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Leadership, Organizational Climate and Maturity Levels of Patient Safety Culture on Nurses' Work Engagement

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Abstract

Background. Work engagement is a positive feeling, motivation, and work related to a psychological state characterized by enthusiasm, dedication, and appreciation. **Objective**: The purpose of this study was to analyze the influence of leadership, organizational climate, and the level of maturity of patient safety culture simultaneously or individually on nurses' work engagement**. Method:** This study uses a quantitative approach with an explanatory causality research design. Collecting data was collected using a questionnaire and tested using Multiple Linear Regression Analysis. **Results:** The results found that leadership, organizational climate, and the level of maturity of patient safety culture simultaneously and partially affected work engagement. However, leadership somewhat affects work engagement, while organizational climate and maturity level of patient safety culture does not affect work engagement. **Conclusion and Recommendation:** This research helps hospital management in developing a policy system for making regulations that can be started from the bottom up, with nurses being involved in easy decision-making as well as completing standard operating procedures in their work units

Keywords: leadership, organizational climate, work engagement, the maturity level of patient safety culture

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INTRODUCTION

The hospital is a public service facility that has a strategic role in the life of every individual human being. Patient safety arises and develops along with the increasing number of patient safety incidents (1).

There are still patient safety incidents that occur in the field but are not reported due to the ignorance of employees in the field that this is an incident that needs to be notified, feeling reluctant/uncomfortable to report incidents carried out by friends in the field (2). In addition, there is still a lot of fieldwork, so they need more time to make incident reports. They are also motivated by fear of sanctions from superiors and management due to negligence in carrying out incidents.

Meanwhile, the assessment of patient safety culture based on existing incident reports is the first step to making changes in improving patient safety (3). Promoting cultural transformation is needed to improve patient safety (4). Culture becomes a fundamental strength and the strength of implementing an organization's services. An assessment of culture is very much needed to improve patient safety (5).

Nurses' leadership, organizational climate, and maturity level could influence the safety culture (6). Leadership (leadership) is the skill of controlling individuals or groups of people to obtain a vision or goal. Creating an organizational climate that can bring its members to improve performance and achieve organizational goals takes work (7).

The survey report on employees' satisfaction in hospital X could be seen from the rise and fall of work engagement which impacts hospital performance in 2020. In the 2021 period from January to December, the frequency of patient safety incidents reported by employees was 59.43% related to inpatient and supporting installations

OBJECTIVE

The study aims to determine the influence of leadership, organizational climate, and the level of maturity factors on safety culture implementation simultaneously.

METHODS

Design

This study uses a quantitative research method with a cross-sectional approach to examine the effect of leadership, organizational climate, and the level of maturity of patient safety culture.

Sample, sample size, and sampling technique

We involved 50 nurses working at Cempaka Putih hospital to participate in this study. The samples were selected using the purposive technique of sampling. The study was conducted at Cempaka Putih Hospital, located at Kec. Cempaka Putih, Central Jakarta City, Special Capital Region of Jakarta.

The instrument for data collection

A demographic data questionnaire was used to determine the characteristics of respondents. This instrument consists of gender, age, and education level.

The work engagement questionnaire was used to measure the assessment of nurses' work involved in the hospital. Researchers modify behavioral instruments based on theory and research (Schaufeli & Bakker, 2004). The work engagement instrument consists of 3 dimensions: enthusiasm, dedication, and appreciation. The measurement scale of the questionnaire uses a Likert scale of 1-5. 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

The Leadership Questionnaire is used to measure the assessment of a leader's involvement in work. The researcher modifies the leadership instrument based on the theory and research of Marquardt (2002), where the leadership instrument consists of 7 dimensions, namely: systems thinker, change agent, creator, servant & administrator, polychronic coordinator, instructor & trainer, and leader who can develop an organizational vision. The measurement scale of the questionnaire uses

a Likert scale of 1-5. 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

The organizational climate questionnaire measured the organizational climate regarding job involvement. Researchers modify the organizational climate instrument based on the theory and research of Davis & Newstrom (2001). The organizational climate instrument consists of 7 dimensions: leadership quality, trust, communication, responsibility, fair rewards, opportunity, and control. The measurement scale of the questionnaire uses a Likert scale of 1-5. 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

The patient safety culture maturity level questionnaire was used to measure the level of patient safety culture maturity owned by nurses in terms of work involvement. Researchers modified the instrument for the maturity level of a patient safety culture based on the theory and research of Parker et al. (2009). The motivational instrument consists of 5 dimensions: pathological, reactive, bureaucratic, proactive, and generative. The measurement scale of the questionnaire uses a Likert scale of 1-5. 1 = Strongly Disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree and 5 = Strongly Agree.

Data collection process

The data in this study were collected through questionnaires distributed to respondents. The researcher and research assistant collected the information using the questionnaire. All respondents willing to participate in this study should sign the informed consent before participating. The research questionnaire was prepared by submitting a closing statement and answer choices to be submitted to the research sample with a Likert interval scale.

Data analysis

Multiple regression analysis was used to determine whether the variable (Y) could be caused by the variable (X)

RESULT

Characteristic of respondents

Most of the respondents in this study were female (76%), and approximately 24% were male. Most respondents were 20-30 years old (70%). Some of them were 30-40 years old (30%). Most of the respondents in this study graduated from a diploma program (94%). Only a few respondents graduated from the bachelor level (6%).

Correlation between leadership, organizational climate, and safety culture maturity with work engagement

Table 1 describes the correlation between leadership, organizational climate, and the level of maturity of patient safety culture on work engagement**.** The results found that there is a significant effect between leadership with work engagement (p-value<.05). However, there is no significant difference between organizational climate and the level of maturity of patient safety culture on work engagement (p-value >.05).

Table 1. Correlation between leadership, organizational climate, and level of maturity of patient safety culture

Variable	B	t	value
Leadership	.354	2.145	0.037
Organizational climate	.155	1.086	.283
Maturity of safety culture	.174	1.049	.299

The ANOVA testing found significant differences in leadership, organizational climate, and the level of maturity of patient safety culture on work engagement simultaneously (p-value<.05).

Table 2. Anova

Model	Some of Squares	Df	Mean	F	Sig.
Regression	443.815	3	147.938	8.034	.000[b]
Residual	847.005	46	18.413		
Total	1290.820	49			

DISCUSSION

Leadership, organizational climate, and maturity level of patient safety culture significantly affect work engagement.

The study results show that leadership, organizational climate, and the maturity level of patient safety culture affect work engagement simultaneously. Good leadership, a corporate environment that can direct and motivate, and a high level of patient safety culture maturity can increase nurses' work engagement in the institution where they work. It was consistent with a previous study that stated that situational leadership style and organizational climate could increase work involvement in the organization (8).

Meanwhile, research conducted by Danielsson et al. mentioned that the level of maturity in the dimension of safety culture contributes to improving the overall patient safety culture, which requires employee contributions in its implementation, which has an impact on performance (9).

Leadership has a significant effect on work engagement.

The results showed that leadership had a significant effect on work engagement. It was due to good leadership that can create enthusiasm for nurses themselves in working by the work engagement theory proposed by Schaufeli and Bakker (2004) (10). This research is relevant to a previous study showing that leaders directly influence employee engagement through three channels: emotional contagion (affective interpersonal pathway), social exchange (cognitive interpersonal path), and role models (interpersonal behavioral pathway) (11). Through progressive work policies and practices, leaders can stimulate employee engagement. This is in line with another, emphasizing leaders' critical role in creating an ethical and trusting work climate conducive to employee engagement (12).

Organizational climate has no significant effect on work engagement.

The results showed that organizational climate had no significant effect on work engagement. The statistical result was 0.283. This indicates that the organizational environment does not increase nurses' work engagement. This is contrary to the theory put forward by Schaufeli et al., which states that organizational climate can increase an employee's dedication to his work institution (10). Meanwhile, another study showed that organizational climate and management support have the strongest impact (direct and indirect) on job involvement, while adaptability and intrinsic motivation directly affect performance (13). However, another study stated that organizational climate does not significantly affect employee work engagement (14).

The maturity level of patient safety culture has no significant effect on work engagement.

The results showed that the maturity level of patient safety culture had no significant effect on work engagement. This indicates that the maturity level of patient safety culture does not increase nurses' work engagement. This is different from the theory of Schaufeli and Bakker (2004), which states that the maturity level of patient safety culture can increase an employee's dedication to his work institution (10). This research is not supported by Reis et al. (2018), who state that culture is included in a patient safety culture, which should give way to a 'fair culture' approach, which will counter the urge to blame and increase work engagement and performance (15). However, the results of this study are supported by previous research conducted by Morales, which stated that the more mature the safety culture among nurses, the greater the work involvement, especially when combined with effective leadership (16).

CONCLUSION

In conclusion, leadership, organizational climate, and level of maturity of patient safety culture simultaneously affect work engagement. However, the partial organizational environment and level

of maturity of the patient safety culture did not impact work engagement.

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