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Electronic Medical Records (ELMR) and the Public Perspective on Privacy Rights

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Abstract: This study aims to analyze the implementation of Electronic Medical Records (EMR) at Hidayah General Hospital Boyolali, focusing on the public perspective regarding patient privacy rights. The research employs a descriptive quantitative method with a survey approach. Data were collected through questionnaires filled out by 100 inpatients. The findings indicate that both the public perspective and patient privacy rights have a significant impact on the implementation of EMR. The public perspective contributes 39.4%, while patient privacy rights contribute 41.0%. Additionally, this study found that the level of EMR implementation is directly influenced by the public perspective (19.9%) and patient privacy rights (23.0%), as well as indirectly through electronic medical records (15.5% and 16.1%). These findings suggest that respecting patient privacy rights and understanding the public perspective are key factors in the successful implementation of EMR. The study recommends enhanced training for healthcare professionals, strengthening privacy policies, and developing feedback systems to improve healthcare service quality.

Keyword: Electronic Medical Records (EMR), Patient Privacy Rights, Public Perspective, Hidayah General Hospital Boyolali.

INTRODUCTION

The development of information technology has brought significant transformations to the healthcare sector, one of which is the implementation of Electronic Medical Records (EMR). EMR is a digital system for managing patient data, aimed at improving the efficiency and quality of healthcare services (Amelia & Rusydi, 2021). This technology allows healthcare professionals to access patient medical information quickly, which not only accelerates decision-making processes but also reduces the likelihood of medical errors often associated with manual record-keeping (Gartner, 2020). Additionally, EMR can reduce paper usage, aligning with efforts to mitigate environmental impacts within the healthcare sector (SaputraD & Dyahariesti, 2024).

However, despite the numerous benefits of EMR, such as rapid access to medical data and improved coordination of care, challenges related to patient data privacy and security remain critical issues (Budiyanti et al., 2019). As the volume of electronically managed medical

data increases, the risks of data breaches or misuse of patient data also escalate. On the other hand, EMR can improve referral systems between hospitals and facilitate communication among healthcare providers, which in turn can enhance the overall quality of patient care (Smith & Jones, 2021).

Patient privacy is a fundamental aspect that must be protected in the use of EMR. Patients have the right to control their medical information and ensure that such data is only accessed by authorized parties (Kusnadi, 2021). In the context of EMR, this privacy includes control over who can access patient data, under what circumstances, and how that data is used. Protection of personal data is not only related to individual patient rights but also to the management of sensitive data, which can lead to significant social and legal consequences in the event of a breach (Chen et al., 2018).

However, patient awareness of their privacy rights is often limited, necessitating efforts to increase understanding and patient involvement in medical data management (Handiwidjojo, 2015). Several studies have found that although most patients desire their data to be kept confidential, many do not fully understand their rights regarding the management of their medical information (Johnson & Thompson, 2019). This underscores the importance of ongoing patient education about their rights in the digital healthcare system. For example, patients need to be provided with clear information about the procedures for accessing and controlling their medical data, as well as how their rights are protected in hospital policies.

This study aims to analyze the implementation of EMR at Hidayah General Hospital in Boyolali, with a focus on public perspectives regarding patient privacy rights. Hospitals, as institutions entrusted with patient data, have a significant responsibility in both protecting patient data and promoting the importance of privacy in the management of digital medical data. Hospitals that implement EMR must understand that protecting patient data is a non-negotiable responsibility, given the high level of trust patients place in healthcare professionals and hospitals (Grogan et al., 2016).

The research questions posed are: (1) How is the process of EMR implementation at Hidayah General Hospital in Boyolali? (2) What are the procedures for patient privacy rights in the implementation of EMR? (3) What is the public perspective on patient privacy rights concerning the implementation of EMR? These questions aim to explore in greater depth how the hospital views and manages patient data digitally, as well as how it involves patients in maintaining the privacy of their medical information.

METHOD

This study employs a descriptive quantitative method with a survey approach. (Kelik Wardiono, 2019) A survey approach allows the researcher to directly collect data from respondents, namely patients who use the EMR service at Hidayah General Hospital in Boyolali. Using this method, the researcher can describe the phenomena occurring in the field regarding the implementation and management of privacy within EMR without altering or manipulating existing variables (Sekaran & Bougie, 2016).

The research population consists of inpatients at Hidayah General Hospital in Boyolali who have used EMR. A sample of 100 respondents was selected using proportional stratified random sampling. This technique was chosen to ensure that the sample accurately represents the diverse population in terms of age, gender, and other background characteristics. The selected sample is expected to provide an accurate depiction of patients' attitudes, knowledge, and experiences concerning EMR and their privacy rights.

Data were collected using a questionnaire consisting of closed-ended questions with a 1-5 Likert scale. This Likert scale was chosen because it provides a clear depiction of the extent to which respondents agree or disagree with statements regarding EMR management and privacy. The use of this scale also allows for more objective and measurable data processing and simplifies the analysis of relationships between variables.

Data analysis was performed using path analysis with the aid of SPSS and AMOS software. Path analysis is a statistical method used to analyze causal relationships between variables, both direct and indirect. By using this analysis, the researcher can identify factors that influence the success of EMR implementation and measure the impact of public perspectives and patient privacy rights on these outcomes (Hair et al., 2019).

RESULTS AND DISCUSSION

Respondent Characteristics

The survey results indicated that 52% of respondents were male and 48% were female. The majority of respondents were aged 21 (54%), followed by those under 20 years (16%) and over 22 years (14%). These age differences suggest that most patients involved in this study were in their young adulthood, which may make them more receptive to adopting new technologies like EMR compared to older age groups (Dixon & O'Leary, 2020). Knowledge of privacy rights is also often better among younger individuals, who are more accustomed to using digital technologies in their daily lives.

The Impact of Public Perspective on EMR Implementation

The analysis showed that public perspective had a significant influence on the implementation of EMR ($\beta = 0.394$; $p < 0.05$). This indicates that patient involvement in the care process and their understanding of the benefits of EMR contribute positively to the success of its implementation. This finding aligns with previous research that states that patient participation in medical decision-making can improve satisfaction and care outcomes (Coulter & Ellins, 2007). Patients who understand the benefits of EMR are more likely to trust and use the system optimally, which, in turn, enhances the quality of healthcare services.

The Impact of Patient Privacy Rights on EMR Implementation

Patient privacy rights also had a significant impact on the implementation of EMR ($\beta = 0.410$; $p < 0.05$). Respect for patient privacy rights increased their trust in the EMR system, thereby encouraging openness in sharing medical information. This finding is consistent with research that emphasizes the importance of protecting patient privacy data as a key factor in building trust between patients and healthcare providers (Martin et al., 2018).

The Combined Influence of Public Perspective and Patient Privacy Rights on EMR Implementation

Path analysis revealed that both public perspective and patient privacy rights influenced the level of EMR implementation both directly and indirectly. The direct impact of public perspective on EMR implementation was 19.9%, while the indirect impact through EMR was 15.5%. Meanwhile, the direct impact of patient privacy rights on EMR implementation was 23.0%, with an indirect impact through EMR of 16.1%. These findings suggest that EMR serves as a mediator in the relationship between public perspective, patient privacy rights, and the level of EMR implementation.

CONCLUSION

This study concludes that both public perspective and patient privacy rights have a significant impact on the implementation of Electronic Medical Records (EMR) at Hidayah General Hospital in Boyolali. Patient involvement in the care process and the respect for their privacy rights are key factors in the successful implementation of EMR. The findings indicate that when patients feel their privacy rights are respected and protected, they are more likely to accept and utilize EMR technology. This is important because patient trust forms the foundation for the success of EMR systems, ultimately improving the quality of healthcare services. Furthermore, these findings align with previous research, which highlights that the success of

EMR systems heavily relies on the trust-based relationship between patients and healthcare providers (Coulter & Ellins, 2007; Martin et al., 2018).

One of the main contributions of this research is the deeper understanding of how public perspective, encompassing patient awareness and participation, can influence the effectiveness of EMR implementation. The study also underscores the importance of training for healthcare professionals to enhance their understanding of patient privacy rights and their role in ensuring EMR implementation in compliance with applicable privacy standards. Path analysis also demonstrates that EMR serves as a mediator linking public perspective and respect for patient privacy rights in supporting the successful implementation of EMR.

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