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## The Influence of Nurse Manager's Transformational Leadership Style on Nurse's Medication Safety Dimediation Performance in Intention Room of Private Hospital in Pekanbaru

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#### **Abstract**

The purpose of this study was to analyze the effect of the nurse manager's transformational leadership style on performance and medication safety. Respondents in this study are medical staff working in a private hospital Pekanbaru. The samples used were 96 respondents with quantitative methods using SEM and Smart PLS, with a sampling technique convenience sampling. Hypothesis testing using SEM-Partial Least Square; test the validity and reliability using confirmatory factors, cronbach's alpha and composite reliability. The results of this study indicate that the transformational leadership style of nurse managers has a positive and significant effect on performance and medication safety, performance has a positive and significant effect on medication safety and mediation performance has a positive and significant effect on nurse manager transformational leadership style on medication safety.

## Keywords

Transformational leadership style; medication safety; performance



### I. Introduction

The hospital is one of the pillars in the function of promotive, preventive, curative and rehabilitative health. Hospitals are also capital-intensive and resource-intensive forms of business. The biggest human resources in the hospital are nursing paramedics. Nurses are at the forefront of direct contact with patients, so that the performance of nurses plays an important role in determining the success of the hospital in achieving common goals.

In achieving common goals, hospitals need leaders who can create a vision for the future, and provide inspiration to employees. Transformational leaders have the ability to unify followers and change followers' goals and philosophies. This type of leadership results in higher achievement and performance levels among individuals than previously thought (Afzal et al., 2016). Furthermore, nursing services contribute to determining the quality of service in hospitals, so that every effort to improve the quality of hospital services must also be accompanied by efforts to improve the quality of nursing services, one of which is by increasing nurse performance (Henniwati & Eliza, 2020).

Performance is the result of work that has a strong relationship with the organization's strategic objectives, customer satisfaction, and contributes to the economy (Nursam, 2017). With medication safety, the treatment system runs according to procedures, clear goals, and studies the incidence of medical errors that occur in the medical service environment (Mulatsih, Dwiprahasto, and Sutaryo, 2016). Where patient safety is the responsibility of all parties related to health care providers.

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Based on the Ministry of Health (2008) errors in drug administration were ranked first (24.8%) of the top 10 reported incidents. One of the patient's rights that must be fulfilled is the right to obtain security and safety during treatment at the hospital (UU No. 44/2009 in article 32 concerning Hospitals) (Layuk, 2017). This incident will continue to increase if there is no awareness of nurses in administering drugs in accordance with the principles of administration that apply in hospitals (Mahfudhah and Mayasari, 2018). Based on the research above, the researcher wants to examine more deeply the influence of transformational leadership style on performance and medication safety, the effect of performance on medication safety and the influence of leadership style on medication safety through performance as a mediating variable.

## II. Review of Literature

According to Sedarmayanti (2016) there are three types of leadership styles that influence subordinates to achieve organizational goals, namely leadership, transformational leadership, primal leadership and humanistic leadership. Transformational leadership is a form of leadership in which a leader and subordinates have the ability to support each other to a higher level of motivation and morale (Arisa & Syah, 2018).

Hospitals in an effort to improve their quality must also be accompanied by efforts to improve the quality of nursing services, one of which is by increasing the performance of nurses (Henniwati & Eliza, 2020). Based on the Decree of the State Minister for Administrative Reform Number: 94/Kep/M.PAN/II/2001 CHAPTER II article 4. In the opinion thatthat the main task of nurses is to provide nursing services in the form of nursing or health care to individuals, families, groups

Medication safety also included in the quality of nursing services. Medication errors and unsafe medical practices cause severe harm, disability and even death to patients. Medication errors can be caused by faulty systems, human factors or working conditions and most commonly occur during medication administration. Nurses must carefully follow all applicable instructions, procedures, and policies related to administering medication and act according to the principles of safe medication (Xu et al., 2014). Nurses need to know how drugs affect patients' symptoms and disease and the possible risks and adverse reactions associated with drugs (Leahy, 2017).

### 2.1 The Effect of Nurse Manager Transformational Leadership on Nurse Performance

Employees will work well and their performance will increase if the leader has a transformational leadership style. Conversely, if leaders cannot influence and direct employees to achieve company goals, then employee performance in the company will decrease (Arisa & Syah, 2018). This shows that transformational leadership has a stronger influence on company performance (Özer & Tinaztepe, 2014). Supported by the results of Al Zefeiti's research (2017) showing that the dimensions of transformational leadership are positively related to employee performance. From the description above, the writer proposes a hypothesis:

H1: Nurse manager transformational leadership influences nurse performance

## 2.2 Effect of Nurse Performance on Medication Safety

To increase the level of patient trust and satisfaction, hospitals must guarantee patient safety. Improving patient safety requires knowledge of parameters such as the competence and abilities of doctors and nurses (Zineldin, 2015). Thus, the constructs of health quality,

patient safety and satisfaction are becoming important concerns for health care settings and wards. Zineldin (2015) also revealed that patient satisfaction on nurse performance and trust in doctor performance greatly affect their perception of safety. From the description above, the writer proposes a hypothesis:

H2: Nurse performance influences medication safety

### 2.3 Effect of nurse manager transformational leadership on Medication Safety

Improving patient safety outcomes requires an effective nursing leadership style (Lappalainen et al., 2020). Transformational leaders are charismatic, demonstrated by high ethical and moral standards of behavior and are trusted, respected and admired. Transformational leaders also consider staff on an individual basis and provide support, mentoring, coaching and teaching.

A leader pays special attention to the needs of each staff member by offering learning opportunities, supported by several studies, that the transformational leadership style was shown to be a positive contributor to a safety climate, whereas the laissez-faire leadership style was shown to contribute negatively to unit socialization and blame culture, (Merrill, 2015), (Vaismoradi et al., 2016), (Iqbal et al., 2020). From the description above, the writer proposes a hypothesis:

H3: The transformational leadership of nurse managers influences medication safety.

# 2.4 Nurse Performance Mediates Nurse Managers' transformational leadership on Medication Safety

Nurses must be aware of their role so that they must be able to actively participate in realizing medication safety. Strong medication safety requires leadership that includes components such as being able to clearly define and communicate a vision for safety, rewarding and empowering staff to achieve the vision. Another component is being actively involved in efforts to improve patient safety, being a role model for subordinates, focusing on system problems not on individual errors and continuing to make system improvements (Jelita, 2019). From the description above, the writer proposes a hypothesis:

H4: Nurse performance mediates the transformational leadership of nurse managers influencing medication safety.

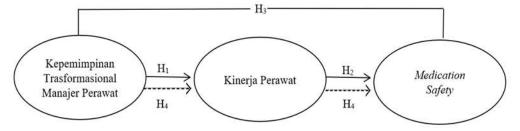


Figure 1. Research Model

## **III.** Research Methods

This research is a quantitative research. The population in the study ismedical staff working in a private hospital Pekanbaru. Retrieval techniqueconveniencesampling as many as 96 respondents. Hypothesis testing is done by using the approachStructural Equation Modelling(SEM) based PLS (Partial Least Square).

### 3.1 Scale and Measurement

This study uses primary data collected through questionnaires filled out by respondents. Measurements using a Likert scale questionnaire with answers in the range 1-5. The scale describes a rating from "strongly disagree" to "strongly agree".

## 3.2 Validity and Reliability Test

The validity and reliability in this study used confirmatory factor analysis to test the influence of constructs and indicators. Meanwhile, reliability testing uses Cronbach's alpha and composite reliability. The results of the validity and reliability tests are presented in Figure 2 and Table 1. Statistical testing to determine the validity value with a loading factor value of > 0.70 and a reliability value of cronbach's alpha>0.70 and composite reliability >0.70.

### IV. Result and Discussion

## 3.1 Population Policy during Turki Utsmani 1512-1566 M

To find out whether the hypothesis testing is rejected or accepted, bootstrapping is done on the PLS software and then the significant value between the constructs, t-statistics and p-value is seen. The hypothesis can be accepted if it has a significant t value >1.96 or a p-value <0.05. There are ten hypotheses in this study. The results of hypothesis testing can be seen in table 2.

Figure 2. shows that after testing the statements that have been tested and are valid, all statements are valid and can be used in this study.

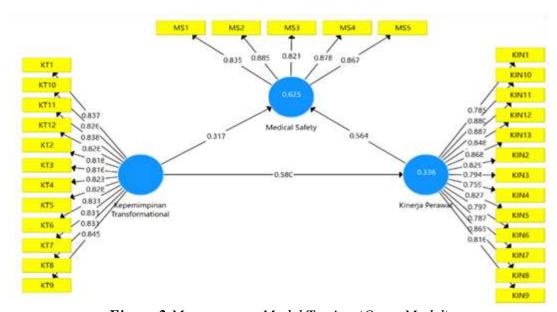


Figure 2. Measurement Model Testing (Outer Model)

**Table 1**. Reliability test results

Variable	Cronbach's Alpha	Composite Reliability	Information
Transformational Leadership	0.959	0.964	Reliable
Nurse Performance	0.961	0966	Reliable
Medical Safety	0910	0.933	Reliable

Based on table 1 it can be seen that the three variables have a Cronbach's alpha value above 0.70 and have a composite reliability above 0.70, so that the measuring instrument used is reliable and feasible to use in research.

Table 2. Hypothesis test

Hypothesis	Model	Original Sample (O)	T Statistics ( O/STDEV )	P Value	Information
H1	Transformational Leadership -> Nurse Performance	0.580	7,244	0.000	Accepted
H2	Transformational Leadership -> Medical Safety	0.317	2,501	0.013	Accepted
НЗ	Nurse Performance -> Medical Safety	0.564	4,913	0.000	Accepted
H4	Transformational Leadership -> Nurse Performance -> Medical Safety	0.327	3,555	0.000	Accepted

Based on table 2 above, the test results for each hypothesis are as follows:

First, the effect of nurse manager transformational leadership on nurse performance shows a positive original sample coefficient value of 0.580. The construct relationship shows a t-statistic value of 7.244 > 1.96, and a p-value of 0.000 < 0.05. So it can be Hypothesis 1 positive significant concluded that has a and second,influencenurse performance on medication safetyshows a positive original sample coefficient value of 0.564. This construct relationship shows a t-statistic value of 4.913 > 1.96, and a p-value of 0.000 < 0.05. So it can be concluded that Hypothesis 2 has a positive and significant effect.

Third, the effect of transformational leadership on nurse managersmedication safety shows a positive original sample coefficient value of 0.317. This construct relationship shows a t-statistic value of 2.501> 1.96, and a p-value of 0.013 <0.05. So it can be concluded that Hypothesis 3 has a positive and significant effect. Next fourth, The influence of transformational leadership of nurse managers on nurse performance is mediated medication safety shows a positive original sample coefficient value of 0.327. This construct relationship shows a t-statistic value of 3.555> 1.96, and a p-value of 0.000 <0.05. so it can be concluded that hypothesis 4 has a positive and significant effect.

### 3.2 Discussion

The results of research on (H1) show that Transformational Leadershippositive and significant effect on Nurse Performance. These results support the previous research which generally stated that Transformational Leadershiphas a significant positive to Nurse Performance which is conducted by Afzal et al. (2016), Abdelhafiz et al. (2015) Transformational leadership is a form of leadership in which a leader and subordinates have the ability to support each other to a higher level of motivation and morale. In

transformational leadership, there are four characteristics of leadership behavior such as ( Arisa & Syah, 2018): (i) ideal influence, (ii) inspirational motivation, (iii) intellectual stimulation, (iv) individual attention. Nursing services contribute to determining the quality of service in hospitals, so that every effort to improve the quality of hospital services must also be accompanied by efforts to improve the quality of nursing services, one of which is by increasing nurse performance (Henniwati & Eliza, 2020). The results of the H2 study stated that there was The Effect of Nurse Manager Transformational Leadership previous research which stated Safety. These results support onMedication the thatTransformational Leadershiphas a significant positive toMedication Safetywhich is conducted by Mulyatiningsih & Sasyari (2021), Vaismoradi et al., (2016), Merrill (2015) the importance of transformational leadership in creating an empowering practice environment that encourages high quality care. In planning a safety strategy, managers must demonstrate transformational leadership behavior by modifying the work environment to create better defenses to avoid unwanted events (Boamah, S., 2018), (Lievens & Vlerick, 2014),(Vaismoradi et al., 2016),(Mulyatiningsih & Sasyari, 2021). The results of the H3 study stated that there was a positive and significant effect between Nurse Performance on Medication Safety. These results support and are in accordance with previous research which generally states that nurse performance has a significant positive effect on Medication Safety Boamah et al., (2018), (Ketut et al., nd; Salih et al., 2021) One of the patient's rights that must be fulfilled is the right to obtain security and safety during treatment at the hospital (UU No. 44/2009 in article 32 concerning Hospitals) (Lavuk, 2017). Therefore, nurses need to have sufficient knowledge about patient safety programs. H4 research results which state that there is a roleNurse Manager Transformational Leadershipinfluenceon Nurse Performance mediatedMedication Safety research(Nivalinda et al., 2013). States thatthere is an effect of nurse motivation on the application of patient safety culture by 10.3%, there is an influence of the leadership style of the head of the room on the application of patient safety culture by 36.8%. There is a joint effect between the motivation of nurses and the leadership style of the head of the room on the implementation of patient safety culture by 39.2%. There is an influence between the motivation of nurses and the leadership style of the head of the room on the application of patient safety culture by nurses

### IV. Conclusion

Based on the findings it can be concludedleadershiptransformational significant positive effect onnurse performance and medication safety, nurse performance positive and significant effect medication safety, And nurse manager transformational leadershipsignificant positive effect onmediated nurse performance medication safety.

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