

The Relationship Between Leadership Style and Nurse's Work Motivation With The Application of Patient Safety Culture Of The Inpatient Installation In The Class C Hospital, Bone Regency

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ABSTRAK

In building patient safety culture, leadership is one of the behavioral factors in the Total Safety Culture model. The patient safety culture is related to the issue of Adverse Events as the main issue of this study. Beside that, active involvement of organization members is also needed in the form of work motivation. Therefore, this study aims to identify the dominant leadership style of the inpatient nurse managers in the c class hospitals and to analyze the relationship between the leadership style and nurse's work motivation with the application of patient safety culture in the c class hospitals of Bone regency. This research is a cross sectional study with 104 samples of nurses providing care, taken in total sampling at three hospitals, namely Datu Pancaitana Regional Hospital, M. Yasin Army Hospital, and Hapsah Hospital. Data were collected using a structured questionnaire and statistically analyzed using the chi-square test (k x k). The results of this study indicate that the dominant leadership style of the inpatient nurse managers is transactional with the percentage of 69.2%. The results also showed that there was a relationship between leadership style ($p < 0.05$) and nurse's work motivation ($p < 0.05$) with the application of patient safety culture. It was concluded that the transactional leadership had a positive impact in building an independent culture. The combination of extrinsic and intrinsic motivation has succeeded in creating a public service motivation that has a positive impact in building a reporting and learning culture.

INTRODUCTION

In guiding members of an organization, a leader can use certain behavioral styles or ways. Wijono (2018) suggested that the leadership style can be determined by the model of traits, behavior, or situation (contingency). Leadership is one of the behavioral factors in the Total Safety Culture model. Khanzada et al (2018) also explained that

the application of patient safety culture includes the frequency of events reported. Merrill (2015) has also linked the safety culture to the safety climate.

Fischer (2016) through his research has also linked leadership with service quality. Meanwhile, Veliu et al (2017) through their research have also linked leadership with organizational



performance. Alghazo et al (2016); Chowdhury (2014); and Musinguzi et al (2018) suggested that leadership can also build work motivation.

Based on the transactional-transformational leadership model proposed by Antonakis et al (2003), there are nine dimensions of leadership. The three dimensions of transactional leadership consist of contingent reward, management by exception-active, and management by exception-passive. The five dimensions of transformational leadership consist of idealized influence-attributed, idealized influence-behavior, inspirational motivation, intellectual stimulation, and individualized consideration. Finally, *laissez-faire* with one dimension, *laissez-faire*.

Vierendeels et al (2018) suggest that in the Total Safety Culture model by Geller (1994), there are three factors related to safety culture, namely personal, behavioral, and environmental factors. One of personal factor is work motivation. Zetter et al (2013) suggested that work motivation is needed to achieve organizational goals. Guntoro et al (2016) also suggested that work motivation is important in optimizing organizational performance.

Based on the theory of self-determination by Ryan et al (2000), work motivation consists of extrinsic and intrinsic motivation. Extrinsic motivation consists of four dimensions, namely external, introjected, identified, and integrated regulation. Intrinsic motivation consists of intrinsic regulation.

Based on the Total Safety Culture model by Geller (1994), there are three

types of safety culture, namely dependent culture, independent culture, and interdependent culture. Dependent culture is shown by a top-down mechanism where leaders play an active role in optimizing organizational performance. Independent culture is shown by the bottom-up mechanism where the members of the organization play an active role in optimizing organizational performance. Interdependent culture is a combination of dependent and independent culture, where there is interaction and positive feedback between leaders and members of the organization in optimizing organizational performance.

Furthermore, this research harmonizes the three types of culture above with instruments for assessing patient safety culture in hospitals that have previously been prepared by AHRQ. For dependent culture is represented by the dimension of non-punitive responses to errors, manager's expectations in promoting patient safety, and staffing. For an independent culture represented by the dimensions of frequency of events reported, handsoff or transition, management support for patient safety, and organizational learning - continuous improvement. For an interdependent culture represented by the dimensions of openness of communication, feedback and communication about errors, overall perceptions about patient safety, team work across and within the units.

Datu Pancaitana Regional Hospital is one of the c class hospital in Bone regency, where this research was located. Based on the researchers'



interviews with the Chairperson of Infection Prevention and Control of Datu Pancaitana Regional Hospital, the incidents of nosocomial infections which are apart of adverse events were high. These incidents consists of three cases from internal medicine care rooms (5.66%) and five cases from pediatric care rooms (13.51%) in the period of January 2019. These incidents indicate the low application of patient safety culture. Therefore, the main objectives of this research are to present an identification of the dominant leadership style of the inpatient nurse managers and an analysis of the relationship between leadership style and nurse's work motivation of the inpatient installation with the application of patient safety culture in the c class hospital in Bone regency.

METHOD

Research Design and Location

This research was conducted in three hospitals in Bone regency with class C qualifications at the time of the study, namely Datu Pancaitana regional hospital, M. Yasin army hospital, and Hapsah hospital. This research is a quantitative study with cross sectional design.

Population and Sample

The population in this study were all officers who worked as nurses, who interacted directly with patients, in internal, surgical, and pediatric inpatients in three class C hospitals in Bone regency, both with the status of the State Civil Apparatus (SCA) and non-SCA. The total population of the three hospitals studied was 104 respondents.

The population consists of 40 respondents from Datu Pancaitana regional hospital, 43 respondents from M. Yasin army hospital, and 21 respondents from Hapsah hospital. Because the total sampling technique is used, the number of samples taken in this study is the same as the total population of the study, which is 104 respondents.

Data Collection

Data were collected using modified questionnaire from Multifactor Leadership Questionnaire (MLQ), Motivation at Work Scale (MaWS) and Hospital Survey on Patient Safety Culture Assessment Tools (HSOPSCAT). Before being used in the hospitals studied, the questionnaire was first tested for its validity and reliability at Prof. HM. Anwar Makkatutu regional hospital of Bantaeng regency by taking 30 respondents. Valid and reliable questionnaires are then used to collect data.

Data Analysis

The collected data was then analyzed univariately and bivariately. Univariate analysis includes the frequency of respondent characteristics and each research variables. Meanwhile, bivariate analysis includes the relationship between leadership style and nurse's work motivation with the application of patient safety culture, respectively and also statistically used chi-square test.

RESULTS

The total number of nurses who became respondents was 104 nurses. From this study, it is known that



respondents spread in two age groups, namely adolescents (≤ 25 years) and adults (26-45 years).

Table 1 Frequency Distribution of Respondent Characteristics in Inpatient Installation of C Class Hospital in Bone Regency.

Respondent Characteristics	Amount	
	n	%
Age		
Teens (≤ 25 y.o)	20	19.2
Adults (26 – 45 y.o)	84	80.8
Gender		
Male	33	31.7
Female	71	68.3
Education		
Diploma	87	83.7
Undergraduate Ners	8	7.7
	9	8.7
Length of work		
< 1 year	16	15.4
1 – 3 years	81	77.9
> 3 years	7	6.7
Employment status		
State Civil Apparatus (SCA)	11	10.6
Non-SCA	93	89.4
History of attending patient safety training		
Yes	63	60.6
No	41	39.4

Table 2 The dominant leadership style of the inpatient nurse managers of the class hospital, Bone regency.

The leadership styles	n	%
Transformational	30	28.8
Transactional	72	69.2
Laissez-faire	2	1.9

However, the number of respondents with an adult age range (26-45 years) is still more dominant, at 80.8%. In addition, it is also known that

there is more female than male with a percentage of 68.3%. From an educational background, it is known that the majority of respondents had Diploma degree with a percentage of 83.7%.

Table 3 The relationship between leadership style of the inpatient nurse managers with the application of patient safety culture.

	Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.039 ^a	1	.002		
Continuity Correction ^b	8.374	1	.004		
Likelihood Ratio	15.465	1	.000		
Fisher's Exact Test				.001	.000
Linear-by-Linear Association	9.942	1	.002		
N of Valid Cases	104				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5,77.

b. Computed only for a 2x2 table

Most of nurses had worked for 1-3 years at the hospital, with a percentage of 77.9%. It is also known that most of the respondents are non-State Civil Apparatus with a percentage of 89.4%. For the history of attending patient safety training, it is known that the majority of respondents had attended patient safety training with a percentage of 60.6% (Table 1).

The dominant leadership style of the inpatient nurse managers is transactional, with a percentage of 69.2% (Table 2). It was also known that there was a significant relationship between leadership style of the inpatient nurse managers with the application of patient safety culture. It was indicated by the p value of 0.002 which was less than a value of 0.05 (Table 3). Furthermore,



there was also a significant relationship between nurse's work motivation with the application of patient safety culture. It was indicated by the p value of 0.000

which was also less than α value of 0.05 (Table 4).

Table 4 The relationship between nurse's work motivation with the application of patient safety culture

	Chi-Square Tests				
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	97.638 ^a	1	.000		
Continuity Correction ^b	91.379	1	.000		
Likelihood Ratio	90.953	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	96.699	1	.000		
N of Valid Cases	104				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.65.

b. Computed only for a 2x2 table

DISCUSSION

Transactional leadership style with the dominant contingent reward dimension used by the inpatient nurse manager has an impact on the high dimensions of staffing, which is equal to 58.7% on the answer 'always'. For example: the inpatient nurse manager always discusses the placement of nurses specifically in order to control the burden and time of work in serving patients. The inpatient nurse manager always directs nurses to always comply with the standards and regulations of the organization's work. For nurses who are able to work well in achieving organizational goals in accordance with standards, there will be rewards, material or non-material.

It was supported by previous study of Ernur et al (2014) that the rewards of both compensation and career development has a positive impact on achieving optimal organizational

performance. It was also supported by Giddens (2017) who explains that the dominant contingent reward dimension have an impact on task completion orientation more than interpersonal relationships. Therefore, the contingent reward dimension has built reporting and learning culture. It has been showed by the high dimensions of handsoff or transitions (39.4% of 'often' answers), and organizational learning-continous improvement (58.7% of 'always' answers). For example: nurses must report patient services through the hospital unit during the transition/handsoff. The reports always be evaluated and corrected during the time in order to facilitate organizational learning for continous improvement.

This study also indicate that the dimensions of transactional leadership style with contingent reward dimensions have an impact on independent culture. It can be seen from the high dimensions of



handsoff or transition, management support for patient safety, and organizational learning-continuous improvement with percentages of 39.4% and 55.8% for 'often' answers and 58.7% for 'always' answers, respectively. For example: patient safety has become a priority service so that the inpatient nurse manager and nurses always provide a safety climate.

On the opposite side, the contingent reward dimension has an impact on the low culture of openness and trust. The low culture of openness can be seen from the low dimensions of openness of communication and feedback about errors, with percentages of 39.4% and 33.7% respectively on the 'sometimes' answer. The low culture of trust can be seen from the low dimensions of manager's expectations in promoting patient safety with a percentage of 32.7% in the answer 'never'. Yet according to Paradiso et al (2017), an open and just (trust) culture were crucially needed for building a total safety culture. Furthermore Hayati et al (2014) also explained that just (trust) culture can strengthen the work engagement of nurses.

In addition, this study also showed that there was a blaming culture as indicated by the low scores of non-punitive response to errors, the frequency of events reported, and overall perceptions about patient safety (with a percentage of 34.6%, 39.4%, and 46.2% respectively at 'sometimes' answers). Yet according to McRae (2017), this blaming culture can cause lower satisfaction, both patients and nurses. Boamah et al (2017) at the previous study also have explained

that the blaming culture was related to lower job satisfaction.

The dominant extrinsic motivation used by the inpatient nursing nurse can be seen at the dominance of the identified and integrated regulation (72.1% and 74% at 'always' answers, respectively). Identified regulation was showed by encouragement to work as a devotion to God by giving kindness to the other people. Integrated regulation was showed by encouragement to work to maintain a self-image of a certain status or profession. If this two self-regulations are continuously maintained, properly trained and facilitated, by the time they can be internalized into intrinsic regulation by forming an interest, enjoyment, and inherent satisfaction. Based on this study, there was also the dominance of intrinsic regulation (intrinsic motivation) with the percentage of 90.4% and 89.4% at 'always' answers, respectively. Intrinsic motivation was showed by interest, enjoyment, and inherent satisfaction by helping the patients.

In building a culture of patient safety, the dominance of identified regulation dimension has an impact on the formation of management support for patient safety. For example: nurses provide a work climate that promotes safety to get the reward from God by saving patients. The dominance of integrated regulation dimension to maintain the professional image has an impact on staffing, handoffs and transitions. For example: the nurses always make reports through the hospital unit during the transition or handsoff, due to their professions as a nurse. The



dominance of intrinsic regulation has an impact on the formation of organizational learning and teamwork, both between units and within units. For example: the nurses feel happy to help patients because it can make them learn to provide the best service to patients. Nurses who experienced happiness and satisfaction by helping each others are able to build a good teamwork, coordination, and collaboration.

An organizational learning and a good teamwork are the evidences of the high application of patient safety culture. The combination of identified-integrated-intrinsic regulations is similar to public service motivation, where someone is motivated by non-material rewards, such as warm praise, confessions, a good image, etc. This non-material rewards mostly refer to psycho-socio-spiritual satisfactions on working. Previous studies also revealed that the public service motivation had a positive impact on employee's commitment toward organization. A good employee's commitment can optimize the organizational performance such as in implementing patient safety culture. It was also supported by previous study of Jensen et al (2017) that public service motivations were related to higher individual commitment to the organization. It was important in optimizing organizational performance, such as application of patient safety culture.

CONCLUSION AND SUGGESTION

This research reveals that the transactional leadership with the contingent reward dimension has

positive impacts on the high application of patient safety culture by building independent culture where the nursing nurse are actively getting involved on promoting patient safety. The dominance of identified-integrated-intrinsic regulation had formed a combination of extrinsic and intrinsic motivation by achieving non-material reward. It was also known as a public service motivation. The public service motivation has positive impacts on the high application of patient safety culture by building learning and reporting culture. Therefore, the inpatient nurse managers should give positive feedbacks and facilitate the communication openness for building an open and a just culture and also minimize a blaming culture in order to apply a total patient safety culture.



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