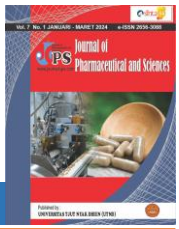
Journal of Pharmaceutical and Sciences

Electronic ISSN: 2656-3088 DOI: https://doi.org/10.36490/journal-jps.com
Homepage: https://journal-jps.com

ORIGINAL ARTICLE JPS. 2025, 8(1), 240-250



# Overview of patient safety culture at Izza Karawang hospital in 2024

# Gambaran budaya keselamatan pasien di rumah sakit Izza Karawang Tahun 2024

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**Abstract**

This study was conducted to describe the patient safety environment developed by Izza Hospital, Karawang, using the Hospital Survey on Patient Safety Culture (HSOPSC) instrument developed by the Agency for Healthcare Research and Quality (AHRQ). The research method used a quantitative descriptive design with a survey approach, involving 326 respondents from medical and non-medical personnel who were directly related to patient care. The sampling technique was accidental sampling, and data were analyzed using univariate analysis for the frequency distribution of the 12 dimensions of patient safety culture. The findings showed that most respondents were nurses (62.9%) with 1-5 years of service (38%) and working hours >40 hours per week (64%). The assessment of the work unit showed the majority in the "good" category (56%), while the most patient safety reports were 1-2 reports per year (35%). Most indicators of patient safety culture showed positive responses, such as teamwork (97%) and open communication (66-81%). However, there were challenges in indicators such as response to errors and staff courage to ask critical questions. In conclusion, the patient safety culture at Izza Hospital is in the "good" category but needs specific improvements in certain dimensions to support more optimal patient safety. These results provide insights for the hospital in formulating strategies for continuous improvement of patient safety culture.

***Keywords*: Patient safety culture, hospital safety, HSOPSC, AHRQ**

**Abstrak**

Studi ini dilakukan dengan maksud untuk menggambarkan Lingkungan keselamatan pasien yang dikembangkan oleh Rumah Sakit Izza, Karawang, menggunakan instrumen Hospital Survey on Patient Safety Culture (HSOPSC) yang dikembangkan oleh Agency for Healthcare Research and Quality (AHRQ). Metode penelitian menggunakan desain deskriptif kuantitatif dengan pendekatan survei, melibatkan 326 responden dari tenaga medis dan nonmedis yang berhubungan langsung dengan pelayanan pasien. Teknik pengambilan sampel dilakukan secara accidental sampling, dan data dianalisis menggunakan analisis univariat untuk distribusi frekuensi dari 12 dimensi budaya keselamatan pasien. Temuan penelitian menunjukkan bahwa kebanyakan responden berasal dari perawat (62,9%) dengan masa kerja 1-5 tahun (38%) dan jam kerja >40 jam per minggu (64%). Penilaian terhadap unit kerja menunjukkan mayoritas dalam kategori "baik" (56%), sedangkan laporan keselamatan pasien terbanyak adalah 1-2 laporan per tahun (35%). Sebagian besar indikator budaya keselamatan pasien menunjukkan respons positif, seperti kerjasama tim (97%) dan keterbukaan komunikasi (66-81%). Namun, terdapat tantangan dalam indikator seperti respon terhadap kesalahan dan keberanian staf untuk mengajukan pertanyaan yang kritis. Kesimpulannya, budaya keselamatan pasien di Rumah Sakit Izza berada dalam kategori "baik", tetapi perlu perbaikan khusus pada dimensi tertentu untuk mendukung keselamatan pasien yang lebih optimal. Hasil ini memberikan wawasan bagi rumah sakit dalam merumuskan strategi peningkatan budaya keselamatan pasien yang berkelanjutan.

***Kata Kunci*: Budaya keselamatan pasien, keselamatan rumah sakit, HSOPSC, AHRQ**

**Article History:**
Received: 06/11/2024
Revised: 05/01/2025
Accepted: 15/02/2025
Available Online: 16/02/2025
**QR access this Article**

https://doi.org/10.36490/journal-jps.com.v8i1.737

## Introduction

A key element in the endeavor to raise the standard of hospital healthcare services is the patient safety culture. Global health organizations, such as WHO, have emphasized how important it is to build a culture that supports patient safety to prevent accidents. WHO (World Health Organization) in Rambelo reported that hospital patient safety requires particular consideration. A strong safety culture has an impact on reducing safety incidents, increasing patient satisfaction, and hospital operational efficiency. [1], [2]. This effort requires not only commitment from top-level management but also involves all hospital staff in creating a safe and supportive work environment. However, efforts to achieve patient safety depend not only on the implementation of technical procedures, but also on a safety culture that reflects the organization's values, attitudes, and behaviors in preventing, detecting, and addressing risks and incidents that could harm patients. [3].

The Institute of Medicine (IOM) noted that in 2020 The United States recorded 98,000 deaths resulting from avoidable medical mistakes. Some research results in Joint Commission International (JCI) accredited hospitals explained that Eleven hospitals in five countries reported 52 incidents. At 31 percent, Hong Kong had the most cases, followed by Australia at 25 percent, India at 23 percent, America at 12 percent, and Canada at 12 percent. 10% of instances [4]. It involved severe patient harm, while the remaining incidents ranged from moderate to minor harm. These findings highlight the global prevalence of preventable medical errors, emphasizing the need for robust patient safety practices and effective reporting systems.

Patient safety incident data in Indonesia shows that There were 171 fatalities, 80 severe injuries, 372 moderate injuries, 1,183 minor injuries, and 5,659 individuals uninjured, there were 7,465 instances in 2019. Out of 7,465 reports, just 12% of patient safety events occur at Indonesia's 2,877 recognized hospitals. 38% of near-injury events (KNC), 31% of non-injury events (KTC), and 31% of unexpected occurrences (KTD) make up this total. Due to the scarcity of patient safety incident reports in Indonesia, it is essential to enhance awareness regarding the importance of patient safety culture. [5]. This points to the need to build a strong patient safety culture, which encourages hospital staff to report incidents without fear or stigma. [6], [7], [8].

The purpose of the Hospital Survey on Patient Safety Culture (HSOPSC) was to evaluate the culture of patient safety, and it was developed by the Agency for Healthcare Research and Quality (AHRQ). This instrument assesses various aspects of safety culture, such as candid communication, managerial backing, incident reporting, and learning from mistakes, and has been widely used in various countries to identify strengths and weaknesses in patient safety culture. [9]. The results of this survey are not only a diagnostic tool, but also a guide for developing interventions that focus on improving the safety culture in the hospital environment. With this data-driven guide, hospital management can take proactive steps to create a work environment that supports holistic patient safety. [10].

The AHRQ method can be quantified using 12 dimensions that represent hospital staff perspectives, specifically: Efforts by and expectations of superiors to foster organizational learning and patient safety, collaboration among hospital units, open communication, staffing, management's backing of patient safety



Electronic ISSN : 2656-3088
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initiatives, inter-unit cooperation, patient turnover, transfer, and feedback and communication on errors; overall impression of patient safety; frequency of incident reporting [11], [12], [13].

Izza Hospital is a Type C hospital operating in the Karawang district. Izza Hospital demonstrates a commitment to patient safety through a safety incident reporting system designed to support a culture of safety in the work environment. A comprehensive knowledge of this hospital's patient safety culture is needed as a basis for identifying challenges and opportunities to strengthen patient safety. Therefore, The purpose of this study is to outline Izza Hospital's patient safety culture using instruments from the Agency for Healthcare Research and Quality AHRQ. The results of the study are expected to provide valuable insights for the hospital to develop improvement strategies and ensure sustainable patient safety.

## Method

This study uses a quantitative descriptive design using a descriptive survey approach to determine the description of patient safety culture in officers who serve patients directly at IZZA Hospital. This research was conducted from November 9 to 21, 2024. The instrument used was the Agency for Healthcare Research and Quality (AHRQ) Hospital Survey on Patient Safety Culture (HSOPSC) questionnaire which has been adapted to the Indonesian context. The sample consisted of 326 respondents including all medical and non-medical personnel who met the inclusion criteria, including: whose work is directly related to patient care, being in the hospital from November 9 to 21, 2024.

The sampling technique is accidental sampling. Primary data is data taken through sampling with a questionnaire. With research questions adopting the Agency for Healthcare Research and Quality (AHRQ). The analysis technique used is univariate analysis, which is used to determine the frequency distribution of each variable studied. 10 variables were studied, namely; manager, supervisor, or clinical leader, organizational learning and continuous improvement, reporting patient safety incidents, staffing, work pace, teamwork, open communication, and responding to errors are all areas that need support from hospital administration to ensure patient safety. With a categorization of results based on Mangindara, 2020, namely > 74% in the good category, 50-74% in the less category, and poor if the results are < 50%[14].

## Results and Discussion

Based on the research that has been done, it can be seen that.

**Table 1**. Respondent Demographics

| Sub Job | Position | Frequency | Percentage |
|---|---|---|---|
| Nursing | nurse | 204 | 62,6% |
| | psychologist | 1 | 0,3% |
| | nutritionist | 3 | 0,9% |
| Other Health Workers | pharmacist/pharmacist assistant | 42 | 12,9% |
| | medical rehab | 3 | 0,9% |
| | lab, and radiology | 21 | 6,4% |
| Management | coordinator | 10 | 3,1% |
| | maintenance coordinator | 4 | 1,2% |
| | cooks and waiters | 5 | 1,5% |
| Supporting | helper | 1 | 0,3% |
| | registration, cashier, office staff | 22 | 6,7% |
| | other staff | 10 | 3,1% |
| amount | | 326 | 100% |
| length of service | | | |


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| | | |
|---|---|---|
| < 1 year | 104 | 32% |
| 1-5 years | 125 | 38% |
| 6 - 10 years | 56 | 17% |
| > 11 years | 41 | 13% |
| Total | 326 | 100% |
| length of working week | | |
| < 30 hours | | 6% |
| 30 - 40 hours | | 30% |
| > 40 hours | | 64% |
| Total | | 100% |
| Assessment of workplace unit for patient safety implementation | | |
| Perfect | 10 | 3% |
| Very good | 95 | 29% |
| Good | 183 | 56% |
| Good enough | 36 | 11% |
| Not good | 3 | 1% |
| Total | | 100% |
| Number of patient safety reports reported in 1 year | | |
| >11 | 36 | 11% |
| 6-10 | 33 | 10% |
| 3-5 | 101 | 31% |
| 1-2 | 114 | 35% |
| none | 42 | 13% |
| Total | | 100% |

Based on the table above, it is known that the most respondents came from nurses, namely 204 people or 62.9%, and the least were psychologists and helpers with a frequency of 1 person each (0.3%). The most work period is 1-5 years with a frequency of 125 people (38%). With the most length of work at > 40 hours per week as many as 210 people (64%). The workplace unit's most stringent evaluation for patient safety was in good condition 183 people (56%), while in terms of the number of safeguards for patients reports reported by individuals in 2024 the highest was at 1 -2 reports with 114 people (35%), and the lowest was at a value of 6-10 reports per year with a frequency of 33 people (10%).

**Table 2.** Frequency Distribution of Positive, Neutral and Negative Question scores in the Patient Safety Culture Indicator.

| No | Questions in the Safety Culture Indicator | Positive | | Neutral | | Negative | |
|---|---|---|---|---|---|---|---|
| | | Frequency | percentage | Frequency | percentage | Frequency | percentage |
| | Supervisor, manager, or Clinical Leader support for patient safety | | | | | | |
| 1 | My manager, supervisor, or clinical leader takes staff recommendations to enhance patient safety seriously. | 267 | 82 | 49 | 15 | 10 | 3 |
| | During hectic times, my manager, our boss, or clinical leader is urging us to get more done in less time, even if it means using shortcuts. | 124 | 38 | 95 | 29 | 108 | 33 |


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|---|---|---|---|---|---|---|---|
| | Whenever issues regarding patient safety are brought to their notice, my manager supervisor, or clinical leader takes appropriate action. | 274 | 84 | 42 | 13 | 10 | 3 |
| 2 | Co-operation | | | | | | |
| | We function as a cohesive team in this unit. | 316 | 97 | 3 | 1 | 7 | 2 |
| | The employees in this unit support one another during peak hours. | 293 | 90 | 26 | 8 | 7 | 2 |
| | Disrespectful behavior by people employed in this unit is a problem. | 212 | 65 | 49 | 15 | 65 | 20 |
| 3 | Openness of Communication | | | | | | |
| | When staff members notice something that might hurt patient care, they speak out on this unit. | 264 | 81 | 49 | 15 | 13 | 4 |
| | Employees in this unit speak up when they witness managers acting in a way that puts patients at risk. | 189 | 58 | 98 | 30 | 39 | 12 |
| | Supervisors in this unit are receptive to concerns raised by employees regarding patient safety. | 215 | 66 | 91 | 28 | 20 | 6 |
| | When something is wrong in this unit, staff members are reluctant to ask questions. | 192 | 59 | 98 | 30 | 36 | 11 |
| 4 | Patient safety incident reporting | | | | | | |
| | How often is it reported when an error is identified and fixed before it affects the patient? | 238 | 73 | 59 | 18 | 29 | 9 |
| | How often does someone mention an error that could have damaged the patient but didn't? | 231 | 71 | 46 | 14 | 49 | 15 |
| 5 | Organizational learning-continuous improvement | | | | | | |
| | To ascertain whether adjustments are required to enhance patient safety, this unit | 297 | 91 | 23 | 7 | 7 | 2 |



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| | conducts routine reviews of work procedures. | | | | | | |
| | This section assesses the effectiveness of modifications made to enhance patient safety. | 300 | 92 | 23 | 7 | 3 | 1 |
| | The same patient safety problems are permitted to persist in this facility. | 290 | 89 | 23 | 7 | 13 | 4 |
| 6 | Communicating errors | | | | | | |
| | We are aware of the mistakes that happen with this item. | 218 | 67 | 75 | 23 | 33 | 10 |
| | In this unit, when an error happens, we talk about how to keep it from happening again. | 277 | 85 | 36 | 11 | 13 | 4 |
| | Changes based on incident reports are communicated to us in this unit. | 251 | 77 | 59 | 18 | 16 | 5 |
| 7 | Hospital Management Support for Patient Safety | | | | | | |
| | Actions taken by hospital administration show that patient safety is a primary concern. | 313 | 96 | 13 | 4 | 0 | 0 |
| | The administration of the hospital offers sufficient resources to enhance patient safety. | 245 | 75 | 65 | 20 | 16 | 5 |
| | It appears that hospital administration only cares about patient safety once a negative incident happens. | 140 | 43 | 98 | 30 | 88 | 27 |
| 8 | Response to errors | | | | | | |
| | Employees in this unit believed that their errors were their fault. | 228 | 70 | 62 | 19 | 36 | 11 |
| | In this section, when an incident is reported, it seems more like the problem is being discussed than the offender. | 186 | 57 | 65 | 20 | 75 | 23 |
| | Instead of placing blame on specific employees, the unit concentrates on learning from worker mistakes. | 261 | 80 | 46 | 14 | 20 | 6 |
| | Staff members implicated in patient safety mistakes in this | 179 | 55 | 78 | 24 | 68 | 21 |



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| | unit do not receive enough support. | | | | | | |
| 9 | Handover and information exchange | | | | | | |
| | Important information is frequently missed while moving patients from one unit to another. | 196 | 60 | 78 | 24 | 52 | 16 |
| | Important patient care information is frequently overlooked when shifts change. | 238 | 73 | 52 | 16 | 36 | 11 |
| | There is enough time during shift changes to share all pertinent patient care information. | 274 | 84 | 39 | 12 | 13 | 4 |
| 10 | Staffing and work speed | | | | | | |
| | We have enough employees in this section to manage the task. | 130 | 40 | 88 | 27 | 108 | 33 |
| | Employees in this unit put in more hours than is ideal for patient care. | 114 | 35 | 52 | 16 | 160 | 49 |
| | the unit relies on the presence of temporary staff and interns | 251 | 77 | 23 | 7 | 52 | 16 |
| | The speed of work in this unit is so rushed that it hurts patient safety | 231 | 71 | 36 | 11 | 59 | 18 |

From the data above, Based on the factors assessed by the AHRQ Hospital Survey on Patient Safety Culture (HSOPSC), there are several significant conclusions about patient safety culture in hospitals. In the positive dimension, the Cooperation dimension shows the highest positive perception rate. A total of According to 97% of respondents, they collaborate well as a team., while 90% also stated that staff work with each other. The Hospital Management Support for Patient Safety dimension also showed a very high rate. A total of 96% of respondents considered that the acts of hospital administration demonstrated that patient safety was of utmost importance, helping during busy times. As for the negative dimensions, the Staffing and Work Speed dimension recorded the highest negative perception, where 33% of respondents stated that the unit does not employ enough people to manage the workload. In addition, 49% of respondents mentioned that staff work longer than the optimal time for patient care.

**Table 3.** Mean Percentage of Positive Responses for Patient Safety Culture Indicators in Hospitals

| No | Indicators | Mean % Positive Response |
|---|---|---|
| 1 | Supervisor, manager, or Clinical Leader support for patient safety | 68% |
| 2 | cooperation | 84% |
| 3 | Openness of Communication | 66% |
| 4 | patient safety incident reporting | 72% |
| 5 | Organizational learning-continuous improvement | 90% |
| 6 | Communicating errors | 76% |



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| | | |
|---|---|---|
| 7 | Hospital Management Support for Patient Safety | 71% |
| 8 | Response to errors | 66% |
| 9 | Handover and information exchange | 72% |
| 10 | Staffing and work speed | 55% |

Based on the table above, it is known that based on the average positive answer, the indicator of the highest value, 90%, is seen in organizational learning and continual improvement. The lowest value is in staffing and work speed, which is at a percentage of 55%.

Based on the Hospital Survey on Patient Safety Culture, the study's findings give a general picture of hospital patient safety cultures. (HSOPSC) developed by AHRQ. Each dimension shows the strengths and weaknesses in the implementation of a patient safety culture. The following discussion is based on relevant data and literature:

**Supervisor and Manager or Clinical Leader support for patient safety**

Supervisor and manager support had high levels of positive perceptions (82%-84%), indicating that they consider staff suggestions and take action on patient safety issues. This is important for creating a conducive work environment and supporting incident reporting. Research [3] Emphasized that the involvement of supervisors who are responsive to patient safety issues can increase staff confidence to report incidents without fear [9].

**Cooperation**

The Cooperation dimension of the teamwork question recorded the highest score (97% positive), indicating that team members work effectively, even under busy conditions. Strong team collaboration is proven to improve the accuracy of clinical decision-making and reduce the risk of medical errors. [15]. Good cooperation is the foundation for building a strong safety culture. Effective collaboration ensures that all team members share critical information promptly, fostering a coordinated approach to patient care. [16]. Research highlights that high-functioning teams are better equipped to anticipate potential errors and implement preventative measures, creating a more resilient healthcare environment. [17].

**Openness of Communication**

This dimension shows a positive perception of 58%-81%, but there are still barriers to staff speaking up about unsafe practices (58% positive). Hierarchical barriers and fear of speaking up to superiors are often barriers to open communication. [18]. Therefore, creating "psychological safety" is essential to improve effective incident reporting. In the healthcare context, psychological safety enables staff to raise concerns about unsafe practices or potential risks to patients, which is an important step in preventing safety incidents. [19]. However, building psychological safety requires strategic efforts, including leadership training to create an environment that supports openness, respect for feedback, and reduction of stigma towards mistakes. [20].

**Patient Safety Incident Reporting**

Perceptions of incident reporting were 71%-73% positive, but 9%-15% of respondents were hesitant to report incidents. This suggests there is an element of blame culture, which may inhibit reporting. According to Leape (1994), to strengthen incident reporting, hospitals should adopt a non-punitive/non-punitive approach that focuses on learning and system improvement. [21].

**Staffing and Work Speed**

This dimension shows significant weaknesses, with only 40% of respondents feeling that the number of staff is sufficient to handle the workload. In addition, 33% of respondents stated that staff often work beyond the optimal time limit for patient care. Staff shortages and workweeks of more than 40 hours risk increasing burnout rates and medical errors, as expressed by (12). Staff augmentation and workload management are top priorities [22].


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**Hospital Management Support**

Management support received a highly positive perception (96%), indicating that patient safety is a top priority. However, 27% of respondents felt that management attention was only apparent after an adverse incident. This indicates the need for proactive steps from management to prevent incidents and build a sustainable safety culture. [3].

**Implication**

These findings imply that hospitals need to strategically allocate resources to strengthen weak aspects of safety culture. A focus on increasing the number and competency of the workforce can reduce work overload, which is often a contributing factor to errors in care. Another implication is the importance of management taking a proactive role in building a safety culture by providing tangible support for patient safety initiatives.

## Conclusions

The hospital's patient safety culture shows strengths in the aspects of Teamwork and Management Support. However, some weaknesses need attention, namely in Staffing and Response to Error. To improve the patient safety culture, several steps can be taken. First, the hospital needs to evaluate workload management in service areas to ensure an adequate and efficient workforce. Second, there is a need to encourage incident reporting through a non-punitive or non-punitive approach, so that staff feel safe to report errors. Third, improve open communication by creating "psychological safety" that supports a trusting work environment. Finally, periodic evaluation of the implementation of the safety culture, both in terms of reporting and the results of that reporting, is essential to ensure continued improvement and necessary adjustments.

## Conflict of Interest

The authors declare that they have no conflicts of interest regarding the publication of this paper.

## References

[1] Bautista-Bernal I, Quintana-García C, Marchante-Lara M. Safety culture, safety performance, and financial performance. A longitudinal study. Saf Sci 2024;172:106409.

[2] Sexton JB, Adair KC, Profit J, Bae J, Rehder KJ, Gosselin T, et al. Safety culture and workforce well-being associations with positive leadership walkrounds. Jt Comm J Qual Patient Saf 2021;47:403–11.

[3] Nieva VF, Sorra J. Safety culture assessment: A tool for improving patient safety in healthcare organizations. Qual Saf Heal Care 2003;12:17–24. https://doi.org/10.1136/qhc.12.suppl_2.ii17.

[4] Rombeallo NT, Tahir T, Saleh A. Faktor Penyebab Rendahnya Pelaporan Insiden Keselamatan Pasien di Rumah Sakit: Literature Review. J Keperawatan 2022;14:657–66.

[5] Departemen Kesehatan Republik Indonesia. Panduan Nasional Keselamatan Pasien Rumah Sakit (Patient Safety) 2008:22–7.

[6] Azyabi A, Karwowski W, Davahli MR. Assessing patient safety culture in hospital settings. Int J Environ Res Public Health 2021;18:2466.

[7] Alsabri M, Boudi Z, Lauque D, Dias RD, Whelan JS, Östlundh L, et al. Impact of teamwork and communication training interventions on safety culture and patient safety in emergency departments: a systematic review. J Patient Saf 2022;18:e351–61.

[8] Kakemam E, Gharaee H, Rajabi MR, Nadernejad M, Khakdel Z, Raeissi P, et al. Nurses' perception of patient safety culture and its relationship with adverse events: a national questionnaire survey in Iran. BMC Nurs 2021;20:1–10.

[9] Sorra J, Gray L, Streagle S, Famolaro T, Yount N, Behm J. Hospital survey on patient safety culture:



Electronic ISSN : 2656-3088
Homepage: https://www.journal-jps.com

user's guide. 2018.
[10] Adeniran IA, Efunniyi CP, Osundare OS, Abhulimen AO. Data-driven decision-making in healthcare: Improving patient outcomes through predictive modeling. Eng Sci Technol J 2024;5.
[11] Farquhar M. AHRQ quality indicators. Patient Saf Qual an Evidence-Based Handb Nurses 2008.
[12] Zebrak K, Yount N, Sorra J, Famolaro T, Gray L, Carpenter D, et al. Development, pilot study, and psychometric analysis of the AHRQ surveys on patient safety culture (SOPS®) workplace safety supplemental items for hospitals. Int J Environ Res Public Health 2022;19:6815.
[13] Ishiguro L, An DA, Plumptre L, Paul J, Mecredy G, Li K, et al. Supporting policy and practice in Ontario through ICES'applied health research question (AHRQ) program. Int J Popul Data Sci 2021;6.
[14] Mangindara M, Samad MA, Insani Y, Uta RM. Gambaran Budaya Keselamatan Pasien di Instalasi Rawat Inap Rumah Sakit Bhayangkara Makassar. J Manaj Kesehat Yayasan RSDr Soetomo 2020;6:155. https://doi.org/10.29241/jmk.v6i2.335.
[15] Salas E, Sims DE, Shawn Burke C. Is there A "big five" in teamwork? Small Gr Res 2005;36:555–99. https://doi.org/10.1177/1046496405277134.
[16] Holen A, Sortland B. The Teamwork Indicator–a feedback inventory for students in active group learning or team projects. Eur J Eng Educ 2022;47:230–44.
[17] Zainuri A, Huda M. Empowering cooperative teamwork for community service sustainability: insights from service learning. Sustainability 2023;15:4551.
[18] Edmondson A. Psychological safety and learning behavior in work teams. Adm Sci Q 1999;44:350–83. https://doi.org/10.2307/2666999.
[19] Edmondson AC, Bransby DP. Psychological safety comes of age: Observed themes in an established literature. Annu Rev Organ Psychol Organ Behav 2023;10:55–78.
[20] Vella SA, Mayland E, Schweickle MJ, Sutcliffe JT, McEwan D, Swann C. Psychological safety in sport: A systematic review and concept analysis. Int Rev Sport Exerc Psychol 2024;17:516–39.
[21] Leape L. Error in Medicine. Jama J Am Med Assoc 1994;274:460. https://doi.org/10.1001/jama.1995.03530060031024.
[22] Patterson PD, Weaver MD, Frank RC, Warner CW, Martin-Gill C, Guyette FX, et al. Association between poor sleep, fatigue, and safety outcomes in emergency medical services providers. Prehospital Emerg Care 2012;16:86–97. https://doi.org/10.3109/10903127.2011.616261.


Electronic ISSN : 2656-3088
Homepage: https://www.journal-jps.com