUCTION

The significance of improving clinical handover in relation to patient care has been acknowledged in the literature. It is important in terms of preventing medical errors and reducing patient harm. A systemic review was performed prior to this research study and the outcome has prompted the researcher to propose a study within the Mohamed Bin Khalifa Bin Salman Al Khalifa Cardiac Centre (MKCC). This is to inspire and encourage the staff to collaborate with the management to understand the level of understanding of nurse handover models. Recommendations after the completion of the study the results will be presented to the management and clinical head nurses as

well as the medical staff to let them understand the status of the handover process within the centre.

To understand nursing handover methods and make recommendations to improve the quality of handover within the MKCC. Thus ensuring the provision of safe care for patients and lessen the risks to patient care and outcomes.

II. BACKGROUND TO THE RESEARCH STUDY

The systemic review that was performed prior to the research study inspired the researchers to complete

III. LITERATURE REVIEW

The aim of this literature review is to answer the following research question "Is there a method to improve nurse's handover and communication with the patients?" Therefore, this systematic review will highlight the impact of poor handover and communication practices on patient care. Furthermore, it will emphasize that handover is considered to be one of the most important measures that should be done in the correct way and is defined as the transfer of responsibility of the patients care from one nurse to another. It is part of teamwork where each nurse will transfer her patient's information and patient's care requirements to other nurses on the next shift. (Johnson, Sanchez and Zheng, 2015). It is a routine process that must be done at the beginning and the end of each shift. The clinical handover can be done in different ways, For example, some handovers are done verbally with each nurse relaying the information to each other. While some are using a written handover and others are using a bedside handover (Cochrane library, 2018).

In a study done by Graan, Botti, wood and Redley (2016) in Australia who looked at standardizing handover processes and the content of the handover tool while using specific checklists. They proposed to use the tool as a solution to mitigate risks for preventable errors and prevent patient harm associated with clinical handover processes. The study which was based from the intensive care unit (ICU) to the cardiac ward while assessing the patient safety risks before and after the pilot implementation. A three stage process using a pre-post interrupted time series design was used and data collected using naturalistic observations and audio recording of 40 handovers and focus groups with 11 nurses. In stage 1 examination of existing practice using observation of 20 handovers and a focus group interview provided baseline data.

Stage 2 consisted of using existing tools for high risk handovers were adapted for the ICU-to-ward handovers. Stage 3 consisted of observation of 20 handovers and a focus group with 5 nurses was used to verify the design of tools to standardize handover in the ICU nurses transferring the care of cardiac patients to the ward nurses.

The results of Graan et al (2016) revealed in stage 1 that the handover process from ICU-ward was unsafe and that incomplete ward preparation, failure to check patient identity, handover was far away from the patient and also some other information gaps. Stage 3 observations revealed that nurses used the tools consistently, ward readiness to receive the patient and checking patient identity did improve.

Graan et al (2016) concluded that adoption of tools to standardize ICU-ward handover of cardiac surgical patients reduced handover variability and reduced the safety risks. They also concluded that specific tools in context were able to guide handover processes and deliver verbal content in a manner that was safe for clinical practice

The benefit and function of nursing handover are to ensure the communications between nurses in regards patient's information to provide a safe environment for the patients and reduce the mistakes during any miscommunications (Kilic et al., 2017). However, there is a statistics showed a number of handovers that done in different countries which done each year total of 300 million in USA, more than 40 million in Australia and over 100 million in England (Eggs and Slade, 2015).

During the time of the handover, communication is the most important thing to be focused on while handover. Any miscommunication during the handover could lead to harm to the patient and increase medical errors. For example in an emergency department, there is a high risk of miscommunication as it is a very stressful place in which communication may fail due to urgency and pressure (Manias et al., 2015). The significance of this systematic review is the need to improve the quality of nursing handover in hospitals ensuring that important information about the patient is shared in an accurate manner, ultimately ensuring the provision of safe and high quality of care to patients as well as reducing medical errors and harm to the patient (Malekzadeh et al., 2013). A systematic review is defined as a summary and evaluation of selected studies that talk about any clinical issue. (Library Research Guides, 2018).

IV. METHODOLOGY

The design methodology was that of qualitative nature with thematic analysis. The naturalistic approach which is the qualitative manner was good for the personal one-to-one interviews that were done within the units. The rationale for this choice was that of the nature of the data collection process and analytic system that was the most convenient for the research study in the time frame given. Staff within clinical practice are usually busy with patient care therefore releasing them for research purposes can sometimes interfere with the care being given therefore, a time limit was set for one-to-one interviews being done during their time on the ward. This made the data collection process simpler.

“Qualitative research methodology often relies on personal contact over some period of time between the researcher and the

group being studied. Building a partnership with study participants can lead to deeper insight into the context under study, adding richness and depth to the data. Thus, qualitative methodologies are inductive, that is, oriented toward discovery and process, have high validity, are less concerned with generalizability, and are more concerned with deeper understanding of the research problem in its unique context” (Ulin, Robinson and Tolley, 2004, p. 100, in Abou-Zaid, 2018).

A qualitative methodology was chosen particularly because of the concern with understanding the human behaviour from the researcher's perspective while assuming a dynamic and negotiated reality. The handover systems being used at present are off the unit's choice and design. They are lacking reliability and validity, although doing a fairly acceptable job in handing over patient information, but not without flaws.

V. ETHICAL APPROVAL

Ethics have always been recognized as a central element in medical and scientific research studies (Burton, Brundrett & Jones, 2014). Burton et al. also indicated that because of the increase in practice based research studies, higher educational establishments are now increasingly required to apply for ethical research approval through ethical committees within the institutions. The study was conducted according to the current ethical practice guidelines of the current organization.

Ethical approval for this study was sought and gained from the participating institution, and the overall organizational ethical committee for the hospital. Participants were approached by the organizational email. The first 24 received emails back were chosen for the study. Patient information sheets were distributed along with the consent for participation in the study.

VI. DATA ANALYSIS

Data analysis was by thematic analysis using the results of the one-to-one interviews which had been conducted earlier. The results were carefully examined recorded and transcribed verbatim for analysis. Identification of communication issues were noticed early on in the transcribing. The connecting issues were also identified including not fully understanding instructions given both verbally and written regarding a patient. Communication being one of the main reasons for a patient having a medication error. Communication failure is the root cause of 65% of all sentinel events reported to the joint commission to date, giving rise to 74% resulting in death (JCHO, 2017).

Themes and sub-themes emerged from the data analysis. Which gave rise to the most important aspects of the study which was the research question being, “Nurses perspectives in the use of a handover model?”

- Thematic analysis brought out 3 main themes from the study.

1. Standardization of the handover process.
2. Communication technique.
3. Generalized throughout the organization a model for the handover process.

The themes indicated that the adoption of a generalized handover model would benefit the center tremendously. The indication for the medical staff being involved in the handover model process was also indicated during the data collection.

Participant Quote: “Yes I have heard about models but not used any, medical staff don’t use them either”

Doctor’s compliance would also be indicated in the handover process. Nurses are aware about the medical staff not using the agreed model within the units of the centre so the adoption of a viable and reliable framework for action would benefit both healthcare areas. Pun, Matthieson, Murray and Slade (2015) noted that ‘recent research has demonstrated that communicating care is as important as delivering care to patients, it has also shown to see that optimal healthcare communication is linked to higher levels of clinician job satisfaction and lower levels of clinician turnover’. Having the medical staff use a model of handover will improve the quality of care within the centre. Graan et al (2015) indicated that ‘Standardizing handover processes and content while using checklists can be solutions to prevent risks and errors which would otherwise be preventable and reducing patient harm’. Good patient outcomes are the aim of all health care organizations and communication plays a large part in this objective.

The use of SBAR is the most widely used model within the health services in the United Kingdom as it complies with all related patient categories. Although our study was looking at different models being used within the centre, SBAR was the one mentioned in the policies and procedures in the centre.

Participant Quote; “SBAR and bedside handover systems are all I have heard off”.

VII. DISCUSSION AND FINDINGS

Knowledge regarding handover models was varied among the staff. Understanding of how a model of handover works was also varied with some staff having heard of models and some not.

“Yes I have heard about models but not used any” Participant response.

“Yes we have a policy for a model but we do not use it” Participant response.

“I have used SBAR in a previous hospital” Participant response.

Errors in health care resulting in adverse events are the leading cause of death and injury in hospitals (Matric et al., 2010). Medical errors within healthcare settings regarding communication and passing of information is still an issue within clinical practice. Strategies to improve standardization of clinical handover can reduce safety risks and improve transferring responsibilities and accountability during clinical handover (Graan et al, 2015). As in resuscitation situations the citation of a team leader, and using a communication tool for handover e.g. Situation, Background, Assessment and Recommendation (SBAR), or Reason-Story-Vital Signs-Plans System (RSVP) and locating a patients records is as important as the patient outcome itself. Good communication systems will help to plan continuous care for patients. Clinical signs of any acute illnesses may be similar to the underlying process as they may reflect failing respiratory, cardiovascular and neurological systems.

“It is useful in urgent and emergency situations to give the Dr. Specific information only of a given problem”. Participant quote.

“Along with critical thinking can manage a patient in urgent need, fast with correct care” Participant quote.

“I feel that a nursing handover model is not useful for overall and detailed handover”, Participant quote

“I have use ISBAR for documentation regarding communication in a previous hospital”

It was a concern among staff that information may have been lost without a model of handover. So the transfer of information in 4 different units was that of a general handover rather than a defined model of handover. Loss of communication has been observed also in surgical patients in the preoperative, intraoperative phase and postoperative phase time periods (Agarwal et al, 2012) due to the handover process. Communication was the key concept in the study and the documentation was also a case for concern. Abbreviations were being used without referring to the policy & procedure.

VIII. RECOMMENDATIONS

Recommendations came as being that of adopting a researched handover model that would fit each of the units. To justify the need for a handover model to be implemented to the centre and have collaboration with the use of the model with the clinicians. Using a collaborated system within the centre will be advantageous to the communication pathway of the patient’s care. Information should not be lost if the model of handover is followed by all involved in the care of the patient

IX. LIMITATIONS OF THE STUDY

Limitations to the study was that of administration time for research was not a concept adopted by the units for research staff. The understanding of evidence based practice protocols and lack of active research from the clinical nursing contingent. Future: work is now being done on upgrading the SBAR policies and procedures regarding nurse handover therefore preparing units to adopt a researched model. Limitations to the study were that of staff understanding of the actual impact that research can have on clinical practice and the usage of evidence based practice. The understanding of research itself played a part in the collaboration of the staff that participated in the one-to-one interviews. Some were reluctant even though confidentiality was maintained at all times. This has been looked at by the education department who have since provided the staff with study days on ‘Introduction to Research’, which can educate staff into understanding the concept of research studies. Staff doing research need to have some administration time to complete the research

study and this has been applied for through head of department. Sometimes patient workload has an impact on approaching staff or patients during research studies. Staff are moved from one unit to another if patient acuity is more than the needed allocation. So this has an impact on tracking any member of staff during a research study. Another issue within the centre is access to a statistical analytic tool which would have enabled us to do a larger more numerical based research. These limitations are manageable within the local management of the centre and in future more staff understanding of research will enable more studies to be implemented to the centre with recommendations for improvement in current situations where needed.

X1 Conclusion

The study was that of 24 staff being one-to-one interviews which gave an overall sample of the handover protocols being used. Recent research demonstrates that communicating while caring for a patient is as important as delivering care to a patient themselves, this also contributes to the optimal healthcare communication strategy which is also linked to medical staff being satisfied with their job and to low levels of medical turnover (Pun et al., 2015). The study revealed the status of the handover systems being used in the centre. The results showed that communication at present is there but also showed that room for improvement from both nursing and medical staff was inevitable. In regards to transferring different information between disciplines it proved that having a collaborative effort would show more clarity than the one at present. The data collected from the participants showed that the understanding of handover models was existent but not being implemented throughout the centre, but in some cases was utilized in some units.

Inherent challenges in communication between nurses and doctors can cause issues when the care of the patient is affected so it is a critical issue to have a good communication tool available where the information concerning a patient may not be lost in translation. A key indicator for improvement would be that of the present system being used, being upgraded to all of the centre. Then a change project to introduce a research based handover model to the center wards and units. These efforts may reduce any adverse events regarding communication difficulties and improve the quality of patient care outcomes.

REFERENCES

- [1] Abou-Zaid, C., 'Exploring the Teaching Skills of the Clinical Nurse Mentors of the 4th year Graduate Nursing Students in Critical Care Placements'. University of Liverpool Library; Thesis, Available at: <http://www.universityofliverpoollibrary.com>.
- [2] Amos, H., J., and Herrick, C. A., 'The Impact of Team Building on Communication and Job Satisfaction of Nursing Staff'. *Journal for Nurses in Staff Development*, 2018, 21(1); pp.10-16.
- [3] Anderson, I., Sharp, G., A., Norton, R., J., Dalal, H., Dean, S., G., Jolly, K., Cowie, A., Zawada, A., and Taylor, R., S., 'Home-based versus centre-based cardiac rehabilitation (Review). *Cochrane Database of Systemic Reviews*, (2017), 6(no: CD007130). Doi: 10.1002/14651858.CD007130.pub4.
- [4] Braaf, S., Riley, R., and Manias, E., 'Failures in communication through documents and documentation across the perioperative pathway'. *Journal of Clinical Nursing*, 2015, 24(13-14); pp. 1874-1884. <http://doi.org/10.1111/jocn.12809>.
- [5] Burton, N., Brundrett, M., and Jones, M., *Doing your Research Project*. 2nd ed., London, Sage Publications Ltd, 2014.
- [6] Graan, S., M., Botti, M., Wood, B., and Redley, B., 'Nursing Handover from ICU to cardiac ward: Standardized tools to reduce safety risks', *Australian Critical Care*, 2015, 29, pp. 165-171.
- [7] Johnson, M., Sanchez, P., and Zheng, C., 'The impact of integrated nursing handover systems on nurse's satisfaction and work practices'. *Journal of Clinical nursing*, 2015, 25(1-2); Pp. 257-268. <http://doi.org/10.1111/jocn.13080>.
- [8] Joint Commission International *Joint Commission International Accreditation Standards for Hospitals*. 6th ed., Illinois, United States of America, 2017.
- [9] Kilic, N., O., Acdoyuran, B., and Calhan, H., S., 'Information communication technologies export and economic growth relationship; An analysis on selected countries'. *Journal of Business Economic and Finance*. 2017, 6(4); pp. 328-335. <http://doi.org/10.17261/pressureacademia.2017.765>.
- [10] Malakzadeh, J., Mazloun, S., R., Etezadi, T., and Tasserri, A., 'A Standardized Shift Handover Protocol: Improving Nurses 'safe Practice in Intensive Care Units'. *Journal of Caring Services*, 2013, 2(3); pp.177-185. Doi:10.5681/jcs.2013.022.
- [11] Pun, J., K., H., Matthieson, C., M., I., M., Murray, K., A., and Slade, D., 'Factors affecting communication in emergency departments: doctors and nurses 'perceptions of communication in a trilingual ED in Hong Kong. *International Journal of Emergency Medicine*, 2015, 8(48); pp. 1-12. Doi 10.1186/s12245-015-0095-y.

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