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# Caring of Acute Deterioration Patient in Term of Leadership Ability Among Nurses at Selected Islamic Hospital

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**Abstract** - Patients with acute illness always seek for help and put their trust in the professionals caring for them. Nurses as first responder of acute patient deterioration in should treat the patients within the golden hour of emergency care. Nurses in medical-surgical ward need to be ready as a team leader for every condition of patient with risk of acute deterioration. The goal for this study was to determine the leadership ability among nurses in caring of acute deterioration patient at medical surgical wards. Descriptive quantitative design was used for this study. It was conducted in Sultan Agung Islamic Hospital at Semarang City Indonesia. A total of 79 respondents involved using purposive sampling technique. Majority of the nurses or 50.6% were have high level of leadership ability caring of acute deterioration patient. Basic Life Support certification and involved in emergency episode were significant predictors of nurses leadership ability. Although nurses felt highly level of leadership abilities, development and improvement is needed to gain the advance or very high competency of caring acute deterioration in medical surgical wards. Furthur research need to be conducted to seek the effectivity of advance training in caring acute deterioration patient.

Keywords: Leadership Ability, Acute Deterioration Patient, Nurse

## 1. Introduction

Heart attack and sudden changes of physiological sign are reaching 29% from mortality rate in the world every year. In addition, cardiac arrest is responsible for about 60% of deaths from ischemic heart disease. According to World Health Organization (2012), the mortality rate caused by cardiovascular disease with cardiac arrest in Indonesia is 371 per 100000 people. Patients with acute illness always seek for help and put their trust in the professionals caring for them. They have assumption that they will be assessed, observed and treated properly. According to Middleton (2011), patients die simply because the staff nurses failed to act on changes in acute patient deterioration. Nurses as first responder of acute patient deterioration in should treat the patients within the golden hour of emergency care.

Acute patient deterioration such as cardiac arrest and adverse events, are commonly happened in medical surgical unit (Hart, Spiva, & Mareno, 2014). Nurses in medical-surgical ward need to be ready for every condition of patient with risk of acute deterioration. Patients from medical-surgical ward who are admitted to the Intensive Care Unit who commonly have cardiopulmonary arrest show detectable signs of deteriorating in the preceding of these events. In one

study regarding adverse events, the quality of nursing care in the hours preceding adverse event has been deemed substandard because of a lack of confidence, knowledge, inadequate appreciation of clinical urgency, and failure to seek advice (Ludikhuize, Smorenburg, Rooij, & Jonge, 2012).

Nurses in medical surgical area especially in acute wards almost every time are faced with high level of stress associated with lack of control, work pressures and difficulties in providing support and follow up for patients and relatives (Tait, 2010). These staff nurses in medical surgical wards assume multiple roles and should be adjusted quickly to change, be creative and innovative, and possess the ability to think and act appropriately. "Nurses are required to recognize signs of clinical deterioration, identify cases of critical illness, activate rapid response teams, and take action to stabilize the patient's clinical condition alongside medical colleagues" (DeVita et al., 2006; Massey et al., 2010 as cited in Smith & Lyte, 2013, p.297). In order to cover those situations, nurses need to have a good confidence and leadership ability to coordinate with others.

While managing the acute patient deterioration, nurses need to give their best performance to bring positive outcomes for patients. In addition, to achieve positive results in managing of acute patient deterioration, good working should be performed by the team. Nurses should consider their skill to lead and coordinate with the other nurses and rapid response team (Tait, 2010). The leadership skill to respond and face the clinical emergencies situation is concern on non-technical skill with complement of technical skills. Nurses need to lead themselves and coordinate with others to perform an emergencies intervention (Gordon & Buckley, 2009).

Nurses have responsibility to serve people and the professionalization of nursing will ultimately help the others to achieve best outcomes especially collaborating with the others in managing acute patient deterioration. To achieve those positive outcomes, nurses should maintain their leadership ability. Leadership is a process that can be used in any situation, simple or complex. Having leadership ability within management of acute patient deterioration is essential component to promote the concept of professionalism in the nursing practice.

Having practiced as a nurse in Indonesia, the researcher observed that staff nurses in medical surgical unit often times engaged in situations where they have to make quick decisions. Nurses in medical surgical wards seldom to have an in-house or ex-house training related with team based training to manage acute and emergency condition of the patients in the ward. Most of them only had a basic life support training, to fulfill the requirement of the hospital. To be able to collaborate with other members, it is essential to be able to manage acute patient deterioration.

The researcher has to develop a sense of responsibility to accord the profession with high regards. The researcher envisions that nurses must maintain a proper sense of caring, the ability to initiate teamwork in order to promote patient safety. It is a great and important challenge for nurses to skillfully and effectively manage the patients with acute deterioration to promote recovery.

This research aim to determine medical-surgical nurses leadership ability in caring of patients experiencing acute deterioration.

## 2. Methods

The current study was a cross-sectional, descriptive study of leadership ability of nurses rated by their supervisor. 79 nurses were involved on this research and selected through purposive sampling. This study conducted on islamic hospital of sultan agung semarang in four medical-surgical wards. All data were entered into a database using Microsoft Office Excel 2007. SPSS, version 16.0, was used for descriptive statistical analysis. The 14-item leadership ability questionnaire was derived from Gordon and Buckley's (2011) with has been validated and reliability test by previous research with Cronbach's alpha of 0.91 to 0.94.

# 3. Results

Table 1. Characteristics of the respondent in term of training attended related to emergency care and involvement in emergency episode

Variabel	Category	Frequency	Percentage (%)
Training Attended	Basic Life Support	74	93.7
Related to	elated to Advance Cardiac Life Support 5	5	6.3
Emergency Care	Total	79	100 %
	1-5 times	18	22.8
Involvement in emergency episode	6-20 times	25	31.6
	>20	36	45.6
	Total	79	100

As revealed in table 3.1, in terms of training attended in emergency care majority of the respondents, where seventy four (74) or 93.7% of them have Basic Life Support Training, only 5 (5) or 6.3% respondents have Advance Cardiovascular Life Support training. It can be inferred that only few of the respondents have the competency to do advance life support for acute patient deterioration.

As illustrated in table 3.1, in terms of involvemet in emergency episode majority of the respondents or 45.6% have more than twenty times involvement in emergency episode. This suggests that the nurses have a lot of experience with emergency episode while taking care of patients with acute deterioration in medical surgical wards. They also do repetitions of emergency procedures while facing emergency episode that may done elevated and increased their ability in managing acute patients' deterioration.

Table 2 Distribution of leadership ability among nurses at selected islamic hospital

Variable	Category	Frequency	Percentage (%)
Leadership ability	Moderate	2	2.5
	High	40	50.6
	Very high	37	46.8
	Total	79	100

As illustrated in Table 3.2, the leadership ability of the nurses in medical surgical ward was rated high by the supervisor as much as 40 (50.6%). Although minority of them was rated moderate by the supervisor as much as 2 (2.5%).

# 4. Discussion

Reflected from table 3.1, training and continuing education is needed for each nurse to enhance their ability in handling acute patient deterioration. Updating their skills is essential to cope with scientific and technological changes within the profession especially in medical surgical ward. To give appropriate nursing care for acute patient deterioration, nurses must attain expertise in medical surgical area and must have the necessary information about the specialty.

Indonesian National Nurses Association (2015) mentioned that, continuing education or training is important to maintain the ability of the nurses. It is relevant to the regulation of majority of the hospitals in Indonesia requiring the nurses to have a minimum basic life support certificate. It also mandates the colleges of nursing to advise the fresh graduate nurses to attend the basic life support training, so they will be able to handle acute condition.

Nurses should realize that there is no end for gaining improvement in their work. This is relevant that attaining continuing education and training is very essential to develop ability and confidence in managing of the acute patient deterioration (Dasalla, 2009).

According to Odell (2014), nurses experiences in the involvement of emergency episode can influence nursing practice decision. The decision of the nurses to act properly while involve in emergency episode is supported by the rapid assessment with early warning score. A similar study of Gordon (2009), shows that the repetitions of nurses simulation in emergency procedures improve ability to respond to emergencies among medical staff.

Those finding also maybe because of nurses have gained different experience or involvement in emergency episode. According to Makinen, Sune, Niemi-Murola, Helitz, Varpula, Nurmi, Axelsson, Thoren and Castren (2012) found that there is significant difference in leadership ability during cardiopulmonary resuscitation between nurses in two different university hospitals. It is because one of the hospitals lacks of experiences regarding individual and group working ability.

The finding also suggests that due to variety and difficulty of acute deterioration case in each ward they have high leadership ability. Researcher observed that allotments of the wards in Sultan Agung Islamic Hospital are based on the patient case, so nurses are facing different problems of patients' diseases.

According to study of Nigro (2012), complexity of problems, experiences and decision-making ability are the factors that caused differences in leadership ability. Furthermore in a research by Gordon and Buckley (2009), they emphasize that leadership ability depend on the learning method and experience of the nurses in responding patient with clinical emergencies.

Reflected from table 3.2 it means that the nurses have high leadership ability in term of be identifiable as leader until emergency team arrives, coordinate immediate responders, support the emergency team leader and performing technical skill of calling for help appropriately. This may be occur because of the nurses are not hesitate call the code blue team after recognizing the patients getting worse on the vital signs. They realize that the standard procedure when the patients become worse they need to call for help and not handle acute patient deterioration by them.

This finding are similar with the local study of Warsito (2006), found that nurses with good perception of teamwork have ideal communication to

coordinate with the team. It is also suggest that they should follow the procedure and organizational bureaucracy to coordinate with other medical staff.

Study from Kang, Massey and Giillespie (2015), found that team work especially on the non-technical skills of nurses can be affected by the patient acuity and familiarity of the team in handling patient. Team coordination with advanced planning can minimize distractions and interruptions that impact on nurses' performance.

. This highly rated seems happened because the nurses in Sultan Agung Islamic Hospital have good communication in leading other nurses while waiting for emergency response team arrival. According to the local study of Alapi (2013) he mentioned that it is necessary for nurses to be able communicate with others as teamwork during clinical emergencies episode. This communication emphasizes on the integration of technical and non-technical skills such as performing Cardiac Pulmonary Resuscitation (CPR) and shares the essential information regarding patients history.

Other aspect that may support the findings is the fact that the in medical surgical ward nurses had been exposed to many cases and have gained experienced by a lot of complex emergency episodes in their area.

## 5. Conclusion

Majority of the nurses in medical-surgical ward at selected islamic hospital were perceived by their supervisors to have high leadership ability. This maybe because of their experience in term of length of service in medical surgical wards, frequent involvement in emergency episode and training attended in emergency care. Furthur research need to be conducted to seek the effectivity of advance training in caring acute deterioration patient.

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# References

- Alapi, M.N.A. (2013). Hubungan komunikasi terapeutik perawat terhadap tingkat kepuasan pasien di instalasi gawat darurat rumah sakit pku muhammadiyah Yogyakarta. (Unpublished thesis). Muhammadiyah University of Yogyakarta, Indonesia.
- Buckley, T. & Gordon, C. (2011). The effectiveness of high fidelity simulation on medical–surgical registered nurses' ability to recognise and respond to clinical emergencies. *Nurse Education Today, 31*(7), 716-721. doi: 10.1016/j.nedt.2010.04.004
- Daniele, M. (2012). The nursing management of cardiac arrest in the emergency departments: the experience of cuneo. *Open Access Scientific Reports*, 1, 138. doi:10.4172/scientificreports.138
- Dasalla, E.B. (2009). Competency of staff nurses in managing critically ill patients in a government hospital in manila. (Unpublished thesis). Arellano University, Manila Philippines.
- Gordon, C., & Buckley, T. (2009). An evaluation of high fidelity simulation training of medical-surgical graduate students in responding to patient clinical

- emergencies. *Journal of Continuing Education in Nursing, 40*(11), 491-498. doi:10.1016/j.nedt.2010.04.004
- Hart, P.L., Spiva, L., & Mareno, N. (2014). Psychometric properties of the clinical decision-making self-confidence scale. *Journal of Nursing Measurement*, 22(2), 312-322. doi: 10.1891/1061-3749.22.2.312
- Hicks, F.D., Coke, L., & Li, S. (2009). The effect of high-fidelity simulation on nursing students knowledge and performance: a pilot study. *National Council of State Boards of Nursing*. Retrieved from https://www.ncsbn.org/09 SimulationStudy Vol40 web with cover.pdf
- Indonesia Ministry of Health. (2011). Profil kesehatan republik Indonesia 2011. Retrieved from http://www.depkes.go.id.
- Indonesian National Nurses Association. (2014). Undang-undang keperawatan. Retrieved from <a href="http://www.inna-ppni.or.id/index.php/component/content/article/85-berita/144-undang-undang-keperawatan">http://www.inna-ppni.or.id/index.php/component/content/article/85-berita/144-undang-undang-keperawatan</a>
- Kang, E., Massey, D., Gilespie, B.M. (2015). Factors that influence the non-technical skills performance of scrub nurses: a prospective study. *Journal of Advance Nursing*. doi: 10.1111/jan.1274
- Kate, B., Dagmar, L., & Richard, T. Deterioration in hospital patients: early signs and appropriate actions. *Nursing Standard.* 23(1), 43. Retrieved from http://e-resources.pnri.go.id:2057/docview/219875165?accountid
- Ludikhuize, J., Smorenburg, S.M., Rooij, S.E., Jonge, E., (2012). Identification of deteriorating patients on general wards; measurement of vital parameters and potential effectiveness of the Modified Early Warning Score. *Journal of Critical care*, 27, 1-2. doi: 10.1016/j.jcrc.2012.01.003
- Macaraeg, E.R. (2000). Leadership effectiveness of nursing managers in selected hospitals in mandaluyong city. (Unpublished thesis). Arellano University, Manila Philippines.
- Middleton, J. (2011). *Careful observation and appropriate action can save lives*. Retrieved from <a href="http://www.nursingtimes.net/Journals/2011/08/24/f/p/p/The-Deteriorating-Patient.pdf">http://www.nursingtimes.net/Journals/2011/08/24/f/p/p/The-Deteriorating-Patient.pdf</a>
- Nigro, M.T. (2012). Leadership ability and achieving styles among studentathletes at a NCAA-II university in the northeast united states. (Published dissertation). Retrieved from http://www.dowling.edu/wpcontent/uploads/2015/01/Mary-Theresa-Nigro-Abstract.pdf
- Odell, M. (2014). Detection and management of the deteriorating ward patient: an evaluation of nursing practice. *Journal of Clinical Nursing*, 24, 173-182. doi: 10.1111/jocn.12655
- Page, K. & Mc Kinney, A. (2012). *Nursing the acutely ill adult: case book*. Englang: Mc Graw Hill.
- Polit, D. F. & Beck C. T. (2012). *Nursing research: generating and assessing evidence for nursing practice* (9<sup>th</sup> ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Riem, N., Boet, S., Bould, M.D., Travares, W., & Naik, V.N. (2012). Do technical skills correlate with non-technical skills in crisis resource management: a simulation study. *British Journal of Anesthesia*, 109(5), 723-728. doi:10.1093/bja/aes256
- Smith, M.C. & Lyte, G. (2013). Leadership and excellence in the early recognition of critical illness: a call for papers. *Intensive and Critical Care Nursing*, 29, 297-299. Retrieved from http://dx.doi.org/10.1016/j.iccn.2013.10.001

- Tait, D. (2010). Nursing recognition and response to signs of clinical deterioration. *Nursing Management*, 17(6), 31-35. Retrieved from http://journals.rcni.com/doi/pdf/10.7748/nm2010.10.17.6.31.c8007
- Venzon, L.M. (2004). *Professional Nursing in the Philippines*. Quezon City: C&E Publishing, Inc
- Warsito, B.E. (2006). Pengaruh persepsi perawat pelaksana tentang fungsi manajerial kepala ruang terhadap pelaksannan manajemen asuhan keperawatan di ruang rawat inap rsjd dr amino gondohutomo semarang. Retrieved from http://eprints.undip.ac.id/16687/
- Whitfield, D., Baio, P., Huff, B., Hart, P.L., Spiva, L., Law, T., Welss, T., & Mendoza, I.G. (2014). Medical-surgical nurses' knowledge, perceived self-confidence, and leadership ability as first responders in acute patient deterioration events. *Journal of Clinical Nursing*, 23, 69-78. doi: 10.1111/jocn.12523
- World Health Organization. (2012). NCD mortality and morbidity. Retrieved from http://www.who.int/gho/ncd/mortality\_morbidity/en/