The Analysis of Relationship Between the Competence and the Performance of ICU and CVCU Nurses at Dr. Wahidin Sudirohusodo Hospital of Makassar

Jasmin Ambas, Fahri Kahar and Jasruddin
Department of Public Administration, Universtas Negeri Makassar,
Jln. Bonto Langkasa Kampus Gunung Sari Baru, Makassar, South Sulawesi, Indonesia

Abstract: Competence is an ability and a skill of a person in the form of knowledge, the ability and skills are required in an office to satisfy the customers and to give motivation in finishing a task. This study aims at determining the relationship of educational competence, work period and training to the performance of ICU and CVCU Nurses at Dr. Wahidin Sudirohusodo Hospital of Makassar. This research applied analytic analysis with cross sectional study. The focus of the research is the ICU and CVCU nurses at Dr. Wahidin Sudirohusodo Hospital of Makassar with 44 respondents. The data is collected through interviews and observations purposively. The result of the research showed that there is a relationship between competence, education, employment and training to the performance. Therefore, it is recommended that structural attention and the improvement is necessary for competence, education, work period and training with the performance.

Key words: CVCU, Sudirohusodo, Makassar, hospital, employment

INTRODUCTION

ICU and CVCU are available to care rooms in a hospital. In Dr. Wahidin Sudirohusodo Hospital, there are staffs and specialized equipment to observe, care and treat patients that are threatened for a reason. Thus, CVCU and ICU nurses should provide capabilities and special equipment to support the vital functions by the performance of medical staffs, nurses and other staffs who are experienced to manage the situation. ICU and CVCU at Dr. Wahidin Sudirohusodo Hospital are two separate places but the work demands require special competence in nursing duties because there are several numbers of equipment and also because the patient's condition is not stable, so accurateness, skill and speed are necessary to care the patients.

There are 30 nurses in ICU and 20 nurses in CVCU. Some nurses pass the stages of requirements before taking the positions respectively but the competency test for all of the nurses at Dr. Wahidin Sudirohusodo Hospital is not implemented yet and no nursing personnel take the test of skills. The efforts to improve skill in nursing care and in assessing the success of nursing services in hospital need objective assessment through nursing care methods and instrument for nurses.

The evaluation results in the standard implementation of nursing care are reported by implementation team SPMKK or the Development Standard of Nursing Performance Management at Dr. Wahidin Sudirohusodo Hospital of Makassar. The team found that nursing care document in 2005 is not suitable for the needs of clients and almost 90% has not been completed, monitoring and evaluation of the nursing actions are not based on the clinical performance indicators. Therefore, it is necessary to understand the correlation between the performance competence of ICU and CVCU nurses at Dr. Wahidin Sudirohusodo Hospital of Makassar.

Literature review: Conformity work or work competence refers to a person's ability to respond the changes and the aspects of skill adequately and the ways to achieve good performance and result. The conformity of the research describes a productive relationship between the competence of a person with the work that refers to the fundamental characteristics of a person that gives superior performance and results. In the arrangement of nurse competence there are three domains of competence, namely:

- The practice of professional, ethics, legal and culturally sensitive is the ability of nurses in doing actions according to standards of an ethical code of nursing, obey the laws and regulations and also give attention to the culture and customs of the patient or client
- The management and administration of nursing care is a set of capabilities for managing and providing nursing care to patients or clients

---

Corresponding Author: Jasmin Ambas, Department of Public Administration, Universtas Negeri Makassar,
Jln. Bonto Langkasa Kampus Gunung Sari Baru, Makassar, South Sulawesi, Indonesia

- Professional development is the ability of nurses to improve the knowledge and skills of self and science of nursing

Nursing care in the form of assistance is provided because of the physical and mental weakness, limited knowledge and lack of will that lead to the ability in doing daily activities independently. The core of fundamental concepts of current and future management is the importance to create a balance between vision, mission and obvious motivation in achieving organizational goals that have been set. If not there will be imbalances that will only create obscurity toward the development of future nursing management. A nursing process is a process of public recognition or other professions on the existence, participation and image of the nursing profession.

Nursing in Indonesia is still in the process of realizing nursing as a profession which is a long-term process, aimed at meeting the demands and needs of the Indonesian people. The changes that occur will cover all aspects of nursing namely:

- Structuring high education of nursing
- Nursing service and care
- Development and professionalism life
- Structuring the environment for the development of nursing

The development in various aspects of nursing is interrelated, interdependent, mutual influence and mutual interest. Therefore, innovation in four aspects above are the primary focus of Indonesian nursing in the process of professionalization and prepare the best challenges for nursing in the future (Nursalam, 2002).

In analyzing the variables, the performance of nurses is the right object in this research. Focus of the discussion is directed at an individual's competence variables as internal factors of human resources as a link with the performance. While, the factors of competence as follows.

Level of education: Education is one way to improve the ability, skills, achievements and productivity of human resources of nursing. In general, the new worker usually has the capability and expertise needed by an organization. Nevertheless, some workers have not yet developed fully in carrying out the tasks assigned to them and even the old workers were usually still making mistakes in the execution of their duties. The education level is a level that has been passed by a worker at an educational institution and is one measure of competence on the job where workers must meet this condition in a particular job or position.

Experience/tenure: Experience is one of the variables that affect the behavior and performance (Gibson *et al.*, 1996) which provides guidance on the level of knowledge or special skills obtained in the past. A series of work activities in the past gives mental disposition to someone that has a reference and enough to be able to adapt to the new environment. In other words because of changes, tenure gives mental disposition, the experience which provides the accumulated knowledge and will create a psychomotor skill that enables a person to carry out a job. Siagian (1987) explains that the more a person's experience and tenure will be more likely to indicate mental maturity or maturity. For example, action is generally more rational and less emotional. It means that the more experienced person it is expected to get wiser and more responsible in his interactions with others. Meanwhile, according to that a person's experiences can demonstrate the ability of the conceptual and financial management skills lower than the higher working age group.

Performance is the appearance of the work of personnel of both quantity and quality within an organization, can be both individual performances and also a working group of personnel. The presentation of the work is not limited to staff who assumed office functionally and structurally but also to the whole range of existing staff was organized (Yaslis). Furthermore, it is said that there are three critical components of performance analysis, namely:

- Determining the purpose of each organizational unit is a strategy to improve the performance that will give direction on how it should work and affect the organization wishes to the personnel
- Determining the measure whether the personnel has reached the expected performance. Thus, it is required the quantitative and qualitative measure of regular performance for each task and responsibility of the personnel as an important role
- Performance assessment is regularly associated with the achievement of performance goals of each person. It will make every personnel is always oriented towards employment objectives and behave accordingly and in line with the objectives to be achieved

Employee's performance or achievements that are expressed by Mangkunegara (2002) that the result of the quality and quantity of work achieved by a person in performing tasks according to responsibilities given to him. While Bernadin and Russel in Cordosa imposed a limit on performance outcomes and it is produced as a record of a particular job function.

Performance as a function of motivation stated by Keith Davis stated (Mangkunagara, 2000) is the capability and the motivation factor. Capability factor is the potential ability (IQ) and the ability to reality (knowledge and skills). Motivational factors as an attitude towards work situation in its environment include income, bonuses, working facilities, labor relations, policy leaders, working conditions and employment patterns of leadership. So, the performance is the result that is achieved, the record output and achievements are shown.

Performance is the actual behavior shown by everyone as the resulting performance appropriate role. Therefore, the performance is the result of concrete that can be observed and measured, is something that is very important in the company's efforts to achieve its objectives (Vethzal and Basri, 2005). Gibson suggests the theoretical model of performance and conduct an analysis of some variables that affect the behavior and performance as follows:

- Individual variables are grouped in sub-variable of abilities and skills and also backgrounds and demographics. Sub-variable of abilities and skills are the main factors that influence the behavior and performance of the individual. While, the demographic variables have an effect that does not directly affect behavior and individual performance
- Psychological variables consist of sub-variables of perception, attitude, personality, motivation to learn and it is a lot affected by the family, the social level, previous work experience and demographic. These variables are complex and challenging to measure
- Variable organization indirectly affected the behavior and performance of individuals such as resources, leadership, rewards, structure and design work (Fig. 1 and 2)

Based on the performance of Gibson's theory above, the three variables influenced the performance of individual variables, especially the ability and skills. Both ability and expertise are the main factors that affect the performance and work behaviour (Ilyas, 2001). Schematically, the conceptual framework is described as follows.
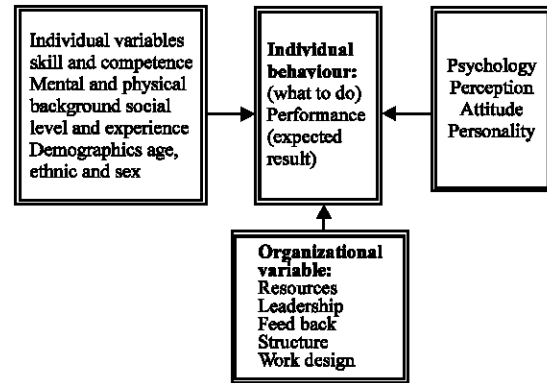

Fig. 1: Schematic diagram theory of behaviour and performance
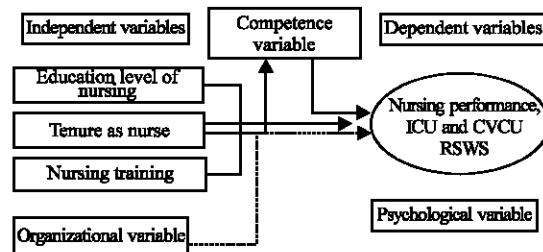

Fig. 2: Conceptual framework of the research

MATERIALS AND METHODS

This research method was descriptive analysis with cross-sectional sampling to explain the relationship competencies including the level of education, employment and training with the performance of ICU and CVCU nurses RS. Dr. Wahidin Sudirohusodo Makassar. The samples were nurses on duty section at ICU and CVCU consisting of 44 nurses then grouped in accordance with the criteria of education, the length of service and the amount of training that they have. They are determined and selected by stratified random sampling (grouping). After selected by simple random sampling and questionnaires are given to be filled based on competence and performance. Then, the performance is observed based on the nursing activities.

Data analysis: The analysis used in this study consisted of: Univariate analysis was used to describe each variable through variable frequency distribution of competence and performance variables. Bivariate analysis was used to determine the level of correlation between two variables, testing the significance of the coefficients in the research carried out at the 95% confidence level and a margin of

error or α = 5%. The relationship is significant if the calculated value (Sig.) is smaller than the value $\alpha = 0{:}05$ (Sig.$\leq \alpha = 0.05$). Likewise, the correlation is declared to be "not significant" if the arithmetic significance (Sig.) is greater than the value of $\alpha = 0{:}05$ (Sig. $>\alpha = 0.05$). Testing the validity of measuring instruments is performed by calculating the correlation coefficient with product moment formula (Rival and Veithzal, 2005):

$$r_{XY} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\left\{N\sum X^{2-} (\sum X)^2\right\}\left\{N\sum Y^2 - (\sum Y)^2\right\}}}$$

Where:
r_{XY} = Correlation coefficient
X = Item score
Y = Total score
N = Total respondent

RESULTS AND DISCUSSION

Based on bivariate test each variable obtained the following results:

Level of education: Correlation between education and competency has a value of p = 0.036 where it can be interpreted that the value has a significant relationship between education and competence because the value is < 0.05 or p = 0.036<0.05. The test results show that a better education will result in better performance.

Tenure and the competence: The correlation between tenure and competence has a value of p = 0.03. It can be interpreted that the value has a significant association between working period with competence and the value is <0.05 or 0.03 p<0.05. The test results show that longer working period will result in better performance.

Training and competence: Correlation between training and competence has a value of p = 0.041. It can be described that the value has a significant relationship between training and competence and the value is <0.05 or 0.041 p<0.05, test results show that training more often will result in better performance.

Competence and performance: Bivariate test results showed that the correlation between performance and competency has a value of p = 0.041. It means that there is a significant relationship between training and competence and the value is <0.05 or 0.041 p<0.05 so this study may indicate that more training will often produce better performance.

Education and performance: Bivariate test results showed that the correlation between the performance and education has a value of p = 0.031 means that there is a significant relationship between education and performance and the value <0.05 or 0.031 p<0.05, so that it can be concluded that the level of education will result in better performance.

Tenure and performance: Bivariate test results showed that the relationship between tenure and the performance of work has a value of p = 0.003. It means that there is a significant correlation between the educational performance and the value is still <0.05 or 0.031 p<0.05, so that it can be concluded that with longer tenure will produce a better performance.

Training and performance: The results of the test bivariate analysis p = 0.038 and the results p<0.05 then the variable significant amount of training is no significant correlation between training and performance of nurses. Therefore, p = 0.038 analytical results have a value lower than the value of 0.05. It means that the amount of training followed by a nurse will have a positive impact on improved performance.

Results of the research on the degree of confidence 95% CI showed that the significance value of p = 0.000 means p<0.05 in the value of the degree of confidence 95% CI. These results show that competencies have a significant and meaningful relationship. Thus, the nurses who have the competencies that will better correlate with better performance and vice versa. The less competence will result in a poor performance, so it is necessary to improve the competence on an ongoing basis in ensuring the creation of performance expected by hospital's customers both internal clients and external customers.

Based on these results, the researchers suggested that education and training will give an opportunity to the nurses to develop the application's ability nursing with the latest theory. So, the nurses can increase their professionalism. The most important to be studied is the education and type of training required by nurses, adjusted challenges faced in the ICU and CVCU, general nurses in ICU and CVCU had to train before join in nursing care. It is because the ICU and CVCU need skilled and agile nurses who have sufficient knowledge to give aid to the patient. The requirements of competence must be possessed by the ICU and CVCU nurses. Before working in ICU and CVCU, nurses must have a certificate of training BTCLS (Basic Trauma Cardiac Life Support), ICU training grounds and ECG (Electrocardiography).

Simanjuntak argues that training is an activity that must be done by every director (management) to guide employees regarding the importance of each area of work concerned. It means that they are more interested and paying attention to the field work as well as a bridge to develop knowledge, skills, experience and career employees.

This study shows results that are in line with research of Kopelmen states that education and training have an effect on 10-15% of the performance. The study of Sri Hidayati also states that the factors of education, training and nursing facilities the environment of nursing that influences the success of nursing care that can support the performance of nurses. The results of this study are consistent with the results of the research; Gani which states that non-physical qualities (competencies) someone in the form of skills, abilities and education related to performance.

Performance assessment instruments can be used to review performance, performance rating, performance assessment and also for evaluation. HR managers can use the information as a performance appraisal feedback success of an organization or enterprise, feedback successful recruitment and employee selection, placement, training and others. Likewise with the performance of nurses in the process of nursing care a proper assessment of the performance of nurses.

One of the results of research directorate of nursing services of health ministry with WHO in 2000 in several provinces in Indonesia is the development in monitoring and evaluating the performance of nurses and midwives. However, the development is not yet performed. Under these conditions, the directorate of nursing services of health ministry with WHO and UGM develop models of improvement nurses and midwives performance, known as performance Management Development (FMD). Special Interest of PMK is increasing the implementation of monitoring the nurses and midwives performance based on agreed performance indicators. It is also improving the quality of nursing care, increasing patient satisfaction with nursing care (Ministry of Health of the Republic of Indonesia No. 836/Menkes/SK/VI/2005 on guidelines for management development performance of nurses and Midwives).

Based on the results of this study, the researchers found working life is an experience that will give the feel of thought and skill that a more perfect on a nurse who works in the area of intensive care. This is because by working longer, the challenges are obtainable in applying methods and tips for nursing. The nurses also have the opportunity to apply their knowledge more perfect for the patients, so that the experienced nurses certainly have many tips and methods in handling cases of intensive care section for customer satisfaction.

Schermerhon claims that there is a difference in producing a product among the workforce who are new or inexperienced with power who has a service life that is long or has the experience. Then, Gibson states that experience or employment is also a variable that affected physical performance. It is said that experience shows there any particular knowledge or skill obtained a person in respect of his work in the past the mental disposition which would give it to someone that has a reference to be able to adapt to new environments or changes.

In order to improve the performance of nursing care in the hospital, it is required guidelines for the development of performance management nurse. Performance Management Development (FMD) Nursing is an effort to improve the managerial capabilities and performance of nurses in providing nursing care in facilities in health institution to achieve quality health services. PMK facilitates the creation of a culture of nurses. It leads to improving the quality of nursing care that is based on professionalism, science and technology fields of health, legality. It is also based on ethics to support the health care system in a comprehensive manner with a common goal of FMD is to improve the quality of nursing care in facilities in the health institution.

Implementation of FMD in the hospital formulate efforts to improve the quality of nursing services and increase the performance of nurses as well as to monitor and evaluate the performance of nurses. Improved performance of nurses will affect the quality of health care for the better so that it will improve the image of nursing services in health care facilities.

The purpose of monitoring and assessment of FMD in the hospital to make sure the service is implemented in accordance with standard operational that has been set to detect obstacles and problem faced by nurses and to make efforts to improve and enhance the quality of nursing services. Monitoring can be done through direct observation, observation and survey documents the service user (patient or family). The output of the development of performance management nurses can be seen among others from the documentation is good and faithful and good performance of nursing clinics as well as their service user satisfaction towards nursing care given.

In general, the performance assessment is based on two basic reasons, namely for the objective evaluation of the performance of employees to make future decisions to come and as an enabling tool to help employees improve performance, plan the work, develop skills and for career development. In order to assess the performance that meets certain requirements, James *et al.* (1996) suggested two requirements to conduct performance appraisals that performance criteria are measured objectively and objectivity in the performance assessment process. Then,

there are three important qualifications for the development of evaluation criteria measured performance an objective that is of relevance, reliability and discrimination.

Relevance shows the level of concordance between the criteria and objective assessment of performance, reliability indicates the degree to which the criteria produce consistent results while discrimination set the level to which a performance criterion may show differences in the criteria. There are five requirements that the performance appraisal system of relevance, acceptability, reliability, sensibility and practicality (Bernardin and Russell, 1993):

- Relevance indicates the level of concordance between the results of the work to the performance objectives predetermined
- Acceptability showed acceptable results of the assessment concerning the success of the implementation of the work
- Reliability is the result of the assessment system must be reliable
- Sensibility means the assessment system sensitive enough to distinguish between a person's level of success or the success of an employee in performing work
- Practicality is a rating system that can directly support the achievement of the institution's goals through increased employee productivity

Employee performance evaluation is assessed by the principal or immediate supervisor. Employee performance can be viewed and judged by the accomplishments of employees, cooperation, initiative, discipline, skills/ability and responsibility towards the tasks given. However, explicitly that employee performance can be rated from potential work that consists of three aspects, quality, performance and timeliness of work.

The necessary education of nurses is education and training that will lead to better skills in the discharge nurse nursing particularly for critical actions that give high competence in the handling process and action on critical care cases. Based on the above discussion, the correlation competence of nurse's performance proved that the development of competencies nurses needs to be improved by providing the opportunity for nurses. It is to increase their education, follow the training of nursing and mastery of technology related to the facilities and technology of nursing to improve its performance in the

Hospital Dr. Wahidin Sudirohusodo Makassar. It is necessary to prioritize this activity and look at the needs of hospitals and financing capability and commitment among nurses with management.

CONCLUSION

The results using bivariate test at the significance level of 95% indicates that: there is a significant relationship either individually or jointly with education, training and tenure on the competence of nurses in ICU and CVCU Dr. Wahidin Sudirohusodo Makassar There was a significant correlation between the competence of nurses with the performance of nurses in ICU and CVCU Dr. Wahidin Sudirohusodo Makassar. It means that nurses who have a good competence will result in better performance. Thus, to improve the performance of ICU nurses and CVCU at Dr. Wahidin Sudirohusodo Makassar, it is necessary to improve the education and training of nursing ICU and CVCU continuously, so that nurses who are trained in ICU care and CVCU is not carried mutations in a certain time.

REFERENCES

Bernardin, H.J. and J. Russell, 1993. Human Resources Management. McGraw-Hill, New York.

Ilyas, 2001. Performance theory, assessment and research. Center for Health Economic Studies Faculty of Public Health, University of Indonesia.

James, L.G., M.I John and J.H. Donely, 1996. [Organization, Behavior, Structure and Processes]. Aksara Publisher, Jakarta, Indonesia (In Indonesian).

Mangkunegara, A.P., 2002. [Human Resource Management]. Youth Rosdakarya Publisher, Bandung, Indonesia (In Indonesian).

Nursalam, 2002. [Nursing Management, Applications in Practice Nursing Professional]. Salemba Publisher, Jakarta, Indonesia (In Indonesian).

Rival and Veithzal, 2005. [Prformance Appprasial]. King Grafindo Persada Publisher, Jakarta, Indonesia (In Indonesian).

Siagian, S.P., 1987. [Techniques to Grow and Maintain Organizational Behavior]. Haji CV Folio Publisher, Jakarta, Indonesia (In Javanesian).

Vethzal, R. and Basri, 2005. [Performance Appraisal: System is Right for Assessing Employee Performance and Improving the Competitiveness of Enterprises]. PT. RajaGrafindo Persada Publisher, Jakarta, Indonesia (In Indonesian).