# Doctor's Leadership Style and Nurse Performance in Inpatient Room

Sudiarto, Ermi Girsang*, Ali Napiah Nasution
*Faculty of Medicine, Prima Indonesia University*

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Abstract: The relationship between doctors and nurses in providing health care to patients is a more binding partnership where there should be harmonization of tasks, roles and responsibilities and an open system. To manage the implementation of health services, especially nursing, of course it takes a doctor's leadership factor which in its application can have an impact on nurses' performance. The fact that in the application of nursing care the role of doctors as clinical leaders is less assertive which has an impact on the performance of nurses that is not yet optimal. This study analyzes the influence of the doctor's leadership style on nurses' performance in the inpatient room. This type of quantitative research is analytic descriptive approach. The number of samples were 38 nurses. Data collection is carried out through questionnaires and documentation studies. The questionnaires were conducted in face-to-face with the participants in order to maintain the validity of the research. Data were analyzed bivariately using chi square test and multivariate using multiple logistic regression tests. The results of the study show that democratic leadership style, participatory, authoritarian and Laissez-faire leadership style significantly influence the performance of the nurses. The independent leadership style variable is the most dominant influencing the performance of the implementing nurse. The results of this study are expected to be useful information and suggestions for hospital management by involving the larger functions of doctors in governance and management. It is hoped that the improvement of doctors' leadership abilities will have a direct impact on improving the performance of nurses.



## 1 INTRODUCTION

Health and care professionals not only require clinical experts but also have competence in leadership and management skills that enable them to be more actively involved in the planning, delivery and transformation of services for patients. To make a change that actually takes place in achieving its goals, leadership is needed. There are many examples of bad practice and system failure in health care due to lack of leadership at the individual, group and organizational level (Salim, 2016).

Greater doctor participation at the level of strategic decision making has the potential to benefit various hospitals. Greater doctor involvement is beneficial for the decision-making process in the hospital and has important implications for policy and practice (Sarto and Veronesi, 2016).

The competence of doctors as leaders in health services in hospitals, often referred to as clinical leaders. For health care workers, especially doctors, the leadership factor is needed in carrying out daily tasks. The main task of the doctor is to lead the health care technical team and in every medical treatment certainly involves many parties ranging from nurses, nutrition installations, medical records, the availability of facilities and infrastructure and doctors. Clinical leadership is a driver of efforts to develop a vision of clinical services in hospitals. The creation of a world-class clinical vision and achievement strategy is a practical example of clinical leadership in hospitals. But being a clinician may not necessarily have clinical leadership abilities. Given the large variety of professions in hospitals and the complexity of hospital organization management, this situation will prevent clinicians from developing leadership abilities. The situation will become even more difficult due to autonomy in each profession, a hierarchy of competencies, and a high workload (Trisnantoro et al., 2011).

In the case of health workers, of course the highest number of personalities and the most frequently dealing with patients served are nurses. Data from the Ministry of Health showed the largest number of nurses in 2016 among other health



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professions, 345,276 people or 30.19% of the total recapitulation of health professionals in Indonesia, namely 1,143,494 people. To manage the implementation of health services, especially nursing, of course it takes leadership factors from doctors who in their application can have an impact on nurse performance. Therefore, this research is conducted on nurses because they are closely related to doctors and patients and they also provide services according to the doctors' suggestions and nursing intakes. The good performance of nurses is a bridge in answering quality assurance of health services provided to both sick and healthy patients, health service facilities including hospitals (Ministry of Health, 2018; Turnip, 2020; Wijaya, 2019).

The relationship between doctors and nurses in providing health care to patients is a more binding partnership where there should be harmonization of tasks, roles and responsibilities and an open system. According to the AMA, if collaboration between doctors and nurses goes as determined it will have a direct impact on patients, because many positive aspects can be generated. In fact, in practice there are various obstacles to collaboration between doctors and nurses so that collaboration is difficult to be created, among others, the dominance of power, differences in the level of knowledge / education, communication and perspective (Rahaminta and Sulisno, 2012).

The main key in improving the quality of health services is nurses who have high performance. However, it is not uncommon to find complaints related to the quality of health services which originates from the performance of nurses. Even criticism of nurses' performance in providing services is often complained of and has often been published in the mass media. It was reported that there were nurses in the hospital saying harshly to patients when serving health checks, nurses were not responsive in providing services, and nurses were less friendly to patients (Nurjannah, 2016).

Criticism or complaints regarding nurses' performance can be minimized by taking into account the factors that can influence them. According to Ilyas, the factors that influence works behavior and performance are individual, organizational, and psychological variables. The individual variables consist of abilities, skills, background and demographics. The organizational variables consist of resources, leadership, rewards, structure and job design. The psychological variables consist of perception, attitude, personality, learning and motivation (Ilyas, 2016). One factor related to the performance of organizational variables is leadership. In this study limited to clinical leadership of doctors (clinical leadership).

National Health Service (NHS) highlights the importance of effective leadership in the system especially the need to involve more doctors in the leadership. Health and care professionals not only require clinical experts but also have competence in terms of leadership and management skills that enable them to be more actively involved in planning, delivering and transforming services for patients and to make a change that actually happens, requires leadership . There are many examples of bad practice and system failure in health care due to lack of leadership at the individual, group and organizational level (NHS Leadership Academy, 2012).

Including leadership and management aspects in the health service system on a team, department, hospital or government scale in the health sector is not an option, but an obligation for all clinicians. This leadership is manifested through various types of leadership styles. Leadership style is a way of working and behaving leaders in guiding their subordinates to do something (Kartono, 2014).

Given global trends, such as an aging population and rapid adoption of new technologies, the way in which health care is delivered has changed substantially in the past 10 years, which in turn brings the need for new ways to lead the health care team. For this reason, a leadership style that is focused on creating positive relationships is associated with higher patient satisfaction, and reducing patient mortality, medication errors, use of controls and hospital-acquired infections.

Several factors that can affect one's leadership style include many aspects, such as psychological, sociological, cultural, political, historical, geographical, technical, and economic aspects. Based these factors it is very possible if the leadership style in one country will also be different from other countries, such as in two different countries: leaders from different regions will also give a difference in the leadership style. This becomes a characteristic that grows and develops closely related to a person's background and how the values are instilled when he grows and grows older, until finally becoming a leader (Laurent and Djastuti, 2013).

Studies of the leadership style and its influence on the work results or performance of its members have been widely carried out. Tewal's research found that there was a positive and significant influence between organizational culture, leadership, and motivation on nurse performance.

Simultaneously that organizational culture, leadership, and motivation significantly influence nurse performance (Tewal, Mandey and Rattu, 2017). The difference with others, this research is only focuses on leadership style.

Haan in his research found that there was a relationship between leadership style (authoritarian, democratic, participatory, liberal) and the work motivation of nurses (de Haan, P.L.M., BitjuniH.J. Kundre, 2019). The difference with this study is that the dependent variable Haan examines nurses' work motivation while this study examines the performance variables of nurses implementing inpatient rooms. Moura in his research found that nursing leadership has a positive and significant impact on job satisfaction (Moura et al., 2017). The difference with this research is that the dependent variable Moura examines nurse job satisfaction. Duwayri explained that to achieve the highest level of staff satisfaction nurse managers need to use several leadership styles, which are relational focused on transformational and transactional styles (Duwayri, 2019). Research conducted by Artiningsih found that the leadership style and motivation of the head of the room had no significant effect on nurse performance while discipline had a significant and dominant effect on nurse performance (Artianingsih, 2016). Suratno's research found that leadership strategies are very important to enhance the role of nurses where leaders can form an effective work environment for nurses and improve the quality of service to patients. Health institutions must create a healthy work environment that benefits nurses and patients, monitors well-being and promotes healthy behaviors to nurses (Suratno, Ariyanti and Kadar, 2018).

Goh's research found that nurse leaders in this study tended to rate themselves higher than others. The results imply the need to include self-awareness elements in nursing leadership development programs (Goh, Ang and Della, 2018). The difference with this research is that the independent variable besides Goh leadership style also examines the organizational commitment variable. Overall research focusing on leadership style and quality of nurse performance (based on several previous studies, these two factors are the most dominant in improving the quality of service in a hospital) which is still rarely done before.

# 2 METHODOLOGY

The study was conducted in the inpatient room at Royal Prima Hospital Medan in August-December 2019. The hospital has implemented a modern service system in the form of an integrated computerized information system. The population was 319 nurses implementing inpatient wards with a sample of 76 respondents by random sampling technique. Data collection was done by distributing questionnaires containing 8 items each statement about the leadership style of doctors (democratic, participatory, authoritarian, and Laissez-faire) with alternative answers Yes given a score of 3, Sometimes given a score of 2, Not given a score of 1 and 20 statement items about the performance of the implementing nurse with alternative answers Yes given a score of 3, Rarely given a score of 2, Not given a score of 1.

Validity and reliability tests were carried out on 30 nurses implementing at the same hospital as the study location. The validity test results obtained Rcount coefficient values in the range 0.393-0.749> Rtable = 0.361, it was assumed that the data was normally distributed. The reliability test results obtained Cronbach's Alpha count values in the range 0.834-0.892> 0.7; assumed a reliable questionnaire. Questionnaires were distributed in the second and third week of December.

Data processing through the Editing stage: to check the suitability of the data with expectations and check the completeness and uniformity of the data. Coding: to simplify the analysis and also to speed up data entry. Processing: done after all variables are coded. Data that has been given a code is then entered first in the master table. Cleaning: this process aims to ensure that the data that has been entered is really clean from errors. Data were bivariately analyzed using the chi square statistical test and multivariate with multiple logistic regression tests. The research process scheme is given as in Figure1.

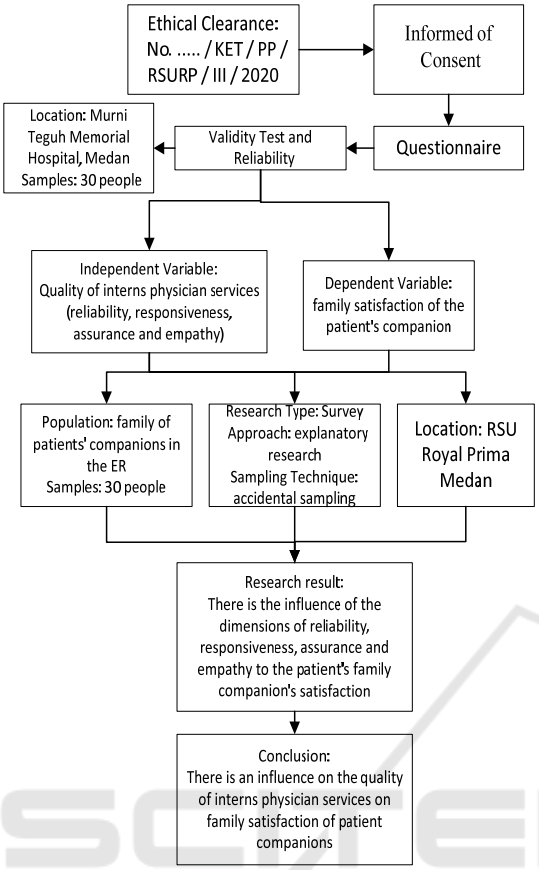


Figure 1. Scheme of Leadership Style and Nurse Performance Research

## 3 RESULTS AND DISCUSSION

Analysis of the research questionnaire based on dummy categories (2 groups) with a mean or average = 1.50; where all the variables above the average are democratic (1.62); participatory (1.67); authoritarian (1.55); free of action (1.54) and nurse performance (1.57). The results of the measurement of the research variable from the questionnaire as in Figure 1 and Table 1. Figure 1 indicate the form and data distribution value of each evaluated variables. The measured data distribution for independent and dependent variables can be seen in Figure 2. In Figure 2, D is Democratic, P is Participatory, A is Authoritarian, F is Laissez-faire / Free action, and N is Nurse Performance.

Based on the assessment of the implementing nurses, there are still doctors who do not apply a democratic leadership style (38.2%). This is evident from the answers of implementing nurses that some doctors in determining action plans to patients do not always ask for ideas from implementing nurses and do not respect the nature of implementing nurses in carrying out health service tasks.

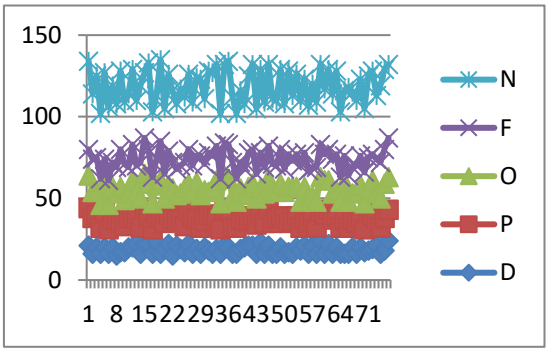


Figure 1: The measured data from questionnaire of 76 respondents.

The results of multiple logistic regression tests on the doctor's democratic leadership style obtained value of the regression coefficient = 1.714; p = 0.008 with the value Exp (B) = 5.553. This means that the respondents considered that the democratic leadership style applied by doctors was good, had a 5.553 times greater chance of carrying out tasks with good categories compared to respondents who rated the leadership style as not good.

A study conducted by Tewal found that there was a significant positive effect between organizational culture, leadership, and motivation on nurse performance. Simultaneously that organizational culture, leadership, and motivation significantly influence nurse performance (Tewal, Mandey and Rattu, 2017).

Human resource management in a hospital requires the right leadership style so that it can form a synergy between superiors and subordinates (in this study between doctors and implementing nurses). With the application of appropriate leadership styles, it is expected that a harmonious communication relationship between doctors and nurses implementing in improving the performance of health services to patients will be better.

Doctors who apply the majority participatory style tend to carry out tasks in either category and not vice versa. Chi square statistical test results obtained p value (0.001) <α (0.05) means that there is a relationship between the participative leadership style of the doctor and the task of the implementing nurse.

The results of multiple logistic regression tests on the physician participatory leadership style obtained the value of the regression coefficient = 1.804; p = 0.008 with the value Exp (B) = 6.073.

This means that respondents who rated the participatory leadership style that doctors applied were good, 6.073 times more likely to carry out tasks in a good category compared to respondents who rated the participative leadership style that doctors applied was not good.

Nurses who state that doctors apply the majority authoritarian style carry out tasks in either category and those who declare doctors do not apply the majority authoritarian style carry out tasks in the less good category. Chi square statistical test results obtained p value (0.002) <□ (0.05) means that there is a relationship between the authoritarian leadership style of the doctor and the performance of the implementing nurse.

The results of multiple logistic regression tests on the doctor's authoritarian leadership style obtained the value of the regression coefficient = 1.937; p = 0.004 with the value of Exp (B) = 6.936 This means that respondents who rated the authoritarian leadership style applied by doctors were good, had a 6.936 times greater chance of carrying out tasks in a good category compared to respondents who assessed the authoritarian leadership style applied by doctors was not good.

Nurses who state that doctors apply the laissez-faire, the majority carry out tasks by category and who state the doctor does not apply the freestyle act, the majority carry out tasks with unfavorable categories. Chi square statistical test results obtained the value of p (0,000) <α (0.05) means there is a relationship between the free leadership style of doctors' actions with the performance of the implementing nurses.

The results of the multiple logistic regression test on the doctor's free leadership style obtained a regression coefficient of 1.804; p = 0.008 with the value of Exp (B) = 6.073. This means that respondents who judge doctors to adopt a free leadership style of action as well, have a 6.073 times greater chance of carrying out tasks in a good category compared to respondents who judge the leadership-free style of action that doctors apply is not good.

From the results of the multivariate test in Table 2 it can be concluded that the leadership style of Authoritarian is the dominant variable influencing the performance of nurses implementing inpatient rooms. This is evidenced from the coefficient value of the Laissez-faire leadership style (1.804) higher than the democratic leadership style (1.714), from the participative leadership style (1.350) More clearly as in Tables 2 and 3.

Table 1: Chi square test results (Bivariate Analysis).

| Leadership | Nurse Performance | | | | *p-value* |
|---|---|---|---|---|---|
| | Good | | Not Good | | |
| | n | % | n | % | |
| **Democratic** | | | | | |
| Applied | 35 | 74,5 | 12 | 25,5 | 0,000 |
| Not | 8 | 27,6 | 21 | 72,4 | |
| **Participatory** | | | | | |
| Applied | 36 | 70,6 | 15 | 29,5 | 0,001 |
| Not | 7 | 28,0 | 18 | 72,0 | |
| **Authoritarian** | | | | | |
| Applied | 31 | 73,8 | 11 | 26,2 | 0,002 |
| Not | 12 | 35,3 | 22 | 64,7 | |
| **Laissez-faire** | | | | | |
| Applied | 32 | 78,0 | 9 | 22,0 | 0,001 |
| Not | 11 | 31,4 | 24 | 68,6 | |

Table 2: Results of multiple logistic regression tests (Multivariate Analysis).

| Variables | *B* | *Wald* | *df* | *Sig.* | *Exp (B)* |
|---|---|---|---|---|---|
| Democratic | 1,714 | 7,024 | 1 | 0,008 | 5,553 |
| Laissez-faire | 1,804 | 6,988 | 1 | 0,008 | 6,073 |
| Participatory | 1,350 | 4,290 | 1 | 0,038 | 3,857 |
| Authoritarian | 1,937 | 8,401 | 1 | 0,004 | 6,936 |
| *Constant* | -3,196 | 17,205 | 1 | 0,000 | 0,041 |

In Trisnantoro's research, it is explained the influence of various models or styles of doctor leadership on the performance of implementing nurses. Hospital core business is clinical services. Patients and their families come to the hospital to get clinical services from the health workers who work in it. Health workers who work in hospitals consist of various professions and each profession has a diverse hierarchy of competencies. The large number of variations is a barrier for the implementation of services oriented to patient safety and satisfaction, if there is no leadership that unites the vision of service from these various professions. For this reason, leadership is needed to build a spirit of togetherness through shared vision and shared values in the service mechanism in hospitals (Trisnantoro et al., 2011). Much researched assumptions indicate that greater physician involvement in governance and management roles

will have broader benefits for the efficiency and effectiveness of health care organizations.

The results showed that there was an influence of the doctor's democratic leadership style on the performance of nurses implementing inpatients. The statement of implementing nurses in general is that doctors adopt a democratic leadership style (61.8%). This is evident from the statement of implementing nurses, among others, that doctors value the ability of each implementing nurse in providing health services; the doctor gives an explanation of the implementation of nursing actions to the implementing nurse openly; if there is a planning of a new method for administering an action, the doctor provides the widest possible information; and doctors help implementing nurses in solving problems related to the implementation of health services.

Based on the results of multiple logistic regression tests, the value of p 0.008 <0.05 means that there is an influence of the democratic leadership style of the doctor on the performance of the executing nurse. In other words the more democratic leadership styles are applied by doctors, the task of implementing nurses also increases. But there are still nurse nurses with poor performance, this can be caused by a less supportive work environment such as conditions when the patient is busy, the nurse's workload is high, and the number of nurses is still less compared to the number of patients who must be served.

The results showed that there was an influence of the physician participatory leadership style on the performance of nurses implementing inpatient rooms. This is based on the statement of the implementing nurse who in general doctors apply a participative leadership style (67.1%). This is evident from the statement of the implementing nurse which among others is that if there is a planning of a new method in the delivery of health services or actions, the doctor proposes to the implementing nurse; the doctor gives direction to the implementation of the duties of the implementing nurse clearly; doctors appreciate the ability of implementing nurses in carrying out health service tasks; and doctors consider the results of the analysis of the problem of implementing nurses related to problems in the implementation of health services.

Based on the results of multiple logistic regression tests, the value of p 0.008 <0.05 means that there is an influence of the participative leadership style of the doctor on the task of the nurses implementing the inpatient room. In other words the more applied the participatory leadership style by doctors, the task of implementing nurses also increased. But there are still nurses with poorly performing tasks, this can be caused by a less supportive work environment such as conditions when the patient is crowded, the workload of nurses is high, and the number of nurse nurses is still insufficient compared to the number of patients who must be served.

Based on the assessment of the executive nurse that there were doctors who did not apply the participative leadership style (32.9%) it was proven that the nurse's response was that in determining the action plan to the patient, the doctor did not always ask for advice from the implementing nurse and likewise in determining the purpose of the action on the patient, the doctor makes his own decision before proposing to the implementing nurse.

The results showed that there was an influence of the doctor's authoritarian leadership style on the performance of nurses implementing inpatients. The statement of the implementing nurse generally states that the doctor applies an authoritarian leadership style (71.7%). This is evident from the statement of implementing nurses, among others, that doctors provide information only limited to the importance of the task to the implementing nurse; the doctor uses full authority in assigning duties to the implementing nurse; and doctors crack down on implementing nurses who violate the provisions of the actions they provide. Based on the results of multiple logistic regression tests the p value of 0.038 <0.05 means that there is an influence of the authoritarian leadership style of the doctor on the task of the implementing nurse in the inpatient room. In other words the more authoritarian leadership styles applied by doctors, the task of implementing nurses also increases.

Ilyas states that theoretically there are three groups of variables that affect performance, one of which is an organizational variable with subvariable leadership (Ilyas, 2016). In this case, what is meant is the leadership of the doctor as the decision maker as well as the person in charge of health measures given to patients who in practice collaborate with nurses. The American Medical Association interprets collaboration between doctors and nurses, the process by which doctors and nurses plan and practice together as colleagues, working interdependently within the boundaries of their practice by sharing values and mutual recognition and respect for everyone who contributes to caring for individuals. , family and community (Rahaminta and Sulisno, 2012).

The results showed that there was an influence of the doctor's Laissez-faire leadership style on the performance of nurses implementing inpatients. This is based on the statement of the implementing nurse that in general doctors do not adopt a leadership style that is free of action (53.9%). Evidenced by the statement of the executing nurse, the majority said no to the statement that in determining the action plan to the patient, the doctor handed over to the implementing nurse; doctors control the implementation of actions to patients by nurses at a minimum; and doctors rarely coordinate implementing nurses in carrying out their duties. Based on the results of multiple logistic regression tests, the value of p 0.004 <0.05 means that there is an influence of the Laissez-faire leadership style on the performance of implementing nurses. In other words the more authoritarian leadership styles applied by doctors, it tends to affect the task of implementing nurses. Based on the results of the multiple logistic regression tests the four democratic leadership style variables have an exponent value of 5.553; participatory leadership style has a coefficient value of 3.857; authoritarian leadership style has a coefficient value of 6.936; and the Laissez-faire leadership style has a coefficient value of 6.073.

Of the four independent variable exponent values, it is seen that the authoritarian variable has a higher value, in other words the Laissez-faire variable is the most dominant influencing the performance of the implementing nurse.This because doctors generally serve many patients so that. So there is a tendency for doctors not to coordinate or in other words tend to give freedom to other implementing nurses to take actions and decisions individually related to the provision of health services in the inpatient room.

Management of human resources in a hospital requires the right leadership style so that it can form a synergy between superiors and subordinates in this study are doctors and nurses implementing. With the application of the right leadership style, it is expected that there is a harmonious communication relationship between doctors and nurses implementing in improving the performance of nursing care services to patients.

Some of the results of previous studies that are in line with this study are Moura who found that nursing leadership has a positive and significant impact on job satisfaction (Moura et al., 2017). Artiningsih's research found that the leadership style of the head of the room was influential but not significant to the performance of nurses in Brigjend H. Hasan Basry Kandangan Hospital (Artianingsih, 2016). Research Naseem et al. find the transformational style of the leader to achieve a statistically optimal nurse presentation statistically significant effect on the level of job satisfaction of nurses (Naseem et al., 2018).

Sfantou et al.'s study found that leadership style plays an integral role in increasing quality measures in health care and nursing (Sfantou et al., 2017). Al-Yami's research found a significant relationship between nurses' organizational commitment in relation to transformational leaders, showing staff becoming more committed to the hospital when a manager displays transformational leadership characteristics (Al-Yami, Galdas and Watson, 2018). Research by Fatimah et al. Found that there was a significant leadership effect on nurse job satisfaction (Fatimah, Wahyuni and Widjasena, 2016). The results of the study are contrary to the results of this study, namely Ibrahim et al. Which found that no statistically significant relationship was found between leadership style and nurse performance (Ibrahim, Sanaa Abd El-Azim., El Sayed, Rasha Ibrahim., Attala, Magdy Mamdouh & Elmezin, 2016).

The provision of nursing services is a complex activity and involves various individuals. In order to achieve the nursing goals, activities required to apply leadership skills. Therefore, leadership arises as a synergistic result of various skills ranging from administrative (planning, organizing, controlling, controlling), technical skills (management, marketing, and procedural technical), and interpersonal skills (Subanegara, 2005).

# 4 CONCLUSIONS

Modeling results show that the regression coefficient value (r = 1.714: p = 0.008); participatory (r = 1.804: p = 0.008); authoritative (r = 1.350: p = 0.038); and laissez-faire (r = 1.937: p = 0.004) on performance. The conclusion of this study is that the doctor's leadership style has a significant effect on the nurse's performance and the laissez-faire style is the dominant factor. Doctors should avoid applying the Laissez-faire leadership style because this variable has the most dominant influence on the nurse's performance. Implementing nurses should strive to improve the duties of nursing care as best as possible.

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