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# The Influence of Transactional and Transformational Leadership Styles of Ward Heads on Patient Safety Culture Implementation in a Regional Hospital in Indonesia

Muhammad Rafi<sup>1</sup>, La Ode Saafi<sup>2</sup>, Sartini Risky<sup>2</sup>

<sup>1</sup>Benyamin Guluh Hospital, Kolaka, Indonesia

<sup>2</sup>Mandala Waluya University, Indonesia

Correspondence: [muhammadrafi0117@gmail.com](mailto:muhammadrafi0117@gmail.com)

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### ABSTRACT

**Introduction:** Patient safety culture is an indicator of service quality and a system that makes patient care safer. The leadership style of the head of the ward is one factor that influences the implementation of a patient safety culture. Indonesia is still struggling to improve the quality of healthcare services by enhancing the patient safety culture among care professionals, including nurses. This study aims to examine the influence of the Head of Room's transactional and transformational leadership style on the implementation of a patient safety culture in the Regional Public Service Agency, Benyamin Guluh Hospital, Kolaka Regency.

**Method:** Quantitative approach with a cross-sectional design was used, this study took place during July 2024. Involving 140 respondents, consisting of team leaders and nurses working in inpatient care.

**Result:** The positive influence of transformational leadership style (0.332 (positive direction), T statistic 2.665 and p-value 0.008) and laissez faire (0.309 (positive direction), T statistic 2.828 and p-value 0.005) in the implementation of patient safety culture.

**Conclusion:** This study emphasizes the importance of a ward head's leadership style that supports a patient safety culture, particularly in reporting individual performance indicators and implementing employee work targets. It is recommended that hospitals improve the implementation of a patient safety culture by conducting continuous patient safety rounds, supervising, monitoring, and evaluating the implementation of individual performance indicators, and encouraging staff to report.

### Introduction

A culture of patient safety in a hospital is a collaborative environment where doctors respect

one another, leaders encourage effective teamwork and create a sense of psychological safety.<sup>[1]</sup> Team members can learn from patient safety incidents,

providers recognize that there are human limitations working in a complex system and there is a learning process and efforts to drive improvement.<sup>[2]</sup> In addition, patient safety culture is an indicator of service quality and a system that makes patient care safer.<sup>[3]</sup> Patient safety culture is an integral part of health services. This culture refers to the behavioral patterns of individuals and groups within an organization that prioritize patient safety above all else.<sup>[4]</sup> Healthcare has become complex, with the development of new therapeutic interventions and technologies.<sup>[5]</sup> These factors can have a negative impact on the level of healthcare services provided and patient safety, therefore, patient safety must be made a culture in hospitals.<sup>[6]</sup>

The 2022 Ministry of Health Accreditation Standards, in the Hospital Governance chapter, standard 13, state that hospital management must demonstrate its commitment to promoting patient safety.<sup>[7]</sup> Improving Quality and Patient Safety Standard 10 patient safety culture measurements need to be carried out by hospitals, conducting a patient safety culture survey every year.<sup>[8]</sup> Hospital directors routinely evaluate the results of patient safety culture surveys by conducting analysis and follow-up. Therefore, hospital leaders must be committed to implementing a patient safety culture.<sup>[9]</sup> The results of research related to the maturity of patient safety culture in hospitals in Indonesia are at the level of safety culture maturity of 708 hospitals is proactive, meaning that hospitals only achieved a score of 60% - <80% on 134 assessment elements of the First Edition of the National Hospital Accreditation Standards in maintaining quality and safety in hospitals.<sup>[10]</sup> Hospitals with a complete level were found to be at a proactive and generative level, meaning that accreditation surveys play a role in improving quality and safety in hospitals.<sup>[11]</sup> Meanwhile, the generative category of patient safety culture maturity at Makassar City Hospital was the most common choice, with 391 samples (82.5%), and the reactive category was the least common, with 1 sample (0.2%). All three hospitals had a generative category of patient safety maturity.<sup>[12]</sup>

Implementing a patient safety culture in healthcare can have both positive and negative impacts. A patient safety culture can contribute positively to organizational development.<sup>[13]</sup> Improving a culture of safety will help reduce

costs to patients who suffer increased pain, disability, physical and psychological trauma, guilt, shame, loss of confidence and morale; increase national targets, and reduce the need for additional care and additional beds.<sup>[14]</sup> Meanwhile, the impact of indifference to patient safety results in losses for both patients and hospitals. One of the top 10 causes of death and disability worldwide is due to unsafe care.<sup>[15]</sup> In high-income countries, an estimated one in 10 patients is harmed while receiving hospital care, of which nearly 50% is preventable, while in low- and middle-income countries 134 million experience adverse events due to unsafe care resulting in 2.6 million deaths and four in 10 patients are harmed in primary and outpatient healthcare, of which 80% is preventable.<sup>[16]</sup> The most common errors found that cause harm are related to the diagnosis, prescribing and use of medications.<sup>[17]</sup> Additionally, preventable adverse events are estimated to range from 2% to 94%, with inappropriate prescribing being the most common type of adverse event.<sup>[18]</sup>

Nurses play a crucial role in promoting and enhancing a culture of patient safety in hospitals. As a developing country, Indonesia continues to struggle to improve the quality of healthcare services by fostering a culture of patient safety among healthcare professionals, including nurses.<sup>[19]</sup> Based on a review study conducted by Yodang identified several obstacles that inhibit nurses in Indonesia from promoting and improving a culture of patient safety, namely nurse capabilities, regulations and policies, organizational culture, support for equality and funding, environmental conditions, and resources.<sup>[20]</sup> Furthermore, to overcome these obstacles, proposed several strategies to improve the promotion and implementation of a culture of patient safety, including the importance of education, including incorporating a culture of patient safety into the nursing curriculum, mentorship and supervision programs, multidisciplinary collaboration, leadership initiatives, and ongoing education.<sup>[21]</sup> Based on the description above, one of the inhibiting and supporting factors in the implementation of patient safety is leadership initiation.

Leadership style plays a crucial role in influencing how employees work. Leadership is a creative, aspirational force, and a powerful moral

force that can influence members to change their attitudes so they align with the leader's desires.<sup>[22]</sup> One of the leadership styles that influences employee performance is transactional leadership style.<sup>[23]</sup> Transformational leadership style, emotional intelligence and competence simultaneously and partially influence employee performance in the media service section.<sup>[24]</sup> An effective leadership style to improve patient safety is a transformational leadership style.<sup>[25]</sup> The leadership style of the room head according to Lippitts and K. White in Sugiharto namely authoritarian, democratic, and laissez-faire (free to act). Each leadership style has its advantages and disadvantages.<sup>[26]</sup> A leader will use a leadership style that suits their abilities and personality.<sup>[27]</sup> Therefore, the head of the room as the person responsible for Quality Improvement and Patient Safety in the room plays a very important role in implementing a patient safety culture by reporting the achievement of quality indicators and Patient Safety Incidents every month to the Quality Committee.

The Quality Committee of the Benyamin Guluh Hospital Regional Public Service Agency is tasked with assisting the hospital Director in implementing and evaluating quality improvement, patient safety, and risk management at the hospital. In carrying out its duties of implementing and evaluating quality improvement, the Quality Committee has the function of monitoring and guiding work units in selecting improvement priorities, measuring quality/quality indicators, and following up on the results of quality indicator achievements as well as implementing support for the implementation of a quality culture at the hospital.

## Method

This study was conducted at Benyamin Guluh Hospital in Kolaka Regency and aimed to examine the influence of ward heads' leadership

styles on improving patient safety culture. The research methodology adopted a quantitative approach with a cross-sectional design. The study took place during July 2024, involving 140 respondents, consisting of team leaders and nurses working in inpatient care. The use of multivariate Structural Equation Modeling and Partial Least Squares (PLS) tests enabled a comprehensive analysis of the influence of ward heads' leadership styles on improving patient safety culture.

## Result

**Table 1** shows that respondents' answers regarding the leadership style of the room head vary from strongly disagree (1) to strongly agree (5), in general respondents agree (49.80%) that the room head has implemented a transactional leadership style, 47.31% of respondents agree that the room head has implemented a transformational leadership style, 45.55% of respondents agree that the room head has implemented a laissez-faire leadership style and 43.70% of respondents strongly disagree with the implementation of an authoritarian leadership style by the room head.

**Table 2** shows that respondents who chose the transformational leadership style applied by the head of the room were 93 (66.43%), the transactional leadership style was 27 (19.29%), the laissez-faire leadership style was 13 (9.29%) and the least number of heads of the room applied the authoritarian leadership style, namely 7 (5.0%).

**Table 3** showed that the majority of nurses were compliant with Employee Work Targets implementation, namely 116 (83.14%). The implementation of Employee Work Targets 2 was the most compliant, namely 123 (87.9%), and the least compliant was Employee Work Targets 5 (76.4%). This indicates that the role of ward heads in improving compliance with Employee Work Targets implementation still needs attention so that patient quality and safety are guaranteed.

**Table 1.**  
**Distribution of Respondents According to Leadership Style Variables Based on Likert Scale Criteria Score**

Leadership Style	Question Items	Answer Options					Mean Score n (%)
		Don't agree n (%)	Strongly Disagree n (%)	Doubtful n (%)	Agree n (%)	Strongly agree n (%)	
Transformational (n=93)		5 (3.76)	15 (10.97)	11 (8.09)	66 (47.31)	43 (30.43)	3.91
	GTF_1	4 (2.9)	14 (10.0)	2 (1.4)	51 (36.4)	69 (49.3)	4.19
	GTF_2	4 (2.9)	19 (13.6)	14 (10.0)	71 (50.7)	32 (22.9)	3.77
	GTF_3	6 (4.3)	12 (8.6)	30 (21.4)	58 (41.4)	34 (24.3)	3.73
	GTF_4	6 (4.3)	12 (8.6)	14 (10.0)	69 (49.3)	39 (27.9)	3.88
	GTF_5	4 (2.9)	14 (10.0)	3 (2.1)	54 (38.6)	65 (46.4)	4.16
	GTF_6	2 (1.4)	17 (12.1)	4 (2.9)	63 (45.0)	54 (38.6)	4.07
	GTF_7	6 (4.3)	11 (7.9)	5 (3.6)	73 (52.1)	45 (32.1)	4.00
	GTF_8	4 (2.9)	14 (10.0)	9 (6.4)	80 (57.1)	33 (23.6)	3.89
	GTF_9	1 (7.0)	19 (13.6)	6 (4.3)	78 (55.7)	36 (25.7)	3.92
	GTF_10	6 (4.3)	25 (17.9)	21 (15.0)	58 (41.4)	30 (21.4)	3.58
	GTF_11	7 (5.0)	13 (9.3)	13 (9.3)	66 (47.1)	41 (29.3)	3.86
	GTF_12	4 (2.9)	14 (10.0)	15 (10.7)	74 (52.9)	33 (23.6)	3.84
Transactional (n=27)		5 (3.23)	21 (14.63)	19 (13.20)	70 (49.80)	27 (19.10)	3.67
	GTK_1	2 (1.4)	16 (11.4)	16 (11.4)	73 (52.1)	33 (23.6)	3.85
	GTK_2	4 (2.9)	35 (25.0)	34 (24.3)	54 (38.6)	13 (9.3)	3.26
	GTK_3	7 (5.0)	14 (10.0)	16 (11.4)	66 (47.1)	37 (26.4)	3.80
	GTK_4	5 (3.6)	17 (12.1)	8 (5.7)	86 (61.4)	24 (17.1)	3.76
Laizzes-Faire (n=13)		6 (4.3)	21 (15.03)	21 (14.83)	64 (45.55)	29 (20.35)	3.63
	GLF_1	4 (2.9)	33 (23.6)	35 (25.0)	48 (34.3)	20 (14.3)	3.34
	GLF_2	7 (5.0)	12 (8.6)	15 (10.7)	75 (53.6)	31 (22.1)	3.79
	GLF_3	6 (4.3)	13 (9.3)	8 (5.7)	70 (50.0)	43 (30.7)	3.94
	GLF_4	7 (5.00)	26 (18.6)	25 (17.9)	62 (44.3)	20 (14.3)	3.44
Authoritarian (n=7)		24 (16.84)	61 (43.70)	19 (13.26)	19 (13.28)	18 (12.84)	2.62
	GKO_1	17 (12.1)	63 (45.0)	24 (17.1)	20 (14.3)	16 (11.4)	2.68
	GKO_2	17 (12.1)	65 (46.4)	21 (15.0)	20 (14.3)	17 (12.1)	2.68
	GKO_3	17 (12.1)	70 (50.0)	15 (10.7)	17 (12.1)	21 (15.0)	2.68
	GKO_4	41 (29.3)	58 (41.4)	9 (6.4)	16 (11.4)	16 (11.4)	2.34
	GKO_5	26 (18.6)	50 (35.7)	24 (17.1)	20 (14.3)	20 (14.3)	2.70

**Table 2.**  
**Distribution of Respondents According to Leadership Style Variables**

No	Leadership Style	Yes		No		Total	
		n	%	n	%	n	%
1	Transformational	93	66.43	47	33.57	140	100.0
2	Transactional	27	19.29	113	80.71	140	100.0
3	Laissez-Faire	13	9.29	127	90.71	140	100.0
4	Authoritarian	7	5.0	133	95.0	140	100.0

**Table 3.**  
**Distribution of Respondents According to the Variable of Patient Safety Culture Implementation Based on the Guttman Scale Score**

Item	Answer Options		Mean Score n (%)
	Not obey n (%)	Obedient n (%)	
SKP	24 (16.86%)	116 (83.14)	1.83
SKP_1	29 (20.7)	111 (79.3)	1.79
SKP_2	17 (12.1)	123 (87.9)	1.88
SKP_3	19 (13.6)	121 (86.4)	1.86
SKP_5	33 (23.6)	107 (76.4)	1.76
SKP_6	20 (14.3)	120 (85.7)	1.86

## Discussion

Transactional leadership tends to involve transactions between leaders and subordinates, where the leader provides rewards when subordinates successfully complete tasks as agreed. Leaders and subordinates each have their own goals, needs, and interests.<sup>[28]</sup>

Discriminant validity is a method of assessing how different a construct is from another construct, which can be determined by comparing the cross-loading values of the two constructs with the squared correlation value between the two constructs being tested. The highest cross-loading value is 0.926. The Transactional Leadership Style variable has a higher cross-loading indicator value for its own variable compared to other variables, so it is concluded that all of these variables meet the requirements of discriminant validity.

If someone perceives the results of a particular leadership style as positive, they will have a positive attitude toward that leadership style. Conversely, if a leadership style is perceived negatively, they will exhibit negative attitudes. Thus, a ward manager's leadership style can have a positive or negative impact, or even no impact at all, on the implementation of a patient safety culture.

The test results of the path coefficient value of the transactional leadership style of the ward head on the implementation of patient safety culture are -0.001 (negative direction), T statistics 0.004 and p-value 0.997. This means that the T statistics value <1.96 and p-value >0.05, so that the control variable transactional leadership style of the ward head does not have a significant

influence on the implementation of patient safety culture. Thus, the hypothesis is rejected.

The results of this study align with previous research, which found no significant relationship between the implementation of management functions (planning and directing) by ward heads. The better the ward head's management functions, the better the nurses' implementation of patient safety.<sup>[29]</sup> Another study confirmed these findings, that the relationship between transactional leadership and patient safety perceptions was not significant ( $\beta = 0.18$ ).<sup>[30]</sup>

Other studies disagree with this study's findings, which suggest a significant relationship between transactional leadership style and the implementation of a patient safety culture and patient safety incidents (each with a p-value of  $0.000 < 0.05$ ). The resulting relationship is moderate (r-value of 0.30–0.499). Other studies, however, suggest that improving leadership style and implementing a patient safety culture will reduce patient safety incidents.<sup>[31]</sup>

## Conclusion

This study emphasizes the importance of a ward head's leadership style that supports a patient safety culture, particularly in reporting Individual Performance Indicators and implementing Employee Work Targets. It is recommended that hospitals improve the implementation of a patient safety culture by conducting continuous patient safety rounds, supervising, monitoring, and evaluating the implementation of Employee Work

Targets, and encouraging staff to report Individual Performance Indicators.

The implementation of these recommendations is expected to improve the culture of patient safety so that the care provided to patients is safe, the need for regular transformational leadership training and which will have an impact on improving the quality of services in hospitals.

## Reference

1. Oktavineda, F. The relationship between nursing team collaboration and patient safety incidents in the Azzara 2 and Melati rooms of Jemursari Islamic Hospital, Surabaya. at (2023).
2. Ministry of Health of the Republic of Indonesia. Ministry of Health 2020. *Ministry of Health, Republic of Indonesia, 2021* (2021).
3. Hasanah, SW Patient safety implementation strategy to improve service quality at Abdoel Wahab Sjahranie Regional Hospital. *Nusant. Innov. J.3*, 12–43 (2024).
4. Syam, A., Nurlila, RU & Risky, S. Factors Related to the Achievement of Capitation Indicators Based on Service Commitment at the Kolaka Regency Community Health Center. *Public Media. Health Promotion. Indonesia.6*, 1213–1226 (2023).
5. Aprianti, NA, Yuanti, Y. & Rostianingsih, D. Healthcare Robotics: Current Trends in Medical and Rehabilitation Services. *J. Multidisciplinary West Sci.2*, 697–713 (2023).
6. Afandi, AT, Pramita, AD, Nur, KRM & Handoko, YT Overview of patient safety culture in hospitals: Case study in the service management area. *SEHATMAS J. Science. Health. Society.2*, 894–902 (2023).
7. Rachmawati, D *Set al.* Patient Safety Management. (PT. Sonpedia Publishing Indonesia, 2023).
8. Anggraini, AN, Kur'aini, SN & Krisdianto, MA Analysis of Patient Safety Culture Based on HSOPSC (Hospital Survey on Patient Safety Culture) as an Effort to Improve the Quality and Safety of Hospital Patients in Karanganyar Regency. Muhammadiyah Lecturer Assistant for Master of Hospital Administration 6, 35–49 (2021).
9. Ratanto, R. *et al.* PATIENT SAFETY MANAGEMENT: Improving the Quality of Healthcare Services and Patient Safety. (PT. Sonpedia Publishing Indonesia, 2023).
10. Natsir, AAA Overview of Patient Safety Culture at Haji Makassar Regional General Hospital in 2023. at (2023).
11. Liana, D., Lestari, F., Sutoto, S., Modjo, R. & Bachtiar, A. A self-assessment model for hospital safety culture maturity. *J. Public Health Res.11*, jphr-2022 (2022).
12. Pasinringi, SA, Rivai, F. & Rezeki, SF Maturity Level of Patient Safety Culture in Makassar City Hospital. *Health Media. Society. Indonesia.17*, 58–63 (2021).
13. Hernawati, H., Zulfendri, Z. & Nasution, SS The Influence of Attitudes towards Nurse Compliance in the Implementation of Patient Safety Culture at Mitra Sejati Hospital. *J. Heal. Science2*, 604–620 (2021).
14. Fatonah, S. & Yustiawan, T. Supervision of ward heads in improving patient safety culture. *J. Silampari Nursing4*, 151–161 (2020).
15. Lestari, EA & Fitriani, AD Analysis of Factors Causing Low Reporting of Patient Safety Incidents in Inpatient Care at Mitra Medika Bandar Klippa Hospital in 2021. *J. Health. Technol. Med.7*, 891–915 (2022).
16. Kencana, L. *Disabled Patients Must Be Smart: Understand Treatment and Care by Doctors.* (Andi Publisher, 2024).
17. Organization, WH *The State of Food Security and Nutrition in the World 2021: Transforming Food Systems for Food Security, Improved Nutrition and Affordable Healthy Diets for All.* vol. 2021 (Food & Agriculture Org., 2021).
18. Assiri, GA *et al.* What is the epidemiology of medication errors, error-related adverse events and risk factors for errors in adults managed in community care contexts? A systematic review of the international literature. *BMJ Open 8*, e019101 (2018).

19. Hasmariana, H., Tasnim, T. & Depu, AH Experience And Training Relate To Performance Clean And Healthy Living Behavior In Cadre In The Working Area Of Poasia Primary Health Care, Kendari City: Clean And Healthy Living Behavior. *Indonesia. J. Heal. Sci. Res. Dev.* 3, 143–148 (2021).
20. Yodang, Y. Barriers and Strategies in Promoting and Improving Patient Safety Culture among Indonesian Nurses: A Systematic Review. *Int. J. Med. Rev.* (2020).
21. Wijayanti, SKet al. Nursing Leadership and Management in the Era of Sustainable Healthcare: Transforming Performance, Careers, and Patient Safety. (Nuansa Fajar Cemerlang, 2024).
22. Musri, M. The role of principal leadership in teacher and employee discipline at SMP Negeri 8 Padang. *J. Ilm. Ekotrans Erud.* 1, 25–37 (2021).
23. Qasanah, U. The influence of transactional leadership style and work loyalty on employee performance. *Psikoborneo J. Ilm. Psychol.* 8, 127 (2020).
24. Putri, SA, Nofierni, N. & Hasyim, H. The role of transformational leadership in improving employee performance in the hospital industry in Indonesia. *J. Health Sciences. Society.* 10, 79–86 (2021).
25. Sasyari, U. Effective leadership styles in improving patient safety. *Healthc. Nurs. J.* (2021).
26. Sugiharto, BI Leadership with Nurses' Work Motivation in the Internal Medicine Inpatient Ward (Study in the Cempaka and Dahlia Wards of Jombang Regional Hospital). at (2018).
27. Zakly, M. Analysis of Midwives' Mental Workload in the Maternal and Child Health Program at the Galang Community Health Center, Tolitoli Regency using the Nasa-tlx Method. at (2024).
28. Siregar, ESM & Wardi, Y. The Influence of Gender and Leadership Style on Organizational Performance. *J. Educ. Dev.* 11, 2223–2229 (2023).
29. Masahuddin, L., Rachmawaty, R. & Bahar, B. The Relationship between the Implementation of the Management Function of the Head Nurse and the Implementation of Patient Safety in the Treatment Ward of Makassar City Hospital: Correlation Between the Implementation of Management Function of Head Nurse and Patient Safety in Treatment Ward Makassar City Hospital. *Scientific Journal of Nursing* 6, 57–65 (2020).
30. Younger, S. *Exploring the Role of Climate for Innovation on the Relationship between Leadership Style and Nurses' Perception of Patient Safety.* (Arizona State University, 2019).
31. Kusuma, PJ. *The Effect of Leadership Style and Implementation of Patient Safety Culture on Patient Safety Incidents: Analysis of Nurses at Panglima Sebaya Hospital, Tanah Grogot, Paser Regency, East Kalimantan.* at (2022).