

The effect of role stress, job satisfaction, self-efficacy and nurses' adaptability on service quality in public hospital of Wajo

Service quality

1

AQ: au

Abdul Rahman Rahman Kadir

*Department of Management, Faculty of Economics and Business,
 Universitas Hasanuddin, Makassar, Indonesia*

Najmi Kamariah

*Department of Business Administration, Sekolah Tinggi Ilmu Administrasi
 Makassar, Makassar, Indonesia*

Ariyanti Saleh

*Department of Nursing, Faculty of Medicine, Universitas Hasanuddin,
 Makassar, Indonesia, and*

Ratnawati Ratnawati

Department of Nursing, RSUD Lamadukkelleng Wajo, Sengkang, Indonesia

Received 22 October 2016
 Revised 19 December 2016
 7 February 2017
 Accepted 9 February 2017

Abstract

Purpose – This study aimed to determine the effect of role conflict and role ambiguity on job satisfaction, self-efficacy and nurses' adaptability and improvement in service quality by analysis of quality function deployment.

Design/methodology/approach – This study used a cross-sectional study design. The research sample of 115 nurses and 299 patients was obtained through the use of probability sampling techniques. Data were statistically analyzed using Spearman's test to see the correlation between independent and dependent variables. Kruskal–Wallis and one-way ANOVA were used to see the differences and quality function deployment analysis was conducted to improve service quality.

Findings – The study concluded there is influence of role conflict and role ambiguity on job satisfaction, self-efficacy and nurses' adaptability. There are differences in role ambiguity in the inpatient unit, critical room and the emergency room.

Practical implications – The quality of service in the hospital can be improved by evaluating the behavior of nurses on the quality of service perceived by the patient. In addition, the necessary improvement of discipline and commitment between physicians and nurses in improving the quality of services at the hospital.

Originality/value – With this measure, the management of nursing at the hospital can translate patient's needs into specific plans to produce products and services that bring together the needs of the patient to service quality.

Keywords Job satisfaction, Adaptability, Service quality, Self-efficacy, Role conflict, Role ambiguity

Paper type Research paper

AQ: 1



Introduction

Hospital, as one of the health care facilities that provide health services to the community, has a major role in creating quality human resources as an effort to accelerate the improvement of overall health status, equitable, affordable and acceptable by the entire

IJQSS
9,2

2

community. The hospital serves to provide health services, such as the provision of health outpatient services and inpatient, emergency, medical and non-medical services, such that human resources are the most important part of hospital management which will have an impact on improving the quality of services provided (Ministry of Health, 2005). Maintaining the quality of health care in the hospital is not in spite of the important role of nursing services. Nurses are the most dominant health personnel at the hospital in terms of quantity as well as presence in providing leading and quality health services to the patient. In the inpatient units, nursing staff has the first and longest contact with the patient, which is 24 hours a day. Therefore, the nurse holds a key position in image building of hospitals (Nursalam, 2015).

The greater public demand for service quality in hospitals cause nurses to experience role stress. Nugroho (2012) states that role stress occurs because of the pressure of the demands of the role assigned to a person in the organization. While Tang and Chang (2010), defining the role stress can occur if the expected role and perceived is different. According to Ho *et al.* (2009), in his research stating that when facing stressful role, individuals can behave unfavorable to the organization, such as reducing performance, fatigue and resignation.

AQ: 2

Zorlu (2012) explains that role stress exists in two forms: role ambiguity and role conflict. Role ambiguity occurs when the purposes and the employee's responsibility to perform one's role in an organization are unclear. Based on interviews with nurses, role ambiguity felt by nurses in the hospital where besides the task of implementing the nursing care of patients, nurses is also working on other tasks such as paperwork, ambulation related to radiology, surgery, took blood samples for laboratory examination and for blood transfusions, distributing food to the patients, and perform other tasks that do not correspond to the role and function as a nurse like cleaning the room when the cleaning service does not exist. Additionally, role conflict occurs when nurses are confronted by different role expectations, discrepancy or mismatch in the requirements of the role that an employee would have to carry two or more roles simultaneously, contrary to the expectations and demands of the organization.

AQ: 3

High role conflict and role ambiguity eventually reduce confidence in their ability to work effectively and result in low job satisfaction felt by nurses (Tang and Chang, 2010). Evidence from several empirical studies supports this argument. For example, Hartline and Ferrel (1996) found that job satisfaction and high self-efficacy of employees have a strong and positive relationship with the employee's performance in creating a good service encounter.

In addition to having high self-efficacy, a nurse in a hospital organization must be able to adapt to changes. Utomo (2009) suggests that adaptation is the human effort to adjust to the level, place and different conditions. According to Herrington and Lomax (1999), nurses' adaptability is the ability of the nurse to adjust to the appropriate behavior according to the public demands with the quality of services at the hospital.

In this study, the authors conducted a modification of some models that have been developed by previous researchers. First, we modified the model of Hartline and Ferrel (1996), where the concept is the author examines the relationship between role conflict and role ambiguity on job satisfaction, self-efficacy, nurses' adaptability at the hospital. Additionally, this concept refers to the model of customer perception with quality of service delivered to customers based on five dimensions of service quality that are tangibility, responsiveness, empathy, reliability and assurance (Parasuraman *et al.*, 1985).

Second, assess the patient's perception of service quality based on the results of previous studies by Solomon (2015), which state that an analysis of quality function deployment is used to see what is required of patients at the hospital and see the gap between what is desirable with what has been received by the patient. Additionally, nursing management at

AQ: 4

the hospital translates patient's needs into specific plans to produce products and services that bring together the needs to quality of service (Jaiswal, 2012). Service quality

The quality of services in the hospital can be improved by evaluating the behavior of nurses on the quality of service perceived by the patient. This study aims to determine the effect of role conflict and role ambiguity on job satisfaction, self-efficacy and adaptability of nurses and improve service quality through quality function deployment analysis at the Lamadukkelleng Hospital, Wajo.

Literature review

Concept of role stress

Robbins (2002) in Nugroho (2012) suggested that role stress is associated with the pressure that one feels toward a particular role that is given and carried out within an organization. While Ho *et al.* (2009) defines role stress as a manifestation of the behavior of individuals in accordance with the position of the individual. In an organization, individuals' role stress refers to stress that is formed from the combined individual expectations of the behavior from all circles.

Zorlu (2012) explains that the role stress is accepted as a natural result of the work in accordance with the current state of work. Role stress characterized the conflict between duty and responsibility, disputes between the target and time. Furthermore, he explained that the role stress exists in two forms, namely, role conflict and role ambiguity. Role ambiguity occurs when the obscurity between purposes and the employee's responsibility to perform its role in an organization. Additionally, role conflict occurs when a nurse is confronted by expectations of different roles.

Based on the explanation, the researchers conclude that the role stress is individual behavior that occurs because of the pressure of the demands of the role that are different from what was expected with what an individual perceived in an organization.

Concept of self-efficacy

Self-efficacy was first introduced by Bandura Alber, an influential psychologist in the history of psychology. Bandura uses social learning theory, hereinafter called social cognitive theory. Social cognitive theory is used as a basis for analyzing the construction of self-efficacy (Lenz and Baggett, 2002 in Sartika, 2012).

Zorlu (2012) suggested that self-efficacy is a self-assessment of the beliefs and attitudes of the staff working toward their abilities and their knowledge accumulation compared to what is expected of them. While Tang and Chang (2010) define self-efficacy as the belief in the competence of individuals to perform certain tasks. Self-efficacy can significantly affect work stress and employee creativity.

Based on the explanation, it can be concluded that self-efficacy is the belief in one's ability to perform his duties within the organization.

Concept of job satisfaction

Robbins and Judge (2013) define job satisfaction as the attitude of the employees who describe feeling positive about their work resulting from the evaluation characteristics. Someone with high satisfaction rates with the job will have positive feelings toward his job, while someone who is not satisfied with the job will have negative feelings.

Ho *et al.* (2009) suggested that job satisfaction is a positive and negative attitude that employees have of the job and the internal state of mind of the individual. If the feeling a person has to work positively then the individual will be satisfied and vice versa. The level of job satisfaction depends on the difference between what a person accomplished in his work with what is expected of his job.

IJQSS
9,2

4

Lu *et al.* (2005) in Moutzoglou (2010) explains that there are several sources of job satisfaction of nurses at the hospital, such as working conditions, interaction (relationships with patients, relationships with colleagues and the relationship with the manager), the work itself (workload, scheduling, challenging work, routines and the requirements of the task), remuneration, self-growth and promotion (professional training, advancement opportunities, job promotion and personal accomplishment), praise and recognition, control and responsibility (autonomy and decision), leadership style and organizational policies.

Based on the above definition, researchers can conclude the job satisfaction is a pleasant emotional state of an employee or a positive attitude toward his work that shows the correspondence between what is done with what is expected in the job.

Concept of adaptability

Adaptation is a human effort to adapt to different circumstances. To improve and maintain the balance of the physical, psychological, social and spiritual functions, man has always tried to adjust to behave as a healthy human being. Adaptation is a process where the dimensions of physiological or psychological dimensions change in response to the stressor (Taylor, 1997 in Utomo, 2009).

Several factors affect the adaptation, such as the perception of stress, self-defense mechanism and a willingness to help. The factors that influence the reaction to stress, among others, are the nature of the stressor, past experience, the stage of development and the condition of the individual. Individual circumstances include age, sex, education, ethnicity, culture, economic status and physical condition (Potter and Perry, 2005 in Saragih, 2011).

Bitner *et al.* (1990) in Hartline and Ferrel (1996) showed that customers evaluate better service encounter when employees are able to adapt and when to find the needs and demands of their specific nature. The invention is further supported in the qualitative study of Bitner *et al.* (1994), in which they reported that nearly half of the encounters of customer satisfaction reported by employees were resulting from their ability to adapt the system to accommodate the needs and demands of customers. Employee's personal ability and willingness to adapt is more likely to meet the needs and demands of customers. Thus, the ability of adaptability of employees can improve customer perception of the quality of service provided by the employee.

AQ: 6

Concept of service quality

Hospital as a means of providing services have a very strategic role in accelerating the improvement of public health degree. Therefore, hospitals are required to provide the best service in accordance with established standards and can reach the whole community. To achieve the quality of service quality in the hospital, we used quality function deployment. Quality function deployment is a methodology used for the design and development of customer-oriented products (Cohen, 1995 in Magdalena *et al.*, 2013).

Parasuraman *et al.* (1985) defines quality of service as the difference between the actual service received or perceived with actual services expected or desired. If the reality is more than expected, the service can be said to be qualified. And, if that is, in fact, the same as expected, then the service is called satisfactory. But, if the reality is not as expected or lower than the expectations of the service, then it is not qualified.

Furthermore, Parasuraman *et al.* (1985) measure the quality of service based on five dimensions of tangibles, reliability, responsiveness, assurance and empathy, which uses a scale of comparison between expectations with perceptions of performance. The perception of the customer expectation is divided into three different levels:

- (1) services desirable that describes something customers want;
- (2) the perceived inadequate performance which is the default condition so that the customer will accept it; and
- (3) service forecast can be given, namely, the level of service being assessed consumers may occur.

AQ: 7

Research methods

The study design used was the type of non-experimental research, with a quantitative approach, descriptive correlation and cross-sectional design. Design is a cross-sectional analytical study that aims to determine the relationship between the variables of the independent variables and the dependent variable one-time and at the same time (Dharma, 2011). In this study, researchers used a descriptive correlation because researchers want to get an overview of each study variable and connect the two variables and sub-variable with correlation analysis.

In addition to using cross-sectional design for role conflict, role ambiguity, job satisfaction, self-efficacy and adaptability for nurses variables, this research is the design of an explorative study that is thorough analysis and contextual to similar situations in other organizations, where the nature and definition of the problem that occurred is similar to that experienced in the current situation (Sekaran and Uma, 2004 in Aji, 2009).

Location and research design

This research was conducted at the Lamaddukkelleng Hospital, Wajo. This research uses non-experimental research, with a quantitative approach, descriptive correlation and cross-sectional design.

Population and sample

The population in this study includes all nurses and patients in the inpatient unit, critical space and hospital emergency room at the Lamaddukkelleng Hospital, Wajo, totaling 161 nurses and 534 patients. The sample in this study is nurses and patients who use the facilities in the inpatient unit, critical care and emergency room, which are 115 nurses and 229 patients. Sampling is done using probability sampling methods.

This study uses criteria that are the criteria for inclusion and exclusion. Criteria for inclusion in this study are:

- (1) Nurses:
 - nurses working in the inpatient unit and critical care (ICU) and ER;
 - nurses willing to participate in the study; and
 - nurses with minimum term of one year.
- (2) Patients:
 - patients who utilized health care facilities at least once;
 - if the patient is minor, respondent would be parent or guardian;
 - if the patient is terminally ill ,then responder would be patient's family; and
 - patients who can communicate and are willing to participate in the study.

Exclusion criteria in this study are:

- (1) Nurses:
 - internship nurses and nurses on leave of absence (maternity leave, sick leave and leave to get married).

IJQSS
9,2

- (2) Patients:
- patients or relatives of patients who cannot read; and
 - patients who returned empty questionnaire sheet.

Data collection technique

Primary data were obtained by means of questionnaires and interviews. Secondary data were obtained from the relevant agencies, namely, the Lamaddukkelleng Hospital, Wajo.

6

Analysis and presentation of data

The data were analyzed with SPSS 16 for Windows and statistical tests were done by using univariate frequency, bivariate Spearman test, one-way ANOVA and Kruskal–Wallis test.

Result

Data quality is determined by the level of the validity and reliability. Validity is a measurement precision of instrument that how capable of measuring instruments to say what should be measured. Reliability is the degree of reliability or consistency of the measurement results. A measurement is said to be reliable if it can give the same or nearly the same results when the review is done repeatedly. In this study, researchers used an instrument that has been used in previous studies that levels of validity and reliability need to be tested again.

AQ: 6

We tested the validity of the instrument using the Pearson product moment correlation (r) to look for relationships between variables score with a total score. Item question was declared invalid if variable score correlated significantly with the total score, that is, when the value of $r > r$ table. Item question declared invalid shall be issued or revised. Reliability testing is done after all the claims were declared valid, by comparing the value of r results in Cronbach's alpha with value of r table. If the results of Cronbach's alpha are $r > r$ table, then the statement is reliable.

Reliability test in this study was conducted using Cronbach's alpha formula. This questionnaire is said to be reliable or consistent if the value of the Cronbach's coefficient is > 0.6 on coefficient comparison (Table I).

T1

Univariate analysis

Table II shows that the characteristics of respondents classified as mature age, which are 97 respondents (84.3), mostly female, amounted to 82.6 per cent; the majority of respondents' work period is more than five years, amounted to 73.9 per cent; mostly nursing education is Diploma III, as much as 61.7 per cent; and employment status is largely honorary, as much as 57.4 per cent. Marital status mostly married was 65.2 per cent and each work unit in the inpatient room as much as 69.6 per cent, critical space is 13.0 per cent and emergency room as much as 17.4 per cent. Furthermore, Table II shows the characteristics of patients classified as adult respondents, which is 121 respondents (52.8 per cent); mostly female at 55.0 per cent; and employment status, most are self-employed, amounted to 43.2 per cent; patients who use the hospital services at least 1 times as much as 57.2 per cent; and the type of service that is used mostly as emergency services in the amount of 56.8 per cent.

T2

Variables	Alpha value	Reliability
<i>Role stress, job satisfaction, self efficacy and adaptability</i>	0.985	Reliable
Level of importance	0.975	Reliable
Level of performance	0.980	Reliable

Table I.
Reliability test results

Service quality

Characteristics	<i>n</i>	Quantity	(%)
<i>Nurses' age</i>			
Adolescent	18		15.7
Adult	97		84.3
<i>Nurses' gender</i>			
Male	20		17.4
Female	95		82.6
<i>Work period</i>			
Less than 1 year	5		4.3
1 year up to 5 years	25		21.7
More than 5 years	85		73.9
<i>Education</i>			
SPK	3		2.6
DIII	71		61.7
Nursing Graduates	21		18.3
Ners	16		13.9
DIV	2		1.7
Master of Nursing	2		1.7
<i>Employment status</i>			
Civil servants	38		33.0
Contract employees	11		9.6
Honoree employee	66		57.4
<i>Marital status</i>			
Single	40		34.6
Married	75		65.2
<i>Working unit</i>			
Inpatient unit	80		69.6
Critical space	15		13.0
Emergency unit	20		17.4
<i>Patients' age</i>			
Adolescent	71		31.0
Adult	121		52.8
Elderly	36		15.7
<i>Patients' age</i>			
Male	103		45.0
Female	126		55.0
<i>Patient's job</i>			
Civil servants	31		13.5
Entrepreneur	99		43.2
Housewife	54		23.6
College student	31		13.5
<i>Use of services</i>			
>1	98		42.8
<2	131		57.2
<i>Service type</i>			
Inpatient	87		38.0
Emergency Unit	130		56.8

Table II.
Distribution characteristics of respondents by age, gender, work period, education, employment status, marital status, working unit, job patient, how many times using the service and type of service used in the Lamaddukkelleng General Hospital, Wajo

Source: Primary Data (2016)

IJQSS
9,2

Table III shows that most of the nurses' role conflict is higher by 68.7 per cent; mostly nurses role ambiguity is high, amounting to 72.2 per cent; the nurse job satisfaction is largely satisfied by 59.1 per cent; largely self-efficacy of nurses is high, amounting to 73.0 per cent; and most of the nurses adaptability was high, amounting to 67.0 per cent.

T3

8

Bivariate analysis

Table IV shows the value of $p = 0.001$, which means that the correlation between role conflict with job satisfaction of nurses at the Lamaddukkelleng Hospital, Wajo, is meaningful. The correlation value is 0.299 indicates a positive correlation with the strength of weak ties. Table role conflict with self-efficacy showed that the correlation between role conflict with the self-efficacy of nurses at the Lamaddukkelleng Hospital, Wajo, is significant ($p = 0.017$) with a correlation value of 0.221, indicating a positive correlation with the strength of weak ties. Table role conflict with adaptability shows that the correlation between role conflict with the

T4

Table III.
Distribution of respondents by variables research in the Lamaddukkelleng General Hospital, Wajo

Variables	<i>n</i>	Quantity (%)
<i>Role conflict</i>		
High	79	68.7
Low	36	31.3
<i>Role ambiguity</i>		
High	83	72.2
Low	32	27.8
<i>Job satisfaction</i>		
Satisfied	68	59.1
Not satisfied	47	40.9
<i>Self-efficacy</i>		
High	84	73.0
Low	31	27.0
<i>Adaptability</i>		
High	77	67.0
Low	38	33.0

Source: Primary Data (2016)

Table IV.
Influence of role conflict, role ambiguity on job satisfaction, self efficacy and adaptability of nurses in the Lamaddukkelleng General Hospital, Wajo

Variables	Correlation coefficient (r)	p
<i>Role conflict</i>		
Job satisfaction	0.299	0.001
Self-efficacy	0.221	0.017
Adaptability	0.239	0.010
<i>Role conflict</i>		
Job satisfaction	0.511	0.000
Self-efficacy	0.230	0.013
Adaptability	0.280	0.002

Source: Primary Data (2016)

adaptability of nurses at the Lamaddukkelleng Hospital, Wajo, obtained value $p = 0.010$ with a correlation value of 0.239, which indicates a positive correlation with the strength of weak ties. The variable role ambiguity and job satisfaction in Table IV shows the value $p = 0.000$, which means that the correlation between role ambiguity and job satisfaction of nurses at the Lamaddukkelleng Hospital, Wajo, is meaningful. Table role ambiguity with self-efficacy showed that there is a correlation between role ambiguity with self-efficacy at the Lamaddukkelleng Hospital, Wajo ($p = 0.013$). Table role ambiguity with adaptability shows the value $p = 0.002$, explaining that the correlation between role ambiguity with the adaptability of nurses at the Lamaddukkelleng Hospital, Wajo, meaning the value of $r = 0.280$ showed a positive correlation with the strength of weak ties.

T5 Table V illustrates that the analytical results obtained nurse role conflict difference value, $p = 0.337$. Therefore, the value of $p > 0.05$; it can be concluded that there is no difference between the room nurse role conflict. Analysis of differences in role ambiguity obtained value of $p = 0.044$ ($p < 0.05$); it can be concluded there is no difference between the room role ambiguity. Analysis of differences in job satisfaction obtained value of $p = 0.176$. Therefore, the value of $p > 0.05$; it can be concluded that there was no difference in job satisfaction between the room. Table analysis of differences in self-efficacy of nurses obtained value of $p = 0.610$. Therefore, the value of $p > 0.05$; it can be concluded that there is no difference between the application of self-efficacy room nurse. Table analysis of differences in adaptability in nurses obtained the value of $p = 0.507$. Therefore, the value of $p > 0.05$; it can be concluded that there is no difference between the room nurse adaptability.

T6 Table VI shows the average rate of interests, sorted from the higher value, are the dimensions of reliability, tangible, assurance, empathy, responsiveness, while the value of

Room/space	<i>n</i>	Variables	<i>p</i>
<i>Role conflict</i>			
Inpatient	80	21.80	0.337
Critical	15	21.40	
Emergency	20	21.10	
<i>Role ambiguity</i>			
Inpatient	80	18.00 (14-24)	0.044
Critical	15	18.00 (16-22)	
Emergency	20	17.00 (14-21)	
<i>Job satisfaction</i>			
Inpatient	80	38.55	0.176
Critical	15	38.67	
Emergency	20	36.30	
<i>Self-efficacy</i>			
Inpatient	80	28.0	0.610
Critical	15	27.0	
Emergency	20	27.0	
<i>Adaptability</i>			
Inpatient	80	29.00	0.507
Critical	15	29.00	
Emergency	20	29.00	

Source: Primary Data (2016)

Table V. Results of variable difference analysis (Role conflict, role ambiguity, job satisfaction, self efficacy, adaptability of nurse) in the inpatient unit, critical space and emergency unit in the Lamaddukkelleng General Hospital, Wajo

each of these dimensions is 4.43, 4.40, 4.38, 4.34, and 4.32, respectively. The average yield rate of interest dimension of service quality shows that reliability dimension has the greatest value (4.43), which means that the dimension of the patient is considered as the most important dimension which must be observed and maintain its quality compared to other dimensions. The average level of performance is sorted from the higher value for the dimensions of empathy, assurance, reliability, responsiveness and tangible, while the value of each of these dimensions is 4.12, 4.05, 4.04, 4.01, and 3.88, respectively. The results of the average level of performance of [Table VI](#) show that the tangible dimension is the dimension that has an average level of performance is the smallest with a value of (3.88).

Discussion

This study showed there is influence between role conflict and role ambiguity and job satisfaction, self-efficacy and nurses' adaptability. This study supports research conducted by [Anisykurlillah et al. \(2013\)](#), which states that individuals who experience very high role stress will experience anxiety, become more dissatisfied and in doing their jobs will be less effective than other individuals.

Job satisfaction in an organization is a bridge for companies so organizational goals can be achieved. This is, in line, with the study of [Ho et al. \(2009\)](#), which explains that the potential consequences of their role conflict and role ambiguity are decreasing someone's job satisfaction. Research conducted by [Zorlu \(2012\)](#) shows that the role of nurses with high stress had lower levels of job satisfaction.

Role conflict experienced by respondents in this study tended to be caused by the respondents have a working period largely over five years so that nurses have sufficient experience and competence in carrying out the tasks assigned in accordance with the rules or policies. But, in certain situations, when the nurse must abide by the rules and ignore the other roles in carrying out the task of an issue can affect the job satisfaction of nurses. [LeRouge et al. \(2006\)](#) explains that the conflict of roles can be a source of job dissatisfaction, fatigue and absenteeism.

In line with the research, [Churiyah \(2011\)](#) said that the role conflict has an influence on satisfaction. This is because the role conflicts arise because of the mismatch between expectations within the role being undertaken. The study also revealed that the work being done in an organization will be faced with various demands both from the leadership, the government with distinct treatment and the willingness led to the emergence of role conflict within the individual. Role conflict will affect a person's job satisfaction and if individuals

Table VI.
Results analysis of average interest rate and rate performance based on service quality dimensions in the Lamaddukkelleng General Hospital, Wajo

Interest rate	Mean
<i>Tangible</i>	4.40
<i>Reliability</i>	4.43
<i>Responsiveness</i>	4.32
<i>Assurance</i>	4.38
<i>Empathy</i>	4.34
Performance rate	
<i>Tangible</i>	3.88
<i>Reliability</i>	4.04
<i>Responsiveness</i>	4.01
<i>Assurance</i>	4.05
<i>Empathy</i>	4.12

Source: Primary Data (2016)

AQ: 6

with high role conflict remain satisfied in this case because colleagues were supportive and salaries obtained will affect a person's level of satisfaction.

Febrianty (2012), in his research, explains that conflicts can arise as a result of a mismatch between the goals of the organization with professional orientation of the organization's members. The behavior of the members of the profession has been governed by a code of ethics set and monitored by professional organizations, but, on the other hand, the behavior is controlled by the rules established by the organization working place. This has led to the emergence of role stress in the form of role conflict and role ambiguity.

This study is in line with research conducted by Churiyah (2011), which states that the relationship between role stress and job satisfaction is proven. Someone who experiences role ambiguity at a high level as a source of stress will be less satisfied with their job. The more aspects of the work in accordance with the wishes and needs of the employee, the higher the perceived satisfaction, and vice versa that somebody who accepts the role stress levels at a higher level as a source of stress will be less satisfied with their jobs.

Anisykurlillah *et al.* (2013) argued that the lack of work experience is the reason that the role ambiguity negatively affects job satisfaction and organizational commitment. If the individual has not enough information to be able to carry out duties related to his role, unclear responsibilities and authority, there will be role ambiguity that may affect employee job satisfaction.

This study is in line with research by Zorlu (2012), which states that nurses with high role conflict that have high levels of self-efficacy is relatively low. Employees with low self-efficacy are more sensitive to role stress. However, the staff that works with high self-efficacy will be more adept at managing and directing their feelings, thoughts and actions within the organization. Self-efficacy can be a mediator in the effects of role stress on the desire to succeed in the workplace. Staff working with high self-efficacy is to be less concerned about the adverse situation and their chances of successfully making decisions in difficult conditions. Therefore, an organization employs staff with high self-efficacy in an attempt to overcome role stress. This is in line with research conducted by Hartline and Ferrel (1996), which indicates that high role conflict will affect self-efficacy of employees.

AQ: 6

The role ambiguity reducing the quality of information available to evaluate properly the individual's ability to perform tasks. According to cognitive theory, achieving high self-efficacy requires that an individual can visualize a good performance in certain situations. But, the high role ambiguity inhibits an individual's ability to visualize an individual's performance, ultimately reducing confidence in their ability to work effectively (Tang and Chang, 2010).

High self-efficacy will encourage individuals trying to make efforts to complete the task as well as possible. Instead, individuals with low self-efficacy would feel hesitant and not confident in their ability to complete the task. If the individual is faced with difficulties when completing the task, the task would be slowly resolved and he would give up easily (Nurmawaddah, 2016).

Hartline and Ferrel (1996) defines adaptability as employees' behavior in response to information received during the meeting and interaction with customer service. This study is in line with Herrington and Lomax (1999), which states that role conflict and role ambiguity have a significant effect on adaptability. Role conflict and role ambiguity reduce the employee's ability to adapt to changes in meeting the service to serve customers.

There are differences in nurses' role ambiguity in inpatient and emergency room because nurses working in the emergency room are receiving patients in need of immediate medical care, including serious illness and trauma, so that the nurses are required to be responsive and quick in dealing with patient's emergency, such as disaster victims, accident, immediate

medical treatment and others. This situation, often leading to job stress, is different from the role stress that nurses perceived in the inpatient unit where the patients being treated are not emergency patients (Widodo, 2010).

The results of a questionnaire given to the patients showed that the service quality at the Lamaddukkelleng Hospital is in good range with the value of 4 and very good with the value of 5. It can be concluded that the quality of service perceived by patient or the patient's family at the Lamaddukkelleng Hospital is good.

If specified based on tangible, reliability, responsiveness, assurance and empathy dimension. The average rate of interests is sorted from the higher value is the reliability dimension and the lowest is tangible dimension. These research findings stating reliability dimension is the dimension of the highest of importance, and the level of performance, tangible dimension is smallest ranks that require attention in improving the quality of service. One of the factors leading to high mismatch between the level of interest and the level of performance based on the Quality Function Deployment analysis because along with the progress level of patients and their families' knowledge on the quality of services, especially those of civil servants, entrepreneurs and students and scholars. Additionally, customer expectations factor on the quality service dimension of providers is getting higher (Kadir, 2005).

Conclusions and recommendations

The study concluded there is influence between role conflict and role ambiguity on job satisfaction, self-efficacy and nurses' adaptability. There are differences in role ambiguity in inpatient, critical room and the emergency room. While the mean level of importance of each dimension of service quality shows that reliability dimension has the greatest value which means that this dimension is considered by patients as the most important dimension, which must be observed and maintain its quality compared to other dimensions. The results of the mean value of the performance level of each dimension of service quality show that tangible dimension has the smallest value, which means this dimension requires the greatest attention for improvement and to be enhanced continuously. Manager of nursing, including the Head of Nursing and Head of the room, needs to reduce role stress that nurses perceived that impacts high job satisfaction, self-efficacy and adaptability of nurses so it can improve the service quality that patients receive, by managing human resources, in particular (nurses) through the provision of in-house training to improve the ability of nurses, enhancement career, the opportunity to continue their education to pursue further and provide rewards for nurses to avoid burnout and boredom of work. Improvements to the tangible dimension should be done on an attribute, especially complete and well-maintained facilities and medical equipment, the building and the rooms to be clean and comfortable and repairs on the responsiveness dimension should be done, mainly in nurses who are always ready when needed by providing appropriate and fast services – the waiting time is no more than 1 hour. Improvements in reliability dimension should be done by improving the discipline and commitment between physicians and nurses in improving the quality of services at the hospital.

References

- Aji, R.M. (2009), "Analisis Kualitas Pelayanan UNS medical center universitas Sebelas Maret Surakarta Dengan Menerapkan quality function deployment", Tesis, Fakultas Ekonomi Universitas Sebelas Maret, Surakarta.
- Anisykurlillah, I., Wahyudin, A. and Kustiani (2013), "Pengaruh *role stressor* terhadap komitmen organisasi dengan kepuasan kerja sebagai variabel intervening pada kantor akuntan publik di Jawa Tengah", *Jurnal Dinamika Akuntansi*, Vol. 5 No 2, pp. 109-120.

- Churiyah, M. (2011), "Pengaruh konflik peran, kelelahan emosional terhadap kepuasan kerja dan komitmen organisasi", *Jurnal Ekonomi Bisnis*, Vol. 16 No. 2, pp. 145-154.
- Dharma, K.K. (2011), *Metodologi Penelitian Keperawatan; Panduan Melaksanakan dan Menerapkan Hasil Penelitian*, CV. Trans Info MediAx, Jakarta.
- Febrianty (2012), "Pengaruh role conflict, role ambiguity, dan work-family conflict terhadap komitmen organisasional", *Jurnal Ekonomi Dan Informasi Akuntansi (Jenius)*, Vol. 2 No. 3, pp. 315-339, available at: <http://news.palcomtech.com/wp-content/uploads/2013/04/febriantje02032012.pdf> (accessed Diakses 12 April 2016).
- Hartline, M.D. and Ferrel, O.C. (1996), "The manajement of costumer contact service employess: an empirical investigation", *Journal of Marketing*, Vol. 60 No. 4, pp. 52-70, available at: <http://doi.org/102307/1251901>
- Herrington, G. and Lomax, W. (1999), *Do Satisfied Employees Make Customers Satisfied? An Investigation into the Relationship Between Service Employee Job Satisfaction and Customer Perceived Service Quality*, Kingston Business University, available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.202.5786&rep1&type=pdf> (Diakses 21 Juni 2016).
- Ho, W.H., Chang, C.S., Shih, Y.L. and Liang, R.D. (2009), "Effects of job rotation and role stress among nurses on job satisfaction and organizational commitment", *BMC Health Services Research*, Vol. 9 No. 8, pp. 1-10, available at: <http://doi.org/10.1186/1472-6963-9-8>
- Jaiswal, E.S. (2012), "A case study on quality function deployment (QFD)", *IOSR Journal of Mechanical and Civil Engineering*, Vol. 3 No. 6, pp. 27-35.
- Kadir, A.R. (2005), "Pengaruh komitmen manajemen bank terhadap tingkat kepuasan kerja karyawan dan tingkat kepuasan nasabah di Sulawesi Selatan".
- LeRouge, C., Nelson, A. and Blanton, J.E. (2006), "The impact of role stress fit and self-esteem on the job attitudes of IT professionals", *Information & Management*, Vol. 4 No. 3, pp. 928-938, available at: <http://doi.org/10.1016/j.im.2006.08.01>
- Magdalena, M., Arto, S. and Ginting, R. (2013), "Peningkatan kualitas pelayanan dengan menggunakan metode quality function deployment (Qfd) Di Rumah Sakit Xyz", *E-Jurnal Teknik Industri FT USU*, Vol. 43 No. 2, pp. 31-37.
- Moumtzoglou, A. (2010), "The Greek nurses' job satisfaction scale: development and psychometric assessment", *Journal of Nursing Measurement*, Vol. 18 No. 1, pp. 60-69, doi: 10.1891/1061-3749.18.1.60.
- Nugroho, M.K. (2012), "Pengaruh stress peran dan kepuasan kerja terhadap komitmen organisasi perawat Di RSPI Sulianti Saroso, Tesis, Universitas Indonesia, Jakarta.
- Nurmawaddah (2016), "Analisis pengaruh role stress terhadap self-efficacy dan kepuasan kerja perawat era JKN Rumah Sakit Umum Daerah Haji dan Rumah Sakit Stella Maris Makassar", Tesis, Universitas Hasanuddin, Makassar.
- Nursalam (2015), *Manjemen Keperawatan Aplikasi Dalam Praktek Keperawatan Profesional*, Edisi 5, Salemba Medika, Jakarta.
- Parasuraman, A., Valade, A.Z. and Leonard, L.B. (1985), "A conceptual model of service quality and implications for future research", *Journal of Marketing*, Vol. 49 No. 3, pp. 41-50, available at: <http://areas.kenan-flagler.unc.edu/Marketing/FacultyStaff/zeithaml/Selected%20Publications/A%20Conceptual%20Model%20of%20Service%20Quality%20and%20Its%20Implications%20for%20Future%20Research.pdf> (Diakses 8 Agustus 2016).
- Robbins, S.P. and Judge, T.A. (2013), *Organizational Behavior*, 15th ed., Pearson, Boston, MA.
- Saragih, M. (2011), "Hubungan Program Preseptorship dan Karakteristik Perawat dengan Proses Adaptasi Perawat Baru di PKSC, RSB, dan RSPI", Tesis, Program Magister Ilmu Keperawatan Peminatan Kepemimpinan Dan Manajemen, Fakultas Ilmu Keperawatan, Universitas Indonesia, Jakarta.

- Sartika, D. (2012), "Self efficacy perawat dalam penggunaan sistem informasi keperawatan Di RSIA Bunda Jakarta: Studi fenomenologi", *Fakultas Ilmu Keperawatan Program Magister Ilmu Keperawatan, Kekhususan Kepemimpinan Dan Manajemen Keperawatan, Universitas Indonesia, Jakarta*.
- Tang, Y.T. and Chang, C.H. (2010), "Impact of role ambiguity and role conflict on employee Creativity", *African Journal of Business Management*, Vol. 4 No. 6, pp. 869-881.
- Utomo, D.P. (2009), "Hubungan stres kerja dengan adaptasi pada perawat di instalasi gawat darurat RSUD Pandan Arang Boyolali", Tesis, Universitas Muhammadiyah, Surakarta.
- Widodo (2010), "Perbedaan tingkat stres kerja antara perawat kritis dan perawat gawat darurat di RSUD dr. Moewardi Surakarta", Tesis, Universitas Muhammadiyah, Surakarta.
- Zorlu, K. (2012), "The perception of self-esteem and self-efficacy as transforming factors in the sources of role stress and job satisfaction relationship of employees: a trial of a staged model based on the artificial neural network method", *African Journal of Business Management*, Vol. 6 No. 8, pp. 3014-3025, available at: <http://doi.org/10.5897/AJBM11.2345>

Further reading

- Departemen Kesehatan, R.I. (2005), *Rencana Strategi Departemen Kesehatan*, Depkes RI, Jakarta.
- Sulaiman, Y. (2015), "Aplikasi quality function deployment, service quality, alur proser untuk meningkatkan kualitas layanan pada pasien rawat jalan di Rumah Sakit Unhas Makassar", Tesis, Universitas Hasanuddin, Makassar.

Corresponding author

Abdul Rahman Rahman Kadir can be contacted at: rahmankadir90@yahoo.com

QUESTIONNAIRE RESEARCH

No :

A. Characteristics of Respondents				
1. Name (Initial)				
2. Age	() year(s)			
3. Gender	1. () Male 2. () Female			
4. Working Period	1. () < 1 year 2. () 1 -5 years 3. () ≥ 5 years			
5. Level of Education	1. () SPK 2. () DIII Nursing 3. () S1 Nursing 4. () Ners 5. () DIV Nursing 6. () S2 Nursing			
6. Employment Status	1. () Civil Servants 2. () Contract Employees 3. () Permanent Employees			
7. Marital Status	1. () Married 2. () Single			
8. Working Unit	1. () Patient Care Installation 2. () Intensive Care Unit 3. () Emergency Unit			
Guide				
Tick the answer that you think is correct				
Tick SS, if strongly agree		STS	TS	S
Tick S, if agree				SS
Tick TS, if not agree				
Tick STS, if strongly disagree				

B. Role Conflict

(Source: Questionnaire Rizzo, Houze, & Lirtzman, 1970 in Nurmawaddah, 2016)

No	Statements	STS	TS	S	SS
1	I often receive assignments without adequate resources to carry it out				
2	I never do the job as opposed to the value of my professionalism as a nurse				

(continued)

D. Job Satisfaction

(Source: Questionnaire Smith, Kendall, & Hulin, 1969, dalam Nurmawaddah, 2016)

5	I was satisfied with the opportunities given to develop my career				
6	I am satisfied with the policy regarding promotion at this hospital				
7	I have a good relationship with my colleagues in providing services				
8	I have a good relationship with other professions in providing services				
9	I'm competent and had no difficulty in applying the nursing management				
10	I'm competent and had no difficulty in applying the nursing care				
11	I'm competent and had no difficulty in applying professional values				
12	I was satisfied with the supervisor's ability in decision-making				
13	My boss always provide solutions to the problems faced				
14	My boss more appreciative, responsive and provide a solution to my complaint in service				

E. Self Efficacy

(Source: Questionnaire Riggs, Warka, Betancour, & Hooker, 1994 dalam Nurmawaddah, 2016)

No	Statements	STS	TS	S	SS
1	I feel confident in my ability to do my job				
2	There are some tasks in my job where I could not do well				
3	I have all the skills needed to do my job well				
4	If my performance is low, it is due to the limitations of my ability				
5	I doubted my ability to do my job				
6	My future in this work is limited because of a lack of skills				
7	I am very proud of my job skills and ability				
8	Most people in my line of work can do better than me				
9	I am an expert in my line of work				
10	I get annoyed when others pay attention to my work				

F. Adaptability

(Source: Questionnaire by Spiro & Weis, 1990 dalam Hartline & Ferrel, 1996)

No	Statements	STS	TS	S	SS
1	I feel every patient requires a unique approach				
2	I feel when I use one approach does not work, I could use another approach				
3	I like to experiment with different approaches				
4	I do not change my approach from one patient to another				
5	I am very concerned about patients' needs				
6	I find it difficult to adapt to a particular patient				
7	I vary my approach from one situation to another				
8	I tried to understand that patients differs from another				
9	I feel confident that I am able to effectively change my approach when this is required				
10	I treat all patients equally and not discriminate between patients with another				

(continued)

IJQSS
9,2

18

		STP	TP	CP	P	SP
Reliability						
1	The service time according to the schedule given					
2	Nurses are able to provide precise and fast action					
3	Nurses are experts and professionals					
4	Ease of administration both outgoing and incoming					
5	Giving the right medicine					
6	The fees charged to the patient are compliant					
Responsiveness						
1	Appropriate and fast services					
2	Nurses are always ready when needed					
3	The action of the nurse inspire confidence in patients					
4	The willingness of nurses to help patients					
5	The waiting time of no more than 1 hour					
Assurance						
1	Nurses act hospitable and friendly					
2	Nurses have extensive knowledge to answer patients' questions					
3	Appreciate and respect in treating patients					
4	Give a full description of the patient's medical condition					
5	Patients feel safe when receiving health care in the Hospital					
6	Confidential patient privacy					
7	Tranquility and comfort in the room					
8	Good cooperation is carried out by doctors and nurses					
9	Environmental security guaranteed					
10	Hospitals have a good reputation					
Empathy						
1	Good communication between nurses and patients					
2	Services are available at any time					
3	Nurses and staff provide care to patients					
4	Nurses understand the patient's complaints					

Level of performance

The level of performance is the user's perception of what has been received after using the Hospital's service

Hint: 1 = Very bad (SJ)

2 = Bad (J)

3 = Quite good (CB)

4 = Good (B)

5 = Very Good (SB)

(continued)

No	Aspects	Level of performance				
		STP	TP	CP	P	SP
Tangible						
1	The facilities and medical equipment are complete and well maintained					
2	The building and the rooms were clean and comfortable					
3	The building and the rooms were equipped with clear signs					
4	The room laid out well					
5	The availability of information about services provided					
6	Nurses are neat and professional					
7	Availability of drugs needed by patients					
8	Availability of tools for patients					
9	Adequate toilet					
10	Adequate parking area					
Reliability						
1	The service time according to the schedule given					
2	Nurses are able to provide precise and fast action					
3	Nurses are experts and professionals					
4	Ease of administration both outgoing and incoming					
5	Giving the right medicine					
6	The fees charged to the patient are compliant					
Responsiveness						
1	Appropriate and fast services					
2	Nurses are always ready when needed					
3	The action of the nurse inspire confidence in patients					
4	The willingness of nurses to help patients					
5	The waiting time of no more than 1 hour					
Assurance						
1	Nurses act hospitable and friendly					
2	Nurses have extensive knowledge to answer patients' questions					
3	Appreciate and respect in treating patients					
4	Give a full description of the patient's medical condition					
5	Patients feel safe when receiving health care in the Hospital					
6	Confidential patient privacy					
7	Tranquility and comfort in the room					
8	Good cooperation is carried out by doctors and nurses					
9	Environmental security guaranteed					
10	Hospitals have a good reputation					
Empathy						
1	Good communication between nurses and patients					
2	Services are available at any time					
3	Nurses and staff provide care to patients					
4	Nurses understand the patient's complaints					

AUTHOR QUERIES

AUTHOR PLEASE ANSWER ALL QUERIES

1

AQau—Please confirm the given-names and surnames are identified properly by the colours.

■ = Given-Name, ■ = Surname

The colours are for proofing purposes only. The colours will not appear online or in print.

AQ1— Please confirm the following edit: Original: In addition, the necessary improvement of discipline and commitment between physicians and nurses in improving the quality of services at the hospital Revised: In addition, the necessary improvement can occur in discipline and commitment between physicians and nurses in improving the quality of services at the hospital

AQ2— Please confirm the following edit: Original: While Tang and Chang (2010), defining the role stress can occur if the expected role and perceived is different. According to Ho *et al.* (2009), in his research stating that when facing stressful role, individuals can behave unfavorable to the organization, such as reducing performance, fatigue and resignation. Revised: While Tang and Chang (2010) state that role stress can occur if the expected and perceived roles are different. According to Ho *et al.* (2009) , when facing a stressful role, individuals can behave unfavorably to the organization, such as reducing performance, fatigue and resignation.

AQ3— Please confirm the following edit: Original: Based on interviews with nurses, role ambiguity felt by nurses in the hospital where besides the task of implementing the nursing care of patients, nurses is also working on other tasks such as paperwork, ambulation related to radiology, surgery, took blood samples for laboratory examination and for blood transfusions, distributing food to the patients, and perform other tasks that do not correspond to the role and function as a nurse like cleaning the room when the cleaning service does not exist. Revised: Based on interviews with nurses, role ambiguity felt by nurses in the hospital, where besides the task of implementing the nursing care of patients, nurses are working on other tasks such as paperwork, ambulation related to radiology, surgery, taking blood samples for laboratory examination and for blood transfusions, distributing food to the patients and performing other tasks that do not correspond to the role and function of a nurse such as cleaning the room when the cleaning service does not exist.

AQ4— Please note that the following citations are not listed in the reference list. Please provide full details for these citations: Solomon (2015); Robbins (2002); Lenz and Baggett (2002); Lu *et al.* (2005); Taylor (1997); Potter and Perry (2005); Bitner *et al.* (1990, 1994); Cohen (1995);

AUTHOR QUERIES

AUTHOR PLEASE ANSWER ALL QUERIES

2

Sekaran and Uma (2004)

AQ5P—lease confirm the following edit: Original: If the feeling a person has to work positively then the individual will be satisfied and vice versa. Revised: If the feeling a person has for work is positive, then the individual will be satisfied and vice versa.

AQ6P—lease note that the sentence is unclear.

AQ6P—lease note that the sentence is unclear.

AQ6P—lease note that the sentence is unclear.

AQ6P—lease note that the sentence is unclear.

AQ7N—ote that the phrase “level of service being assessed consumers may occur” is unclear.

AQ8T—his paragraph is unclear.
