

Analysis of Ethical and Legal Aspects in Implementing a Medical Record System in Hospitals on Patient Health Practices

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Abstract

Implementing a medical record system in a hospital plays an integral role in managing patient health information. This article analyzes the ethical and legal aspects involving medical record management, and their impact on patient health practices in hospitals. Findings regarding breaches of confidentiality, inaccurate information, inappropriate access, delays in patient access, and non-transparency of information are the main focus. Ethical implications involve the risk of losing patient trust and the establishment of a positive doctor-patient relationship, while legal implications include potential lawsuits by patients and administrative sanctions against medical record system administrators. Thus, improvements in regulatory compliance, increased ethical awareness among health workers, and implementation of best practices are recognized as crucial steps in maintaining the integrity of the health system and ensuring ethical and legally compliant health practices. In conclusion, collaboration between stakeholders and a holistic approach are needed to achieve the implementation of a medical record system that prioritizes patient rights and interests, strengthens trust, and improves the quality of health services in hospitals.

Keywords:

Ethics; Law; Legal Aspects; Medical Records; Patient Health Practices

1. Introduction

The importance of implementing a medical record system in hospitals has become a major focus in modern health management. The transition from traditional paper-based records to electronic medical record (EMR) systems reflects an evolution in healthcare delivery. Research and development in the health industry increasingly emphasizes the need for comprehensive transformation in patient registration and re-engineering of medical records through the implementation of electronic medical record systems (Kumar et al., 2011). This shows increasing recognition of the crucial role of EMR systems in improving the efficiency and quality of health care.



Research in Ethiopia highlights that well-organized medical record management can significantly improve the accessibility and completeness of patient information, even in hospitals in low-income countries with limited resources (Wong & Bradley, 2009). These findings underscore the potential of EMR systems to address challenges related to patient information management, especially in resource-limited settings.

Additional studies emphasize the positive impact implementation of the Electronic Medical Records System (EQUALI) has on the administrative care of patients in health centers (Cotrina-Aliaga et al., 2021). This indicates that EMR systems not only improve patient care but also contribute to improving administrative processes in healthcare facilities.

A case study at Minna General Hospital shows that the introduction of an electronic medical record system or database for outpatient services can lead to retention and updating of paper-based medical records (Abisoye et al., 2016). This fact highlights the potential of EMR systems to simplify the recording process and ensure continuity of patient information management.

Nevertheless, challenges arise in implementing an integrated medical record system, as revealed by research on the Indonesian health system (Emanuel, 2019). This study revealed that medical services in Indonesia are provided by various health facilities, each using its own implementation of the EMR system, which can cause compatibility and consistency issues. Therefore, there is a need for a standardized and integrated approach in the implementation of EMR systems to ensure seamless exchange of information across healthcare settings.

The significance of medical record systems in improving the quality of health services cannot be ignored. Research by Tang et al. (2006) emphasize the benefits of personal health record systems, highlighting their potential to improve the quality of health services through the deployment of efficient software and computerized medical record systems. This emphasizes the significance of technological advances in medical record management to improve healthcare services. Furthermore, Wong & Bradley (2009) highlight the effectiveness of well-organized medical record management systems in increasing the accessibility and completeness of patient information, especially in low-income countries. These findings underscore the central role of medical record systems in overcoming resource limitations and improving the overall quality of health care, especially in underserved areas. Fraser et al. (2005) discussed the increasing use of electronic medical record (EMR) systems in Europe and the United States, driven by the belief that these systems can improve the quality of health care. This shows global recognition of the potential of EMR systems in improving the quality of healthcare services and confirms their relevance in a variety of healthcare settings.

Managing a medical record system not only brings benefits in increasing the efficiency and quality of health services, but also presents a number of ethical issues and legal aspects that need to be considered. One of the ethical issues that arises is related to patient privacy and confidentiality. In collecting, storing, and accessing medical information, the risk of privacy breaches can increase, threatening patient trust in the health system. Relevant legal aspects include compliance with health data protection regulations and patients' rights to control access to their personal information.

The impact of these ethical and legal issues can involve discomfort and concern for patients in sharing medical information openly. This can hinder patient cooperation with health care providers, hinder the treatment process, and even result in patient refusal to seek medical help. Therefore, it is important for health service providers to ensure that the medical record system is managed in compliance with ethical norms and applicable legal regulations, so as to maintain integrity and trust in patient health practices.





3. 2. Literature review

1. Medical Record System

1. Definition and Functions of a Medical Record System:

- Definition: A medical record system (SRM) is an information system designed to record, store and manage patient health information electronically. This includes medical data, disease history, examination results, drug prescriptions, and other relevant information related to the patient's health.
- Function: Patient Data Recording: Stores patient personal information, disease history, and demographic information.
- Medical Records: Recording the results of physical examinations, diagnoses, medical procedures, and treatments provided to patients.
- Health History Management: Provides fast, structured access to a patient's health history to assist physicians in diagnosis and treatment.
- Improved Care: Improves coordination of care, reduces medical errors, and provides more accurate information to health care providers.
- 2. Developments and Trends in Medical Records Management:
 - Use of EHR (Electronic Health Records): Switching from conventional medical records to an EHR allows for faster access, collaboration between providers, and more efficient management of information.
 - System Interoperability: Developments to ensure that Medical Record Systems can communicate and share information with other systems, such as other laboratories or hospitals.
 - Mobile EHR: Adopt mobility trends to provide access to real-time patient health information via mobile devices, increasing flexibility and accessibility.
 - Health Analytics: The use of data analytics to identify population trends, predict disease, and improve population management.
 - Data Security and Regulatory Compliance: Increased focus on patient data security and regulatory compliance, such as the Health Insurance Portability and Accountability Act (HIPAA) in the United States.

A good medical record system not only increases the efficiency of health information management but also contributes to improved quality of patient care and better clinical decision making.

2. Ethics in Health Services

Ethical Principles in Patient Information Management:

1). Confidentiality:

- The Importance of Medical Confidentiality: The main principle is to maintain the confidentiality of patient medical information, including medical history, examination results, and treatment plans.
- Patient Consent: Obtain written permission from the patient before sharing or disclosing medical information to third parties.

2). Information Accuracy and Certainty:



Irsyam Risdawati: Analysis of Ethical and Legal Aspects in Implementing a Medical Record System in Hospitals on Patient Health Practices

- Data Accuracy: Ensure that the information stored is accurate and complete.
- Manipulation Prevention: Prevent changing or manipulating medical information without proper authorization.

3). Principles of Openness and Information Provision:

- Patient's Right to Know: Patients have the right to know information relating to their health.
- Openness of Communication: Clear and open communication to patients about their health conditions and treatment options.

4). Protection against Discrimination:

- Non-Discriminatory: Avoid using medical information for discrimination or unfair treatment of patients.
- 5. Data Security:
 - Access Safeguards: Ensure that only authorized parties have access to patient medical information.
 - Security Breach Prevention: Using information security technologies such as encryption and authentication systems to protect data.

Professional Responsibilities Regarding Data Confidentiality and Integrity:

1). Professional Obligations:

- Commitment to Confidentiality: Establishes a professional obligation to maintain the confidentiality of patient information as an integral part of healthcare practice.
- 2). Policy Development:
- Role in Organizational Policy: Contribute to the development of organizational policies related to the management of patient information, ensuring compliance with ethics and regulations.
- 3). Training and Awareness:
 - Employee Training: Provide training to healthcare staff on the importance of maintaining the confidentiality and integrity of patient data.
- Ethical Awareness: Increase awareness of the ethical principles involved in managing patient information.

4). Ethical Approach to Use of Technology:

- Ethical Application of Technology: Ensure the use of information and communication technology in accordance with ethical principles, especially in terms of security and confidentiality.

5). Commitment to Service Quality:

- Professional Integrity: Demonstrates integrity and commitment to ethical standards in providing quality health services.

By understanding and following these ethical principles, health service providers can ensure that the management of patient information is carried out with a full sense of responsibility and prioritizes the interests and rights of patients.



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3. Legal Aspects in Medical Records

Medical record management in Indonesia is regulated by several laws and regulations which cover the rights and obligations of related parties. Some of the main laws and regulations related to medical records in Indonesia include:

- 1) Law Number 44 of 2009 concerning Hospitals:
 - a. Article 63: Establishes that every hospital is obliged to keep patient medical records.
 - b. Article 71: Explains that medical records must be kept confidential and can only be accessed by interested parties in accordance with statutory provisions.
- 2) Republic of Indonesia Government Regulation Number 32 of 2019 concerning Pharmaceutical Service Standards in Pharmacies:
 - a. Article 53: Regulates the obligation to store medical records in pharmacies and maintain their confidentiality.
- 3) Regulation of the Minister of Health of the Republic of Indonesia Number 269/MENKES/PER/III/2008 concerning Medical Records:
 - a. Article 5: Determines that medical records must be compiled, filled in and maintained carefully, clearly and accurately.
 - b. Article 15: Gives patients the right to access and obtain a copy of their medical records.
- 4) Regulation of the Minister of Health of the Republic of Indonesia Number 67 of 2016 concerning Pharmaceutical Services in Pharmacies:
 - a. Article 50: Establishes that pharmacists and pharmaceutical personnel are obliged to maintain the confidentiality of patient information.
- 5) Law Number 36 of 2009 concerning Health:
 - a. Article 101: Establishes that everyone has the right to have information about themselves stored in medical records.
 - b. Article 102: Explains that medical records must be kept and kept confidential.

Rights and Obligations of Related Parties According to Indonesian Law:

- 1. Patient:
- Right to Privacy: Patients have the right to maintain the privacy and confidentiality of their personal information contained in their medical records.
- Right to Obtain Information: Patients have the right to obtain the information contained in their medical records.
- 2. Healthcare Providers:
 - Duty to Maintain Confidentiality: Health care providers are required to maintain the confidentiality of patient medical records in accordance with the law.
 - Obligation to Store and Organize Well: Must keep medical records well and arrange them carefully, clearly and accurately.
- 3. Hospitals and Pharmacies:
 - Obligation to Keep Medical Records: Hospitals and pharmacies are required to keep patient medical records in accordance with applicable regulations.
 - Duty to Maintain Confidentiality: Must maintain the confidentiality of patient medical information.
- 4. Government:



- Establishing Regulations: The government has the responsibility to establish regulations regarding medical records and ensure their implementation.
- Law Enforcement: Enforcing the law against violations related to medical record management.

It is important to remember that rules and regulations can change, so it is important to always refer to the latest regulations that apply in the context of medical record management in Indonesia.

3. Method Study

According to Soerjono Soekanto, a method is a process or systematic way to understand a problem through structured steps. Research, as a tool used by humans to strengthen, develop and develop knowledge, involves this process.

1. Research Specifications

The method applied is descriptive analytical, which describes the applicable laws and regulations related to legal theories and practice of implementing positive law related to the responsibility of medical records and hospitals for leaks of patient medical record information. Descriptive research aims to detail certain phenomena related to theory and solve problems that arise.

2. Approach Method

The method applied in this research is the normative juridical method, a deductive approach that uses theory as a starting point for answering research questions. This research will analyze articles in laws and regulations related to the responsibility of medical records and hospitals regarding medical record leaks.

In the context of normative research, a conceptual approach is used to understand concepts such as the responsibilities of doctors, hospitals, and medical records. These concepts are the basis for producing norms in the rule of law.

3. Research Stage

- a) Literature Research: Involves literature study to collect secondary data, including primary and secondary legal materials related to the responsibilities of doctors and hospitals.
- b) Field Research: Conducted by interviews and direct observation of health workers in hospitals to support literature study.

4. Data Collection Techniques

- a) Primary Legal Material: Involves binding legislation such as the 1945 Constitution, Law No. 29 of 2004, Law No. 36 of 2009, and RI Minister of Health Regulation No. 269/MENKES/PER/III/2008.
- b) Secondary Legal Materials: Involves law books and legal works from various sources.
- c) Tertiary Law Materials: Includes dictionaries, encyclopedias, indexes, and cumulatives.



5. Data Collection Tools

- a) Literature Study: Search for and collect secondary data such as laws and regulations, scientific journals, and scientific articles related to the responsibilities of doctors and hospitals.
- b) Field Study: Using interview techniques with health workers to obtain primary data.

6. Data Analysis

- a) The choice of analysis must be appropriate to the type, research objectives, and nature of the data collected.
- b) Qualitative descriptive analysis is used to group, select, and connect data from field research with theories and laws that have been studied.

4. Results and Discussion

1. Ethical aspects in administering the medical record system.

Implementation of an efficient medical record system plays an important role in improving the quality of health services. Electronic Medical Records (EMR) managed by Blockchain technology have been identified as a potential solution to create a more efficient and interoperable infrastructure for managing records, leading to improved health outcomes (Vazirani et al., 2020). This approach ensures maintenance of ownership and privacy of patient data, addressing ethical concerns regarding data security and patient confidentiality. Additionally, the use of Personal Health Records (PHRs) is recognized as beneficial, with recommendations developed to promote PHR adoption and overcome barriers to its implementation (Tang et al., 2006). In addition, the role of electronic health records in improving the quality of health services and supporting qualified staff in their tasks has been emphasized, highlighting their significance in decision making and health management (Tasri & Tasri, 2020).

Furthermore, the importance of medical records in the provision of public health services has been emphasized, emphasizing their irreplaceable role in health service delivery (Marutha & Ngoepe, 2017). Medical records management is recognized as fundamental to improving health knowledge, quality, patient experience, and associated costs, demonstrating its significance in improving health services (Monga & Singh, 2022). Therefore, ethical aspects in the administration of medical record systems are closely related to the efficient management of patient data, ensuring privacy, security, and ownership, while also contributing to improving health outcomes and decision-making processes.

2. Legal aspects in administering the medical record system.

The legal implications of electronic medical records are very significant, because the absence or completeness of medical records can result in administrative, criminal and civil sanctions (Mardi, 2022). Therefore, medical record administration must comply with legal requirements to avoid potential sanctions. Additionally, the migration of medical records to cloud-based platforms has facilitated data exchange between health and research institutions, enabling faster and more convenient exchange, which has legal implications regarding data privacy and security (Xia et al., 2017).



The medical record system in Indonesia not only relies on technology to manage patient health information, but also must comply with a strict legal framework. The legal implications in implementing a medical record system are very important, because they involve aspects of privacy, security and compliance with applicable regulations.

One regulation that is very relevant in this context is Law Number 36 of 2009 concerning Health. This law establishes the legal basis for managing health information, including medical records. The main point that medical record system administrators must pay attention to is the protection of patient data, including the right to privacy and confidentiality of health information. Violation of this provision may result in administrative sanctions and even criminal sanctions, in accordance with the provisions regulated in law.

Apart from the Health Law, it is also important to understand the role of Law Number 11 of 2008 concerning Electronic Information and Transactions (ITE) in the context of electronic medical records. ITE establishes provisions related to the security and validity of electronic documents, including electronic medical records. This indicates the need to implement adequate information technology security measures to protect the integrity and authentication of patient data.

3. The impact of ethical and legal aspects on patient health practices.

The impact of ethical and legal aspects on patient healthcare practices is a critical area that deserves attention in the healthcare industry. Ethical considerations play an important role in shaping the decisions and actions of health care providers, especially nurses and social workers, as they face complex patient care scenarios (Ulrich et al., 2007). The ethical climate and ethical stress experienced by healthcare professionals can have a direct influence on their job satisfaction and ultimately influence the quality of patient care (Ulrich et al., 2007). Additionally, the management of safe patient care and medical errors among nurses is closely related to the ethical climate and ethical-legal aspects in healthcare settings (Aly et al., 2020). This highlights the importance of fostering an ethical climate and addressing legal aspects to ensure patient safety and quality care.

In the context of psychiatric mental health nursing, ethical considerations regarding the use of coercive measures are important to maintain the principles of respect for autonomy, courage, non-harm, and justice in health practice (Manderius et al., 2023). Nurses must navigate these ethical principles and give priority to ethical theory to ensure comprehensive ethical consideration in their practice, highlighting the central role of ethical principles in patient care (Manderius et al., 2023).

Additionally, the ethical impact of technology on health systems is a growing area of concern, as technology-mediated health practices raise complex ethical issues that require careful consideration (Ali, 2020). Ethics committees play an important role in addressing these challenges and working with health stakeholders to find ethical solutions to complex medical cases, emphasizing the need for an ethical framework to guide technology-mediated health practices (Ali, 2020).

In addition, ethical decision-making in the patient care process by pharmacists is an important aspect of health practice, because it directly influences the quality of care provided to patients (Erstad, 2022). Principles of biomedical ethics and ethical decision-making frameworks are essential to guide healthcare professionals, including pharmacists, in navigating ethical dilemmas and ensuring patient-centered care (Erstad, 2022).



The impact of ethical and legal aspects on patient health practices is multifaceted and spans multiple dimensions of health care delivery. From influencing job satisfaction and patient safety to guiding decision making in complex healthcare scenarios, ethical considerations are an integral part of ensuring high-quality patient care.

4. Discussion Analysis

a. Ethics in Medical Records Management

Violation of the confidentiality of medical records is a serious problem in the health system, with several cases involving both health workers and other unauthorized parties. The implications are profound, including loss of patient trust in the health system and can have detrimental personal and social impacts on the patient. The integrity of patient data is threatened by inaccurate information in medical records, which can include inaccuracies or completeness of data. The impacts include inappropriate care delivery, difficulties in long-term care planning, and the risk of errors in diagnosis or treatment.

Inappropriate access to medical records by unauthorized parties is a serious finding with significant implications. In addition to harming patient privacy, unauthorized access can be misused for unethical purposes, such as discrimination or misuse of information. Delays in patient access are a major barrier to providing continuity of care and can result in difficulties for patients understanding their health condition.

The lack of transparency in providing information to patients about their medical records is also a finding that needs serious attention. The impact can hinder patients' active participation in health decision making, as patients may not fully understand their diagnosis, prognosis, or treatment plan. Therefore, protection of confidentiality, data integrity and appropriate access to medical record information is essential to ensure ethical and sustainable health practices in Indonesia.

b. Analysis of Legal Aspects in Medical Records Management

Violations of the confidentiality and privacy of medical records, which include unauthorized actions by both health professionals and other unauthorized parties, can have serious legal implications. These findings could trigger lawsuits by patients who feel they have been harmed by the violations. Penalties and sanctions in accordance with relevant regulations, such as the Health Law, can be applied in response to violations of the confidentiality and privacy of medical records.

Inaccuracies or manipulation of information in medical records are also serious findings that can lead to legal consequences. These violations, including attempts to manipulate medical data, can give rise to lawsuits by patients who feel disadvantaged. Penalties and sanctions imposed by the legal system may include misuse of medical information.

Delays or failures in patient access to medical records, especially if accompanied by denial of access by health authorities, can involve legal action. Patients have a right guaranteed by law to access their medical records, and violations of this right may result in legal action seeking restoration of the patient's rights.

Non-transparency of information to patients about their medical records can also have legal consequences. Patients have the right to accurate and complete information regarding their health condition, and violations of this right may result in legal action.





Failure to implement health standards, especially those related to security and privacy, can also trigger legal consequences. Violations of security and privacy standards may lead to legal action and sanctions in accordance with applicable regulations.

Overall, the legal aspects of medical record management are very important to protect the rights and interests of patients, as well as maintain integrity and trust in the health system. Consistent and firm law enforcement is needed to prevent and respond to these violations.

c. Implications of Ethical Aspects for Patient Health Practices

The importance of maintaining patient trust in medical record management cannot be ignored. Noncompliance with ethical principles in this case can have serious consequences, undermining patient confidence in the health system. Ethical violations, such as inaccurate information, inappropriate access, or lack of transparency, can hinder collaboration in care and make it difficult to establish a positive doctor-patient relationship.

The impact on patient privacy is a direct consequence of ethical violations in medical record management. Violations of privacy can cause emotional and psychological stress in patients, creating the risk of denial or delays in seeking care. The security and confidentiality of medical information is an important foundation for maintaining the emotional and psychological well-being of patients.

Inequitable access to information creates challenges in patients' efforts to be active partners in decision making regarding their care. Delays or inequalities in access to information can prevent patients from properly understanding their health conditions, reducing their participation in decision-making processes regarding self-care.

Patient education is key to ensuring a good understanding of their health condition. Accurate and clear information allows patients to actively participate in disease management and care decision making. Non-compliance with ethical principles in providing information can harm patients and hinder the potential for improving their health.

The impact on quality of care is a major concern because inaccurate or incomplete information can harm patients. The reliability of medical data is crucial for providing care that is appropriate to actual conditions. Therefore, to overcome ethical problems in medical record management, joint efforts are needed to strengthen compliance with regulations, increase ethical awareness among health workers, and give appropriate priority to the rights and interests of patients. This not only improves the quality of healthcare services but also builds a solid foundation for positive relationships between patients and healthcare providers in Indonesia.

d. Implications of Legal Aspects for Patient Health Practices

Lawsuits by patients who feel their legal rights have been violated have serious implications for violations in medical record management. Patients have the right to demand justice and compensation for violations of the privacy or confidentiality of their medical records. These lawsuits can potentially result in financial and reputational losses for the health care providers involved, providing significant penalties for ethical violations.

Administrative sanctions that can be imposed by health authorities pose a serious threat to health service providers who violate regulations related to medical record management. These implications include the potential for fines, license withdrawal, or other sanctions that could affect the operations and continuity of health service providers.





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The importance of compliance with regulations in managing medical records is a necessity to avoid legal consequences that may arise. This compliance includes implementation of best practices, indepth understanding of applicable regulations, and strict supervision of medical record management processes.

Legal violations in medical record management can have a negative impact on the reputation of health service providers. These implications include the risk of losing the trust of patients and the public, which could impact the number of patients seeking health services at these institutions. Maintaining a good reputation is key to supporting the sustainability of health service providers.

Legal protection for patients is a critical aspect recognized by the legal system. Patient rights regarding access to information, privacy and confidentiality of medical records need to be maintained and strengthened. The legal system provides a basis for protecting patients from violations of these rights and for administering justice in cases of violations. Therefore, awareness and compliance with legal aspects in managing medical records is a crucial step in ensuring integrity and ethics in health practices in Indonesia.

5. Conclusion

Overall, the ethical and legal aspects of medical record management have significant implications for patient health practices in Indonesia. Findings regarding breaches of confidentiality, inaccurate information, inappropriate access, delays in patient access, and non-transparency of information create serious challenges in maintaining patient trust, protecting privacy, and ensuring the integrity of medical data.

From an ethical perspective, the importance of maintaining patient trust is the main focus. Violations of ethical principles, such as breaches of confidentiality and manipulation of information, can damage the doctor-patient relationship and inhibit patients' active participation in their care. The impact includes the risk of emotional stress on patients and difficulties in seeking care, highlighting the urgency of maintaining ethics as a strong foundation in the administration of medical record systems.

From a legal perspective, serious implications such as lawsuits by patients, administrative sanctions, and risks to the reputation of health institutions emphasize the importance of compliance with applicable regulations. The Health Law and the Information and Electronic Transactions Law form critical legal foundations, requiring medical record system administrators to adhere to high standards regarding privacy, security and access to information.

These ethical and legal impacts have direct consequences on patient health practices. Patient trust in the health system can be eroded, complicating the shared decision-making process between patients and health professionals. Therefore, there is a need for improvements in medical record management, including increasing ethical awareness among health workers, implementing best practices, and strict law enforcement to protect the rights and interests of patients.

To achieve ethical and legal health practices in Indonesia, collaboration between stakeholders, the application of adequate technology, and continuous education of health workers and patients are crucial steps. Only with this holistic approach can health systems achieve a high level of integrity, sustainability and trust in managing patient medical records.



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