



## AN EVALUATION ON NURSES WORKLOAD IN PATIENTS OF THE ACUTE CORONARY SYNDROME IN INTENSIVE CARDIOVASCULAR CARE UNIT (ICCU)

Ayu Wahyuni Lestari\*<sup>1</sup>, Titin Andri Wihastuti<sup>2</sup>, Septi Dewi Rachmawati<sup>3</sup>, Kumboyono Kumboyono<sup>4</sup>

<sup>1</sup>Nursing Master's degree Student, School of Nursing, Medical Faculty, Universitas Brawijaya, Malang, East Java, Indonesia.

<sup>2,3,4</sup>Lecturer Nursing Master's Degree, School of Nursing, Medical Faculty, Universitas Brawijaya, Malang, East Java, Indonesia.

Received date: 25 April 2018

Revised date: 16 May 2018

Accepted date: 06 June 2018

Corresponding Author: Ayu Wahyuni Lestari

Nursing Master's degree Student, School of Nursing, Medical Faculty, Universitas Brawijaya, Malang, East Java, Indonesia.

### ABSTRACT

**Background:** An excessive number of patients or overcrowding is a common problem in the ICCU which gives a high workload for nurses and affect the quality of service. **Objective:** The purpose of the research was to explore the experiences of nurses against the workload in the treatment of Acute Coronary Syndrome patients (ACS) in the ICCU. **Methods:** This research is a descriptive phenomenology research with 8 participant nurse who has experience working in the ICCU minimum 1 year. **Results:** This research resulted in the exhaustion of the theme will be the power and limitations of the increased workload that consists of two sub-themes, namely the imbalance ratio of nurses and patients as well as the workload increases. **Conclusions:** Hence the need for a concerted effort to address the problems experienced by nurses in the ICCU by adjusting the ratio between the number of nurses and the number of patients or caregivers not experiencing fatigue and can provide maximum service.

**KEYWORDS:** Acute Coronary Syndrome, Cardiac Intensive Care Unit, Workload, Phenomenology.

### INTRODUCTION

Ischaemic heart disease is a problem of public health world<sup>[1]</sup> and the leading cause of death worldwide, accounting for 17.3 million deaths in the year 2008 (or ~ 30% of all deaths worldwide). Coronary artery disease and acute coronary syndrome (SKA) together accounted for around 7 million deaths each year.<sup>[2,3]</sup> The prevalence of cardiovascular disease in Indonesia many occur in individuals aged over 15 years amounted to 9.2%.<sup>[4]</sup>

Acute Coronary Syndrome (ACS) is ischaemic heart disease who are treated in a special room of the heart, namely Cardiovascular Intensive Care Unit (ICCU). Limitations of manpower and the increased workload are excessive workloads due to the buildup of patients and providing services with a limited number of nurses and care support facilities. Heaping amount of patients occurs because Groove does not start passing moving in accordance with the procedures. According to Domres, Koch, Manager, and Bebecker<sup>[5]</sup> State the number of health workers as human resources limited ICCU become the common problems found so cannot meet the needs of patients who are critical or critical and

redundant. The number of patients who are many and excessive overcrowding is the most common problem in ICCU that gives a high workload for nurses and affect the quality of service.<sup>[6]</sup>

The excessive workloads facing an obstacle of nurses in optimal service paint a large number of patients and limitations of power makes the Act of nursing experience barriers. Barriers in the form of excessive workload faced by nurses also affect the focus of nursing in patients decreases. Patients need the convenience in the form of attention, privacy, an intense communication, touch and open communication to bring about the patient's comfort is a form of doing for aspects of caring Swanson. The nurse could not realize it due to the condition of the ICCU which is a treatment on the patient's total care high dependency rate and the number of nurses is limited as well as a high workload. So to be able to realize a nursing professional and focused on the patient's need for efforts to reduce barriers to providing care to patients one of which is to explore the experience of nurses against the workload in the treatment of Acute Coronary Syndrome patients (ACS) in the ICCU.

## METHODS

This study was qualitative using a descriptive phenomenology design. Through this approach, it is possible to obtain research results that illustrate the phenomena derived from the personal experience experienced by participants.<sup>[7,8]</sup> The study was conducted by a team of researchers led by a research nurse with high integrity and cardiovascular expertise. Prior to the data collection process, participants would get the explanation on the objectives, benefits, and research procedures. There was no relationship between researchers and participants. Researchers held 2 to 3 meetings to the nursing room of the ICCU of the Public General Hospital Syaiful Anwar Malang. This was done so that participants are willing to tell his experiences about participating in patient care experience acute coronary syndrome (ACS). Furthermore, the consent to participate in the research was evidenced by the signing of informed consent by the participants.

Participants in this study were 8 nurses working in the ICCU of the Saiful Anwar General Hospital, Malang, East Java Indonesia. No nurses refused to participate in the study. Research sample was selected from population using purposive sampling approach<sup>[9]</sup> based on inclusion criteria including having experience working in ICCU at least 1 year, having experience treating patients with ACS, and have followed Basic Cardiac Life Support Training {BCLS}.

Nursing experience in patient care explores ACS in the ICCU through in-depth interviews semi-structured. The interview process was conducted face-to-face in the ICCU nurses' room. Participants were interviewed one by one. Interviews lasted from 30-50 minutes per participant. Statements submitted by the participants were recorded into audio (MP3). The research results are kept anonymous and confidential.

Interview data were analyzed manually using thematic methods<sup>[10]</sup> where one cannot proceed to the next phase without completing the previous stage. The stages are: a) familiarisation with the data, done by reading repeatedly the results of interviews; b) coding, executed by making categories of words considered important and answering research objectives; c) searching for themes, organizing categories according to their groups for subthemes and themes; d) reviewing themes, checking the suitability of themes and categories; e) defining and naming themes, defining themes for obtaining the main idea of each theme; and f) writing up, writing the results of research as a report after associated with the existing literature.

## RESULTS

Based on the results of the interview against 8 participants can be identified themes of fatigue will increase workload and manpower limitations. This theme contains the sense of fatigue felt by nurses due to the lack of nursing resources in a service unit is

accompanied by a high degree of working hours and responsibility are great as well as the difficulty of the task at hand. Fatigue will cause the power limitations of the increased workload has two subthemes, namely the imbalance ratio of nurses with patient and nurse were assigned additional duties.

### a. The Sub-theme of unbalance ratio of the nurse with patient

Sub-theme has the meaning of an imbalance between the number of human resources available to the number of patients who should be treated. Sub-theme was composed of reasonable action, the nursing workforce is less and the number of patients is increasing. This is in accordance with the statements delivered by the following participants:

*"Coroner's syndrome patients of acute preventive action is supposed to do, namely to use the Cath this primary or sometimes delayed because first we lack human resources." (P1)*

*"If here still less nurse to be right sometime one nurse holding more than four patients were less energy." (P4)*

### b. The Sub-theme of increased workload

Sub-theme this means increasing amounts of work or activity conducted by a nurse during a stint in a nursing service unit. Sub-theme consists of the number of patients is increasing and has additional duties. This relates to the statement submitted by the following participants:

*"...waiting for the schedule because of the schedule to the Act of operating it very there is a maximum of one day five action operation. Most have not fixed it already six or seven in a day, and even then already. Make effort in cath room. Tired all the time." (P1)*

*"Yes like it or like me yesterday about PQRS training, so there is a follow up of his Yes student do facilitate extension if the follow up directly not just we finally have an extra job so wrote." (P2)*

## DISCUSSION

The results showed that the workload of nurses in the ICCU is very high this is due to the limited number of nursing personnel, and bearing in mind that space is the space where the ICCU patients have a high level of dependency in the process treatment and the fulfillment of basic human needs.

Limitations of manpower and the increased workload are excessive workloads due to the buildup of patients and providing services with the limited number of nurses and care support facilities. Heaping amount of patients occurs because Groove transfer of patients does not run in accordance with the procedures. According to Domres, Koch, Manager, and Bebecker<sup>[5]</sup> state the number of health workers as human resources in the

ICCU limited became the common problems found so cannot meet the needs of patients who are critical or critical and redundant. The number of patients who are many and excessive overcrowding is a problem most commonly in ICCU which gives a high workload for nurses and affect the quality of service.<sup>[6]</sup>

The excessive workloads facing an obstacle of nurses in optimal service paint a large number of patients and limitations of power makes the Act of nursing experience barriers. Barriers in the form of excessive workload faced by nurses also affect the focus of nursing in patients decreases and cause fatigue. This is in accordance with the research conducted by Burke and Ronald J<sup>[11]</sup> in the study against fatigue on nurses, mentions that the workload in nurses is the most meaningful to predict the existence of mental health negative on nurses, stress, lack of job satisfaction, stress, and fatigue.

Patients need the convenience in the form of attention, privacy, an intense communication, touch and open communication to bring about the patient's comfort is a form of doing for aspects of caring Swanson. The nurse could not realize it due to the condition of the ICCU which is treatment on the patient's total care high dependency rate and the number of nurses is limited as well as a high workload. So to be able to realize a nursing professional and focused on the patient's need for efforts to reduce barriers to providing care to patients.

## CONCLUSION

Through this research, it is known that the workload of nurses in the ICCU very high caused by the limitations of power and this causes fatigue so that care be given the maximum. In this research obtained two important sub-theme i.e. the imbalance ratio of nurses and patients as well as the workload increased, therefore, the need for a concerted effort to address the problems experienced by nurses in the ICCU by adjusting the ratio between the number of nurses and the number of patients or caregivers not experiencing fatigue and can provide maximum service.

## Ethics

This research has passed the Medical Research Ethics Committee of Medical Faculty, Universitas Brawijaya, Malang with the letter number: 216/EC/KEPK/06/2017.

## Funding

This research was funded by Medical Faculty, Universitas Brawijaya.

## ACKNOWLEDGMENT

The authors are pleased to thank the mentors, hospital, and colleagues who have spent much time and ideas for the completion of this research.

## Conflict of interest

There is no conflict of interest in this research

## REFERENCES

1. Baccouche, H. et al., Acute Coronary Syndrome Among Patients with Chest Pain: Prevalence, Incidence and Risk Factors. *International Journal of Cardiology*, 2015; 214: 1–5. Available at: <http://dx.doi.org/10.1016/j.ijcard.2015.11.065>.
2. World Health Organization. (2008) Cardiovascular diseases: fact sheet number 310.
3. T. Ohira, H. Iso. Cardiovascular disease epidemiology in Asia: an overview *Circ. J.*, 2013; 77(2013): 1646-1652.
4. Amalia, L. et al. Prevalence of Adverse Drug Reactions in CAD STEMI Patients Treated in the Cardiac Intensive Care Unit at the Public Hospital in Bandung, Indonesia. *Scientia Pharmaceutica*, 2016; 84(1): 167–179. <http://doi.org/10.3797/scipharm.ISP.2015.08>.
5. Domres, B., Koch, M., Manger, A., Becker, H. D. Ethics and triage. *Prehospital Disaster Med*, 2001; 16: 53-8.
6. Hoot, N.R. and Aronsky, D. Systematic Review of Emergency Department Crowding Causes, Effects, and Solutions. *Annals of Emergency Medicine*, 2008; 52: 126-136.
7. Padilla-Diaz, M., “Phenomenology in educational qualitative research: Philosophy as science or philosophical science?”, *International Journal of Educational Excellence*, 2015; 1(2): 101-110.
8. Reiners, G.M., “Understanding the differences between Husserl’s (descriptive) and Heidegger’s (interpretive) phenomenological research”, *J Nurs Care*, 2012; 1(5): 1-3. doi: 10.4172/2167-1168.1000119.
9. Streubert, H.J. and Carpenter, D.R., *Qualitative research in nursing: Advancing the humanistic imperative* (5th ed), Lippincott Williams & Wilkins, China, 2011.
10. Clarke, V. and Braun, V., “Teaching thematic analysis: Over-coming challenges and developing strategies for effective learning”, *The Psychologist*, 2013; 26(2): 120-123.
11. Burke and Ronald J. Hospital Restructuring, Workload, and Nursing Staff Satisfaction and Work Experiences. *Health Care Manager*, 2003; 22(2): 99–107.