

	<h1>International Journal of Economics, Accounting, and Management</h1>	
	Vol. 1, No. 6, March 2025 Page 358-365	E-ISSN: 3047-6798 P-ISSN: 3047-678X
	Site : https://jurnal.intekom.id/index.php/ijeam	

Impact of Risk Management, Safety Culture, and Service Quality on Patient Satisfaction

Sara Mustika Hardy¹, Vip Paramarta²

^{1,2} Faculty of Postgraduate Studies, Universitas Sangga Buana, Bandung, Indonesia

Article Info

Article history:

Received February 12, 2025
 Revised February 12, 2025
 Accepted March 10, 2025

Keywords:

Risk Management,
 Safety Culture,
 Quality of Care ,
 Patient Satisfaction,
 Systematic Literature Review

ABSTRACT

Quality health services are a fundamental aspect in improving the welfare of society. This study aims to analyze the relationship between risk management, safety culture, and service quality on patient satisfaction. The method used was a systematic literature review (SLR) with the PRISMA approach, which reviewed various related studies from 2019 to 2024. Data sources were obtained from Google Scholar and DOAJ, then selected based on relevance criteria to the research topic. The results showed that risk management plays an important role in reducing adverse events and improving patient safety. A strong safety culture, with the implementation of an open incident reporting system and adherence to standard operating procedures, contributes to creating a safe service environment. In addition, service quality, which includes speed of service, friendliness of medical personnel, and adequate facilities, significantly improves patient satisfaction. The conclusion of this study confirms that implementing effective strategies in these three aspects will have a positive impact on the overall quality of health services. These findings can serve as a reference for hospitals in developing health service improvement policies to increase patient satisfaction and public trust in health institutions.

This is an open access article under the [CC BY](https://creativecommons.org/licenses/by/4.0/) license



Corresponding Author:

Sara Mustika Hardy
 Faculty of Postgraduate Studies, Universitas Sangga Buana
 Bandung, Indonesia
 Email: yayahardy28@gmail.com

1. INTRODUCTION

Health services are an important part of improving people's welfare. Every individual has the right to get quality and safe health services. Good quality health services can increase patient trust and satisfaction [1]. However, there are still many challenges faced in improving the quality of health services. One of the influential factors in health services is risk management. Risk management aims to identify, analyze, and control potential hazards in the medical service process. Hospitals that have a good risk management system can reduce medical errors and improve patient safety. Errors in medical procedures can cause serious repercussions for both patients and medical personnel [2]. Therefore, the implementation of effective risk management is very important.

In addition to risk management, safety culture is also a major factor in improving health services. Patient safety culture reflects the commitment of all health workers in preventing medical incidents. Factors such as leadership, training, and reporting systems play a role in shaping a strong safety culture. Hospitals that implement a good safety culture tend to have higher levels of patient satisfaction [3]. Therefore, strengthening safety culture is necessary in the healthcare system.

Service quality is another aspect that greatly influences patient satisfaction. Quality service includes speed of response, friendliness of medical personnel, and adequate facilities. Patients who feel comfortable with the services provided tend to be more satisfied and trust in health services. Conversely, poor service can cause dissatisfaction and even reduce the level of trust in the hospital [4]. Therefore, hospitals must continuously improve the quality of their services to meet the needs of patients.

The problem that often arises is that there are still gaps in the implementation of risk management, safety culture, and service quality in various hospitals. Some hospitals still experience obstacles in optimizing an effective risk management system [2]. Lack of awareness of the importance of safety culture is also an obstacle in improving the quality of health services [3]. In addition, inconsistent service quality can reduce the level of patient satisfaction [4]. Therefore, further research is needed to understand how these three factors are interconnected in improving patient satisfaction.

This study aims to analyze the impact of risk management, safety culture, and service quality on patient satisfaction. Using a literature study approach, this research will examine various previous studies that discuss the relationship between the three variables. The results are expected to provide a more comprehensive understanding of the factors that influence patient satisfaction. In addition, this research can also provide recommendations for hospitals in improving their service quality. Thus, the results of this study can serve as a reference for policy development in the health care sector.

Through this research, it is hoped that effective strategies can be found to improve patient satisfaction through risk management, safety culture, and service quality. Improvements in these three aspects will have a positive impact on patients and medical personnel. Hospitals that implement these strategies well will have a better image in the eyes of the public. In addition, improving the quality of health services will also contribute to improving the overall welfare of society. Therefore, this study has important significance in the effort to improve health services in the future.

2. METHOD

The method in this study is a systematic literature review, which is a process used to review, evaluate, and interpret all existing research that is relevant to the formulation of the problem or topic under study. Systematic literature review (SLR) is a method for identifying, evaluating, and interpreting all available research evidence to answer specific research claims. This process helps in collecting and analyzing all available information to understand a problem or topic.

The SLR method used in this study is PRISMA. PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is a tool and guide used in systematic reviews and/or meta-analyses [5]. It can help researchers review and analyze data systematically so as to obtain useful and reliable results. The reference materials used are the results of research on risk management, safety culture, and service quality on patient satisfaction from 2019-2024. The documents used as references were searched using Google Scholar and DOAJ as a guide to searching for scientific data, then stored in Mendeley software for archiving

This study used Google Scholar and DOAJ as databases to search for reference materials on risk management, safety culture, and service quality on patient satisfaction. The search results found about 9,790 publications that contained the phrase in the title, abstract, or body of the paper. This is because these two internet databases collect a large number of articles, books, reports, and other types of publications from various disciplines.

In this research, there are several selection criteria used to determine the reference materials to be used. These criteria are as follows:

1. Research addresses risk management, safety culture, and service quality and patient satisfaction
2. Articles are published in scientific journals.
3. Articles are easily accessible and contain information

After finding documents that met the criteria, the researcher read the titles and abstracts to ensure that the documents met the assessment criteria. After searching and selecting reference materials that met the criteria, the researcher managed to collect 7 eligible articles. All articles were analyzed using descriptive qualitative research methods. The next stage is the narrative synthesis stage, where the results of the analysis will be written and summarized systematically and structured in a table of study results contained in the results and discussion section of the essay. The conclusion of the literature review will be described in detail in that section.

3. RESULTS AND DISCUSSION

After searching and screening reference materials, the researcher classifies the results of the screening. This step is an important part of the systematic literature review because the results and discussion obtained will be the core of this research. The results of the screening of reference materials can be seen in the following discussion:

3.1 Risk Management in Healthcare

Patient safety is a major focus in hospital healthcare. Health services that are not safe enough will provide opportunities for risks that endanger the patient's life to death, which has an impact on increasing patient mortality rates while receiving hospital care. Based on data from the World Health Organization, as many as 1 in 10 patients who seek treatment in health services suffer losses so that they feel less safe and comfortable while undergoing treatment. The losses felt are due to various incidents or Unexpected Events (KTD). Studies state that 2.9%-16.6% of patients experience adverse events and as many as 5-13% of these cases lead to patient death, of which 50% of these cases are classified as preventable cases. In addition to adversely affecting patients, the problem also has an impact on socioeconomic factors resulting in a significant financial burden on health services [6]. Therefore, the existence of a risk identification program is very important to overcome these problems with the implementation and development of systematic risk management.

Risk management is a series of assessments, identification, and prioritization of risks that are arranged proactively with the intention of eliminating or minimizing the impact that occurs. Based on the KARS (Hospital Accreditation Committee) and JCI (Joint Commission International) hospital accreditation agencies, the purpose of risk management is to identify risks in order to minimize the occurrence of KTDs and other risks that threaten the safety of patients and staff. The implementation of risk management is an important issue for quality-based health care. Risk management plays a role in prevention efforts for a company, especially those engaged in services that are prone to errors and complaints

The application of risks that occur in accordance with the existing work units within a company is very important to minimize the impact caused. Risk management is expected to minimize the number of accidents or errors to patients, visitors, or employees in a hospital. Risk management includes policies and strategies used in the process of controlling and mitigating risks in a health service. It aims so that there are no errors in identification to work monitoring [6]

One of the key aspects of risk management is the identification of risks that may occur in healthcare. This process involves monitoring various activities in the hospital, from patient admission to the provision of therapy and medical treatment. Risk identification can be done through incident

reporting by medical personnel, internal audits, and analysis of patient medical record data. Hospitals that have a transparent incident reporting system are more likely to identify problems before they develop into adverse events. Therefore, health workers' awareness in recognizing and reporting potential risks is crucial in this process.

Once the risk has been identified, the next step is analysis and evaluation to determine the severity and likelihood of the risk occurring. This analysis can be done using quantitative or qualitative methods, depending on the type of risk at hand. Some commonly used approaches in risk analysis are Failure Mode and Effects Analysis (FMEA) and Root Cause Analysis (RCA). These methods help in determining the main causes of a risk as well as the preventive measures that can be implemented. By understanding the factors that cause risk in depth, hospitals can make more effective decisions in risk control efforts.

Risk mitigation strategies in healthcare involve various approaches, such as the implementation of standard operating procedures (SOPs), the use of safe healthcare technology, and improving the competence of medical personnel. Clear and structured SOPs help in reducing variations in medical services and improving consistency in patient care. In addition, the use of technology such as electronic health record (EHR) systems can help in monitoring patient conditions more accurately and reduce the possibility of administrative errors. Regular training for medical personnel is also necessary to ensure that they understand the applicable safety procedures and can respond quickly to emergency situations.

In addition to implementing prevention strategies, periodic monitoring and evaluation is also an important part of healthcare risk management. Hospitals must have a mechanism to evaluate the effectiveness of risk management policies that have been implemented. One way to do this is by conducting patient safety audits and surveys of medical personnel and patients regarding the level of safety of the services provided. Continuous evaluation allows hospitals to identify areas that still need improvement and develop new strategies in risk management.

Based on previous research by Firmansyah (2022), it is stated that the existence of a risk management program can effectively reduce the occurrence of medical errors. This research is in line with Fanny's research (2020) which states that risk management is proven to reduce the number of errors that occur in patients in the emergency department. Medical errors, nosocomial infections, and errors in drug administration are some of the risks that often occur in health services. With a good risk management system, hospitals can implement strict protocols in every stage of service to minimize events that can harm patients. For example, the use of technology such as electronic medical record (EHR) systems can help in ensuring proper medication administration according to the patient's condition. In addition, open reporting of incidents allows hospitals to continuously improve their safety systems based on evaluation of previous cases [7] [8].

Another impact is the improvement of the hospital's operational efficiency. Structured risk management can help in reducing resource wastage due to procedural errors or medical device failure. Hospitals with a good risk mitigation system can also reduce the duration of hospitalization due to preventable medical complications. This has the effect of increasing the hospital's capacity to treat more patients more effectively. With a more efficient service process, hospitals can allocate resources more optimally so that services become faster and more responsive.

The stages of implementing risk management at A. Yani Hospital consist of seven stages, namely (1) Communication and support for risk management programs, (2) trusting, reporting, and managing every event or incident, (3) appreciating and practicing risk management well, (4) identifying and managing programs on an ongoing basis, (5) encouraging organizational learning with assigned structures and tasks, (6) developing strategies to prevent the same incidents from recurring, and (7) conducting continuous monitoring along with evaluating the strategies implemented [7].

There are obstacles in the implementation of the risk management program that are generally caused by a lack of effective communication between management and staff. For example, when the risk register has been revised but has not been communicated back to the work unit. This stage is also not monitored so that the process does not run smoothly due to ineffective communication. Research by Olli, et al (2019) identified key factors in the implementation of risk management in hospitals including staff knowledge, leadership, hospital strategic policies, and the presence or absence of a program responsible position that ensures the running of the risk management program [9].

The important role of risk management in the health care setting must be a concern for every agency. Hospital leaders in particular must make efforts to increase employee participation in the implementation of risk management programs. The implementation of an effective risk management program can be supported by strategic policy making in the hospital so that it will have a positive impact on patient safety. The implementation of the risk management program also needs to pay attention to the guidelines and the person in charge of the program so that the plans or policies that have been made can be realized optimally. The effect of risk management implementation on patient safety is more in-depth, further research is needed with a larger sample size to get more accurate results.

3.2 Patient Safety Culture

Patient safety culture is a set of values, perceptions, and attitudes that are applied in a health institution to ensure that patient safety is a top priority. This culture reflects the commitment of all health workers in preventing, detecting and managing risks that could harm patients. Hospitals and healthcare facilities that implement a good safety culture will have a system that allows transparent reporting of incidents without fear of punishment. With this system in place, medical errors can be identified early, analyzed, and prevented from recurring in the future. Therefore, a patient safety culture not only improves the quality of care but also builds public trust in the healthcare system [10].

One of the key aspects of a patient safety culture is openness in reporting medical incidents and errors. In an environment with a strong safety culture, healthcare workers are encouraged to report any risky events without fear of sanctions or negative stigma. This reporting aims to find the root of the problem and improve the system, not to find individual mistakes. By implementing this approach, hospitals can learn from previous incidents and create more effective solutions in error prevention. It also encourages healthcare workers to be more cautious and raise awareness of the importance of adhering to safety procedures.

The implementation of a patient safety culture also requires clear standard operating procedures (SOPs) that are adhered to by all health workers. These SOPs cover various aspects, such as drug administration procedures, patient handling, and the safe use of medical devices. With clear guidelines, health workers can work in a more structured manner and reduce the possibility of errors that could harm patients. In addition, regular training for health workers is also necessary to keep them up to date with the latest developments in patient safety practices. This includes emergency event simulations, effective communication training, and education on risk prevention strategies.

A good patient safety culture, where all safety procedures and protocols are properly executed, provides a sense of security to patients and increases their trust in laboratory services. With the implementation of an optimal safety culture and improved service quality, it can increase overall patient satisfaction, strengthen the institution's reputation, and ensure patient safety and comfort in receiving health services. Consistent implementation of safety culture, such as prevention of medical errors, maintaining cleanliness, and adherence to standard operating procedures, not only impacts patient safety but also increases their trust in the professionalism of laboratory staff. Therefore, implementing and strengthening patient safety culture should be a top priority for every healthcare facility in order to create a better service system in the future.

There are 9 factors that influence the implementation of patient safety, among others [11]:

a. Economic Aspects

The availability of adequate funding and budget allocation is essential in supporting patient safety programs. Lack of funding can hinder the procurement of safe medical equipment, training of health workers, and development of systems that support patient safety.

b. Leadership

The role of leaders in a healthcare facility, such as hospital directors or chief nurses, is highly influential on patient safety implementation. Leaders who are highly committed to patient safety will encourage staff compliance with safety standards and create a safer work culture.

c. Culture

The values, norms and habits in the work environment determine the extent to which patient safety can be implemented. A strong safety culture encourages open reporting of incidents, increases risk awareness, and strengthens teamwork in preventing medical errors.

d. Risk Management System and Health Services

An effective system for identifying, analyzing, and managing risks is necessary. These systems help healthcare workers reduce the likelihood of medical errors and improve healthcare standards.

e. Knowledge, Attitude, and Action

Health workers' level of understanding of patient safety affects compliance with safety procedures. Continuous training can improve their competency in managing risks and preventing medical incidents.

f. Situation Analysis and Working Environment Conditions

Factors such as workload, healthcare facilities, and stress levels of medical personnel affect the successful implementation of patient safety. A supportive work environment, including adequate facilities and clear workflows, will improve compliance with safety standards.

g. Duration of Nurses' Working Hours

Excessively long working hours can lead to fatigue, potentially increasing the risk of medical errors. A balanced work shift arrangement is essential to maintain the performance and concentration of health workers in providing safe services.

h. Mentoring Program

Mentoring from more experienced healthcare workers can help new staff understand the importance of patient safety and implement it effectively. It can also increase the confidence of medical personnel in handling emergency situations.

i. Nursing Supervision and Evaluation of Patient Safety Implementation

Good oversight ensures that safety standards are consistently applied across service units. Periodic evaluation is also necessary to identify weaknesses in patient safety implementation and determine necessary corrective measures.

3.3 Service Quality on Patient Satisfaction

The quality of health services is one of the main factors that determine patient satisfaction in a health facility. Quality services cover various aspects, ranging from the availability of competent medical personnel, the accuracy of diagnosis and treatment, to the comfort of the facilities provided. Patients who receive good service tend to feel more satisfied and have a higher level of trust in the health institution. Conversely, if the services provided do not meet patient expectations, it will result in low satisfaction and potentially reduce the reputation of the health facility [4].

The quality of health services can be measured through several main dimensions, such as reliability, responsiveness, assurance, empathy, and tangible evidence. Reliability includes the ability of health workers to provide accurate diagnosis and treatment according to procedures. Responsiveness refers to the speed and alertness of health workers in handling patient complaints.

Meanwhile, reassurance involves the sense of security provided by medical personnel in explaining medical procedures and possible side effects. Empathy relates to the attention and concern of medical personnel for the patient's condition, while physical evidence includes cleanliness, comfort, and completeness of health facilities [4].

Patient satisfaction is the result of their experience while receiving services at a healthcare facility. When patients feel that their medical and emotional needs are well met, they will be more satisfied with the services provided. This satisfaction is also influenced by effective communication between health workers and patients. For example, clear explanations of diagnosis, procedures, and treatment can increase trust and reduce patients' anxiety about their illness [12].

In addition to service quality, there are several other factors that influence patient satisfaction, such as waiting time, cost of service, attitude of medical personnel, and accessibility of health facilities. Long waiting times are often the main complaint of patients and can reduce their satisfaction even though the medical services provided are excellent. In addition, fees that are not transparent or too high can make patients feel burdened and less satisfied with the services they receive. The friendly and professional attitude of medical personnel also plays a big role in creating a positive experience for patients.

Good service quality not only increases patient satisfaction, but also encourages their loyalty to a particular healthcare facility. Satisfied patients are more likely to return to the same place when they need medical services in the future. They are also more likely to recommend the facility to family and friends, thus helping to enhance the positive image of the hospital or clinic. Conversely, a negative experience may cause patients to switch to another healthcare facility and leave a bad review that may affect the reputation of that healthcare service [13].

To increase patient satisfaction, healthcare facilities need to make various improvements in their service systems. Some of the steps that can be taken include increasing the competence of medical personnel through regular training, improving queue management systems to reduce waiting times, and providing comfortable and hygienic facilities. In addition, it is also important to build better communication with patients, such as providing clear and transparent information regarding health service procedures and costs.

4. CONCLUSION

Risk management in healthcare is an important step to improve patient safety and reduce adverse events (AEs) that can endanger patients' lives. Patient safety culture plays an important role in creating a safe and transparent healthcare environment. The implementation of an open incident reporting system, compliance with SOPs, and regular training for medical personnel are key factors in building a strong safety culture. Service quality has a significant influence on the level of patient satisfaction. The main factors that determine patient satisfaction include speed of service, friendliness of medical personnel, adequate health facilities, and clarity of information provided. The better the quality of service provided by the hospital or health facility, the higher the level of patient satisfaction.

REFERENCES

- [1] Berdame, Nurul Ragilia. "Kebijakan Pemerintah Dalam Pelayanan Kesehatan Terhadap Masyarakat Yang Kurang Mampu Menurut Undang-Undang Nomor 17 Tahun 2023 Tentang Kesehatan." *Lex Privatum* 13.5 (2024).
- [2] Hernawati, Lestari, et al. "Upaya Peningkatan Keselamatan Pasien dengan Pelaksanaan Manajemen Risiko di Unit Rawat Inap." *Journal of Telenursing (JOTING)* 5.2 (2023): 2972-2981.
- [3] Wianti, Arni, et al. "Karakteristik dan budaya keselamatan pasien terhadap insiden keselamatan pasien." *Jurnal Keperawatan Silampari* 5.1 (2021): 96-102.
- [4] Purnama, Engga, and Farida Yuliaty. "STUDI LITERATUR: Faktor Kualitas Pelayanan terhadap Loyalitas Pasien di Rumah Sakit Indonesia." *AKADEMIK: Jurnal Mahasiswa Ekonomi & Bisnis* 5.1 (2025): 50-60.

- [5] Purwadhi, Purwadhi, et al. "Peran Manajemen Strategis Dalam Meningkatkan Efisiensi Operasional Dan Kepuasan Pasien Di Rumah Sakit Swasta: Systematic Literature Review." *EKOMA: Jurnal Ekonomi, Manajemen, Akuntansi* 3.6 (2024): 2697-2706.
- [6] Wahyuningsih, Luh Gde Nita Sri, et al. "Implementasi Manajemen Risiko pada Pelayanan Kesehatan: A Literature Review." *Jurnal Ilmiah Permas: Jurnal Ilmiah STIKES Kendal* 14.2 (2024): 561-570.
- [7] Firmansyah, Muhammad Huda. "Penerapan Manajemen Risiko Keselamatan Dan Kesehatan Kerja Di Rumah Sakit Islam Surabaya a. Yani." *Jurnal Kesehatan Masyarakat* 10.1 (2022): 12-19.
- [8] Fanny, Nabilatul, and Anindiya Soviani. "Analisis Manajemen Risiko Di Ruang Filing RSUD dr Soediran Mangun Sumarso Wonogiri Tahun 2020." *Infokes: Jurnal Ilmiah Rekam Medis dan Informatika Kesehatan* 10.2 (2020): 12-19.
- [9] Olii, Marsella Wahyuni, Fridawaty Rivai, and Sukri Palutturi. "Implementasi manajemen risiko klinis dan faktor-faktor yang mempengaruhi pada rumah sakit di kota Makassar." *Jurnal Kesehatan Masyarakat Maritim* 2.2 (2019).
- [10] Dianvayani, Giska, et al. "Analisis Mutu Pelayanan Melalui Keselamatan Pasien Dan Kepuasan Pasien Sebagai Variabel Intervening (Studi Survei di Rumah Sakit Mitra Husada Pringsewu-Lampung)." *Innovative: Journal Of Social Science Research* 4.4 (2024): 11667-11686.
- [11] Mastuty, Amalia, et al. "Analisis Faktor Penerapan Budaya Sasaran Keselamatan Pasien di Rumah Sakit: A Literature Review." *Jurnal Kesehatan Qamarul Huda* 9.1 (2021): 71-77.
- [12] Sitepu, Michi, and Kosasih Kosasih. "Analisis Loyalitas Pasien dan Kepuasan Pasien: Pendekatan Kajian Literatur dengan Kualitas Pelayanan Rumah Sakit sebagai Variabel Intervening." *Jurnal Penelitian Inovatif* 4.4 (2024): 2047-2058.
- [13] Setyaji, Deny Teguh, Vip Paramarta, and Eka Purwanda. "Hubungan Mutu Pelayanan dan Lama Waktu Tunggu Rawat Jalan dengan Tingkat Kepuasan Pasien Rawat Jalan di Rumah Sakit Tahun 2024." *J-CEKI: Jurnal Cendekia Ilmiah* 3.6 (2024): 6242-6257.