

THE INFLUENCE OF HEALTHCARE PRACTITIONERS' ATTITUDES, THE ROLE OF TEAMWORK, AND THE PHYSICAL ENVIRONMENT ON PATIENT SAFETY CULTURE IN JAKARTA HOSPITALS

Venny, Erick Kristianto Adityatama, Aditia Prasetianto, Innocentius Bernarto
Graduate School of Hospital Management, UPH, Indonesia
Email: vennykarnadi97@gmail.com, erickkristianto@gmail.com,
aditiaprasetiando.md@gmail.com, Bernarto227@gmail.com

ABSTRACT

Patient safety is the primary goal in providing healthcare services. This can be realized by upholding a culture of patient safety, which refers to the values, beliefs, and behaviors held by hospital staff that prioritize patient safety. This study aims to determine the influence of healthcare practitioners' attitudes, the role of teamwork, and the physical environment on patient safety culture in Jakarta hospitals, as well as to formulate recommendations to improve patient safety culture in these hospitals. The study uses a quantitative method with a cross-sectional research design. Data for this study were collected through questionnaires, observations, and documentation studies. The population in this study consists of all healthcare practitioners in Jakarta hospitals, with sampling conducted using convenient sampling techniques. Data analysis techniques in this study include validity testing, reliability testing, and regression analysis using SPSS software. The results of the study indicate that healthcare practitioners' attitudes, the role of teamwork, and the physical environment have a positive and significant impact on patient safety culture in Jakarta hospitals.

KEYWORDS

Healthcare Practitioners Attitudes, Role of Teamwork, Physical Environment, Patient Safety Culture



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

How to cite:

E-ISSN:

Venny et al. (2024). The Influence Of Healthcare Practitioners' Attitudes, The Role Of Teamwork, And The Physical Environment On Patient Safety Culture In Jakarta Hospitals. *Journal Eduvest*. 4 (5): 4079-4090

Published by:

2775-3727

<https://greenpublisher.id/>

INTRODUCTION

The health sector is one of the crucial sectors in society, with rapid development. Health is considered a fundamental right and also a state investment. The hope of every nation is to achieve optimal health conditions because good health is a primary factor in the growth and sustainability of a nation. The greater the demand for healthcare services by the community, the higher the prospects for increasing life expectancy (Sudjadi, 2021).

One of the healthcare facilities that play a role in providing healthcare services to the public is hospitals, and their sustainability heavily depends on the number of patient visits and the level of patient satisfaction they serve. According to Mosadeghrad, quality healthcare services can be identified as services that consistently meet patient needs by providing effective and efficient care according to current clinical guidelines and standards. These services must meet patient needs and satisfy service providers (Mosadeghrad, 2014). The precise outcomes of quality services emphasize the importance of services that meet patient needs and are safe for patients. This means hospitals must ensure that their actions do not make patients sicker or cause additional injury.

Patient safety is an effort to reduce the likelihood of unwanted injuries in healthcare services to the lowest acceptable value (Darmika & Darmawan, 2019). Patient safety is considered an integral part of healthcare defined as a collective effort by healthcare providers within an integrated framework to prevent medical errors or preventable injuries, aiming to protect patients (Kim et al., 2015). Protecting patients from injury risks during healthcare is a top priority in providing superior healthcare services, with the primary goal of maintaining patient safety. When patient safety is neglected, it can lead to negligence in medical actions ultimately harming patients.

According to the WHO, 1-10 patients are likely to experience incidents due to negligence in medical procedures. Furthermore, millions of patients suffer injuries or even lose their lives annually due to receiving unsafe and low-quality healthcare services. Particularly, this situation often occurs in low and middle-income countries, where millions of harmful incidents occur in hospital environments (Handayani et al., 2022). Data from the World Health Organization (WHO) states that there are 2.6 million deaths out of 134 million reported incidents due to medical procedural errors in developing countries annually. In Indonesia, there were 171 recorded deaths due to medical procedural errors in healthcare facilities (National Patient Safety Committee Report, 2019).

Based on this data, patient safety has not been well established in various healthcare facilities, especially in hospitals (Atwa et al., 2023). Therefore, larger steps are needed to improve patient safety culture in hospitals as healthcare facilities for the public.

There are several factors that influence patient safety culture in a healthcare facility. One of them is the mindset of doctors, nurses, and medical staff regarding patient safety. Healthcare practitioner attitudes refer to the behavior and attitudes of healthcare practitioners such as doctors, nurses, and medical staff as healthcare

providers (Atwa et al., 2023). Some previous studies have reported a relationship between healthcare practitioner attitudes and the improvement of patient safety culture in hospitals. For example, (Alzahrani et al., 2018) studied the attitudes of doctors and nurses in emergency departments towards patient safety in two hospitals in Saudi Arabia.

Teamwork is a group of individuals with specific abilities working together and interacting to achieve common goals. Several previous studies have shown that teamwork influences patient safety culture in hospitals. A study by Febriansyah et al. (2020) stated that the teamwork variable can influence patient safety culture in hospitals in Bekasi both partially and simultaneously (Febriansyah et al., 2020).

Patient Safety Culture in Emergency Departments is one of the main destinations that need special attention from healthcare professionals, managers, and decision-makers (Alshyyab, Albsoul, et al., 2023). In this regard, regular measurement of safety culture is needed to provide valuable insights to hospital managers and emergency department units regarding areas needing improvement and to assess the quality improvement plans implemented in healthcare services (Fekonza et al., 2023). This study aims to determine the influence of healthcare practitioner attitudes, the role of teamwork, and the physical environment on patient safety culture in Jakarta hospitals and to formulate recommendations to improve patient safety culture.

Literature Review

Healthcare Practitioners Attitudes

Healthcare Practitioners' Attitudes refer to the perceptions and opinions provided by healthcare professionals regarding various aspects within their field, including patient care, patient safety, and technology utilization (VanPuymbrouck et al., 2020). Practices or applications of health education support other health programs (Lumbanbatu et al., 2019). Indicators for Healthcare Practitioners' Attitudes may encompass various aspects of healthcare practitioners' attitudes and behaviors in patient care, citing the Indonesian Ministry of Health's statement that nursing care is considered of good quality when nurses provide services to patients in line with fundamental aspects of patient care. Some indicators that can be used include acceptance (friendly, polite, cheerful, and always smiling), attention, communication, cooperation, and responsibility (Tahu & Kep, 2022).

Role of Teamwork

The Role of Teamwork refers to the contribution and interaction among team members in achieving common goals. The role of teamwork refers to the ability and efforts of team members to work together effectively, share knowledge and skills, and support each other in achieving goals (Meslec et al., 2020). Indicators for measuring the role of teamwork in healthcare teams, as stated by Sriyono and Farida in (Letsoin & Ratnasari, 2020), include willingness to collaborate, expressing positive expectations, appreciating input, providing support, and strengthening group morale.

Physical Environment

The Physical Environment, often referred to as the atmosphere, can influence consumer purchasing decisions. Sometimes, the Physical Environment even becomes the most dominant factor in influencing consumer preferences (Baker et al., 2020). Indicators included in the Physical Environment, as explained by Nitisemito in (Amalia et al., 2017), encompass physical environment indicators such as lighting, noise, color, cleanliness, music, air circulation, and security.

Patient Safety Culture

Patient Safety Culture is a combination of individual and group actions rooted in beliefs and values to continuously reduce risks to patients. Efforts to improve patient safety will succeed if hospitals accept and adapt such safety culture (Guspianto et al., 2022). Indicators for Patient Safety Culture include leadership, cooperation, communication, staffing, blameless response, and incident reporting (Wahyuda et al., 2024).

RESEARCH METHOD

This study used quantitative methods with a cross-sectional research design. Quantitative method is a research approach that uses numerically measurable data to answer research questions and test hypotheses (Caroline, 2019). The data collection process is carried out through questionnaires, observations and documentation studies. The population in this study is all health practitioners in Jakarta hospitals who have worked in the last 1 year by taking samples using *convenient sampling techniques*. Because the population size is not known exactly, the researchers determined the number of samples using Lemeshow's formula:

$$n = \frac{z^2_{1-\alpha/2} \times P(1-P)}{d^2}$$

Information:

n = Number of samples

z = Z score at 95% confidence = 1.96

P = Maximum estimate

d = Error rate

So the calculation is as follows:

$$n = \frac{z^2_{1-\alpha/2} \times P(1-P)}{d^2}$$

$$n = \frac{1,96^2 \times 0,5(1-0,5)}{0,05^2}$$

$$n = \frac{3,8416 \times 0,25}{0,0025}$$

$$n = \frac{0,9604}{0,0025}$$

$$n = 384,16 = 384$$

Based on the formula, the minimum number of samples required for the study was 384.

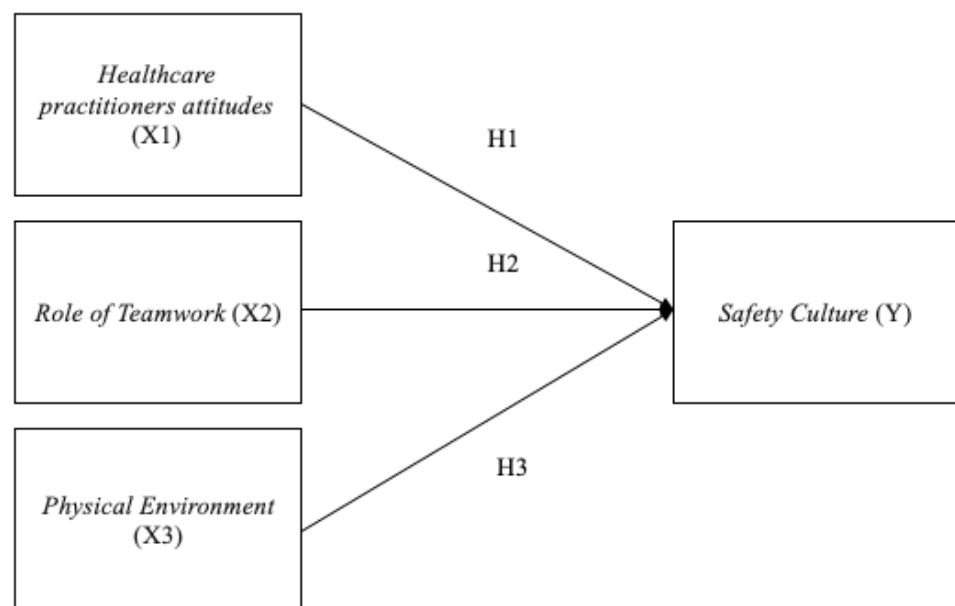


Figure 1. Research Framework

Hypothesis:

H1: Healthcare practitioners attitudes positively and significantly influence patient safety culture

H2: The role of teamwork positively and significantly influences patient safety culture

H3: Physical environment positively and significantly affects patient safety culture
 H4: Healthcare practitioners attitudes, Role of teamwork, dan Physical environment mempengaruhi secara positif dan signifikan patient safety culture

RESULT AND DISCUSSION

Descriptive Test

This test is a statistical method used to analyze and describe data in detail.

Table 1. Descriptive Test

Gender	
Female	221
Male	179
Demographics	
North Jakarta	23
East Jakarta	25
West Jakarta	25
South Jakarta	27

Based on the descriptive test, the data obtained show that there are 221 female respondents and 179 male respondents. Meanwhile, demographically, respondents are divided into 4 areas: North Jakarta with 23 respondents, East Jakarta with 25 respondents, West Jakarta with 25 respondents, and South Jakarta with 27 respondents.

Validity Test

This test is a measurement process to determine the extent to which the instrument or measuring tool used in the study can accurately measure the intended concept or variable (Darma, 2021).

Table 2. Validity Test

		Healthcare practitioners attitudes	Role of teamwork	Physical environment	Patient safety culture
Healthcare practitioners attitudes	Pearson Correlation	1	.634**	.413**	.429**
	Sig. (2-tailed)		<.001	<.001	<.001
	N	400	400	400	400
Role of teamwork	Pearson Correlation	.634**	1	.431*	.459**
	Sig. (2-tailed)	<.001		<.001	<.001
	N	400	400	400	400

Physical environment	Pearson Correlation	.413**	.431**	1	.555**
	Sig. (2-tailed)	<.001	<.001		<.001
	N	400	400	400	400
Patient safety culture	Pearson Correlation	.429**	.459**	.555**	1
	Sig. (2-tailed)	<.001	<.001	<.001	
	N	400	400	400	400
TOTAL	Pearson Correlation	.826**	.825**	.757**	.715**
	Sig. (2-tailed)	<.001	<.001	<.001	<.001
	N	400	400	400	400

Based on the data from Table 2, it can be concluded that each measuring instrument shows Pearson correlations exceeding the Table r value = 0.163 (N=100), and all significance values (2-tailed) for each item's correlation are $.000 < 0.05$. This indicates that each statement on each question item has strong validity. Therefore, the entire questionnaire is considered valid for use in the study.

Reliability Test

This test is a process to assess the consistency or reliability of an instrument or measuring tool in producing consistent results over time (Darma, 2021).

Table 3. Reliability Test

Cronbach's Alpha	N of Items
.775	4

Based on the test results in Table 3, the recorded Cronbach Alpha value is 0.775, exceeding the threshold of 0.600. This indicates that the questionnaire indicates good consistency and can be used in further research.

Multiple Regression Test

This test is a statistical analysis technique used to evaluate the relationship between one dependent variable and two or more independent variables simultaneously (Darma, 2021).

Table 4. Hypothesis Test 1

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	6.4986	.619		10.505	<.000
Healthcare practitioners attitudes	.234	.025	.429	9.487	<.000

The research results indicate that the significance value is $0.000 < 0.05$, which means Healthcare practitioners attitudes positively and significantly affect patient safety culture.

Table 5. Hypothesis Test 2

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.739	.643		8.928	<.000
Role of teamwork	.279	.027	.459	10.312	<.000

The research results indicate that the significance value is $0.000 < 0.05$, which means Role of teamwork positively and significantly affects patient safety culture.

Table 6. Hypothesis Test 3

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	7.024	.405		17.332	<.000
Physical environment	.334	.026	.555	13.309	<.000

The research results indicate that the significance value is $0.000 < 0.05$, which means Physical environment positively and significantly affects patient safety culture.

Discussion

The Influence of Healthcare Practitioners Attitudes on Patient Safety Culture

The research results indicate that healthcare practitioners' attitudes positively and significantly influence patient safety culture in Jakarta Hospitals. This indicates that individual attitudes in healthcare practice, such as concern for patient safety, compliance with safety protocols, and effective communication among medical team members, collectively contribute to the formation of a culture prioritizing patient safety in these hospitals.

Previous research findings by (Ismail & Khalid, 2022) show that healthcare professionals in clustered hospitals exhibit an unsatisfactory level of patient safety culture. Most respondents appreciate their work, although they feel dissatisfied with their working conditions. Priority for change should involve systematic interventions focusing on patient safety training, addressing blame culture, improving communication, sharing information about errors, and improving working conditions.

The Influence of Role of Teamwork on Patient Safety Culture

The research results show that the role of teamwork significantly and positively influences patient safety culture in Jakarta Hospitals. This affirms that good collaboration and coordination among medical team members, including doctors, nurses, and other staff, play a crucial role in creating a safe and responsive working environment for patient needs. When medical teams work harmoniously and support each other, they are more effective in identifying patient safety risks, taking necessary preventive actions, and responding to emergencies promptly and accurately.

Supported by findings from (Alshyyab, FitzGerald, et al., 2023) which found that teamwork affecting safety culture in the operating room (OR) is categorized into two main themes: internal teamwork (within the OR) and external teamwork (between the OR and other units). Each theme is further categorized into sub-themes. Respondents emphasize the role of internal and external teamwork in the operating room in building patient safety culture and improving safety and quality of operations.

The Influence of Physical Environment on Patient Safety Culture

The research results show that the physical environment significantly and positively influences patient safety culture in Jakarta Hospitals. This indicates that the physical environmental conditions in hospitals, including cleanliness, security, availability of adequate medical equipment, and ergonomic and user-friendly design, can affect the perception and practice of patient safety by medical personnel. A clean and organized environment can help reduce the risk of nosocomial infections and accidents that could endanger patient safety. Additionally, facility security and adequate medical equipment will enhance the effectiveness of emergency response and implementation of patient safety procedures.

This research aligns with previous studies by (Mihdawi et al., 2020) showing that out of 350 out of 570 (64.6%) surveyed nurses, 35.2% (125) reported a positive perception of patient safety. Adequacy of staff and resources, professional communication style, and nurse participation in hospital quality improvement activities are associated with higher levels of patient safety perception. It is crucial to focus on specific dimensions of the nursing work environment, such as staff and resource adequacy, nurse participation and progress, and communication style to improve the quality of service provided to patients.

Healthcare practitioners attitudes, Role of teamwork, and Physical environment jointly influence patient safety culture positively and significantly

The study indicates that healthcare practitioners' attitudes, role of teamwork, and physical environmental conditions in the workplace simultaneously and significantly influence patient safety culture in Jakarta Hospitals. Positive attitudes from healthcare practitioners, such as awareness of patient safety and concern for their well-being, play a crucial role in shaping a culture that supports patient safety. Additionally, effective collaboration among healthcare team members enables better information exchange, better care coordination, and faster identification of patient safety risks. Physical environmental factors, such as adequate medical equipment facilities and safe infrastructure, also significantly contribute to creating a workplace environment that supports safe and efficient clinical practices.

CONCLUSION

The research findings indicate that the attitudes of healthcare practitioners, the role of teamwork, and the physical environment have a positive and significant impact on patient safety culture in Jakarta hospitals. Hospitals need to enhance teamwork among healthcare professionals, ensuring that each individual in the team collaborates effectively to improve service quality and patient safety. Improving the physical environment conditions in hospitals is necessary, including factors such as cleanliness, security, and the availability of adequate resources to support patient safety practices. Finally, increasing awareness and commitment of healthcare professionals to patient safety is crucial, through training, education, and enhancing understanding of the importance of patient safety practices in every aspect of healthcare service. For further research, several suggestions can be considered: 1. Case Studies in More Hospitals Future researchers can conduct multi-hospital studies to obtain a broader and more representative overview of patient safety culture in hospitals in Jakarta. 2. Influence of Additional Factors Subsequent researchers can expand the scope of the study by considering additional factors that may influence patient safety culture, such as organizational policies, incident reporting systems, and patient safety training.

REFERENCES

- Alshyyab, M. A., Albsoul, R. A., Kinnear, F. B., Saadeh, R. A., Alkhaldi, S. M., Borkoles, E., & Fitzgerald, G. (2023). Assessment of patient safety culture in two emergency departments in Australia: a cross sectional study. *The TQM Journal*, 35(2), 540–553.
- Alshyyab, M. A., FitzGerald, G., Ababneh, E. Y., Zghool, A. W., & Albsoul, R. A. (2023). Nurses' perceptions regarding the impact of teamwork on patient safety culture in the operating room: A qualitative study. *Perioperative Care and Operating Room Management*, 33, 100345.
- Alzahrani, N., Jones, R., & Abdel-Latif, M. E. (2018). Attitudes of doctors and nurses toward patient safety within emergency departments of two Saudi Arabian hospitals. *BMC Health Services Research*, 18, 1–7.
- Amalia, T., Ekwarso, H., & Taryono, T. (2017). *Pengaruh Lingkungan Fisik Terhadap Tingkat Kunjungan Wisatawan Di Museum Daerah Sang Nila Utama Kota Pekanbaru*. Riau University.

- Atwa, H., Alfadani, A., Damanhori, J., Seifalyazal, M., Shehata, M., & Abdel Nasser, A. (2023). Healthcare practitioners' attitudes toward patient safety in hospital settings in Jeddah, Kingdom of Saudi Arabia. *Arab Gulf Journal of Scientific Research*.
- Baker, M. R., Kivva, K. K., Pisareva, M. N., Watson, J. T., & Selivanova, J. (2020). Shifts in the physical environment in the Pacific Arctic and implications for ecological timing and conditions. *Deep Sea Research Part II: Topical Studies in Oceanography*, 177, 104802.
- Caroline, E. (2019). *Metode Kuantitatif*. Media Sahabat Cendekia.
- Darma, B. (2021). *Statistika Penelitian Menggunakan SPSS (Uji Validitas, Uji Reliabilitas, Regresi Linier Sederhana, Regresi Linier Berganda, Uji t, Uji F, R2)*. Guepedia.
- Darmika, P., & Darmawan, E. S. (2019). Determinant Factors Associated with Patient Safety Culture in Dharma Yadnya General Hospital, Bali. *Jurnal Ilmu Kesehatan Masyarakat*, 10(2), 139–146.
- Febriansyah, F., Kusumapradja, R., & Ahmad, H. (2020). The Role Of Teamwork In Improving Patient Safety Culture. *JMMR (Jurnal Medicoeticolegal Dan Manajemen Rumah Sakit)*, 9(1), 41–52.
- Guspianto, G., Ibnu, I. N., & Wardiah, R. (2022). PENINGKATAN BUDAYA KESELAMATAN PASIEN DI RSUD AHMAD RIPIN KABUPATEN MUARO JAMBI. *Medical Dedication (Medic): Jurnal Pengabdian Kepada Masyarakat FKIK UNJA*, 5(1), 341–349.
- Handayani, A., Arif, Y., & Putri, Z. M. (2022). STUDY DESCRIPTION OF PATIENT SAFETY CULTURE AMONG NURSE. *Jurnal Endurance*, 7(2), 454–461.
- Ismail, A., & Khalid, S. N. M. (2022). Patient safety culture and its determinants among healthcare professionals at a cluster hospital in Malaysia: a cross-sectional study. *BMJ Open*, 12(8), e060546.
- Kim, L., Lyder, C. H., McNeese-Smith, D., Leach, L. S., & Needleman, J. (2015). Defining attributes of patient safety through a concept analysis. *Journal of Advanced Nursing*, 71(11), 2490–2503.
- Letsoin, V. R., & Ratnasari, S. L. (2020). Pengaruh Keterlibatan Karyawan, Loyalitas Kerja Dan Kerjasama Tim Terhadap Kinerja Karyawan. *Jurnal Dimensi*, 9(1), 17–34.
- Lumbanbatu, A. M. R., Mertajaya, I., & Mahendra, D. (2019). *Buku Ajar Promosi Kesehatan*. PROGRAM STUDI DIPLOMA TIGA KEPERAWATAN FAKULTAS VOKASI UNIVERSITAS KRISTEN
- Meslec, N., Duel, J., & Soeters, J. (2020). The role of teamwork on team performance in extreme military environments: an empirical study. *Team Performance Management: An International Journal*, 26(5/6), 325–339.
- Mihdawi, M., Al-Amer, R., Darwish, R., Randall, S., & Afaneh, T. (2020). The influence of nursing work environment on patient safety. *Workplace Health & Safety*, 68(8), 384–390.
- Mosadeghrad, A. M. (2014). Factors affecting medical service quality. *Iranian Journal of Public Health*, 43(2), 210.

- SUDJADI, T. D. W. I. P. (2021). *PENGARUH KUALITAS PELAYANAN TERHADAP KEPUASAN PASIEN RAWAT JALAN RUMAH SAKIT UMUM DAERAH (RSUD) POLEWALI KABUPATEN POLEWALI MANDAR*.
- Tahu, N. S. K., & Kep, M. (2022). Standar Profesional dalam Pelayanan Keperawatan. *Ilmu Keperawatan Dasar*, 31.
- VanPuymbrouck, L., Friedman, C., & Feldner, H. (2020). Explicit and implicit disability attitudes of healthcare providers. *Rehabilitation Psychology*, 65(2), 101.
- Wahyuda, O., Suyasa, P. G. D., Adianta, K. A., & Sastamidhyani, P. A. J. (2024). Analisis Faktor-faktor yang Berhubungan dengan Budaya Keselamatan Pasien di Rumah Sakit. *Jurnal Keperawatan*, 16(1), 27–36.