

The Analysis of Medical Records Confidentiality Protection in Compliance with the Clinical Accreditation Standard 3.4 at Klinik Prima Husada- Bandung

Fatima Lanao¹; Prihartono Aksan Halim²
Politeknik Piksi Ganesha, Indonesia

Abstract:- The purpose of this study is to analyse medical record confidentiality protection in compliance with the clinical accreditation standard 3.4 at Klinik Prima Husada. A quantitative research method with a descriptive approach was used. Data was collected through observations, questionnaires, and literature reviews. Based on the findings with the number of samples of $n = 11$ respondents other indicators performed significantly above chance, but not other indicators. After the analysis, we conclude that the confidentiality of medical records at Klinik Prima Husada has not fully complied with the confidentiality aspects of medical records in some terms.

Keywords: Protection, Confidentiality Of Medical Records, Clinic Accreditation Standards.

I. INTRODUCTION

One of the supporting health services is the clinic. A clinic is a health service facility that organizes individual health services that provide basic and specialist medical services. Clinics in the era of decentralization have three functions, namely mobilizing health-oriented development, empowering the community, and empowering families, as well as providing first-level health services for society. Based on the type of service, the clinic is divided into two, namely the primary clinic (Klinik Pratama) and the main clinic (Klinik Utama). The primary clinic is a clinic that provides basic medical services, while the main clinic is a clinic that provides specialists in medical services, and it has a more complete facility. Klinik Prima Husada is a primary clinic that provides medical services to the community including an Outpatient, Clinical Laboratory, Pharmacy, and Medical Check Up. In the year 2023, the outpatient service consists of 2 polyclinics: a general polyclinic which has 2 permanent doctors, and a Dental polyclinic which has 1 doctor.

The community has the right to obtain quality and safe health services, promotive, preventive, curative, and rehabilitative health services. Wijaya et al. (2020) emphasize that quality and safe healthcare services require a comprehensive approach that involves the use of evidence-based practices, ongoing monitoring and evaluation, and a commitment to continuous improvement. Accreditation is a trigger for health service facilities to significantly improve the quality of care (Bogh et al., 2016).

According to Permenkes Number 46 of 2015 concerning accreditation of primary health care facilities, it requires every primary health to carry out accreditation as a way to guarantee the quality of health services. To meet the accreditation standards of a clinic, assistance from a competent facilitator is required, so that the clinic can build a clinical service system and program implementation, which is supported by good and correct governance and leadership that has a high commitment to providing safe, quality and affordable services to the community on an ongoing basis, and not just an assessment to obtain an accreditation certificate. Medical records are one of the bases for assessment based on the content of the information contained in the medical record file. Mardiani et al. (2019) define medical records as "a systematic documentation of a patient's medical information, including medical history, physical examination, laboratory test results, diagnosis, treatment, and other relevant information related to the patient's care and treatment". Medical record documents belong to healthcare facilities, while the contents of medical records belong to patients. Medical records must be kept and kept confidential by doctors, dentists, and leaders of healthcare facilities.

There are clinical accreditation standards relating to the contents of medical records. there are special standards written in the evaluation instrument Chapter III regarding Medical Record Information Management, especially in standard 3.4. For the criteria and elements of assessment related to the protection of the confidentiality of medical records, namely criterion 3.4.2, officers have access to information under the needs and responsibilities of the job. As for the first assessment element 3.4.2.1, policies and procedures for staff access to medical information are established. The second element of assessment 3.4.2.2 is the officer's access to the required information carried out by their duties and responsibilities. The third element of assessment 3.4.2.3 is the officer's access to information carried out according to policies and procedures. The fourth element of assessment 3.4.2.4 is the right to access the information considering the level of confidentiality and information security.

Mustikasari (2016) discusses the relationship between medical records and Clinical Accreditation Standard 3.4, which focuses on the documentation of patient care. Specifically, the author notes that medical records are a critical component of meeting this standard, as they provide a detailed and comprehensive record of the care that patients receive.

Based on the background above, the authors are interested in making this problem an object of research entitled "The Analysis of Medical Records Confidentiality Protection In Compliance With the Clinical Accreditation Standard 3.4 at Klinik Prima Husada- Bandung".

II. LITERATURE REVIEW

A. Medical Records

By the Republic of Indonesia's Minister of Health's Regulation No. 24 of 2022, medical records are records that include information about patients' identities, examinations, treatments, and other services that have been provided to them. A medical record contains information on a patient's name, date and time of action, anamnesis findings, complaints, disease history, physical exam findings and medical support, diagnosis, management plans, prescriptions, and/or actions, as well as additional supporting papers (Rosadi, 2016).

B. Confidentiality

Confidentiality refers to the restriction of access to personal information from unauthorized persons and processes at authorized times and in an authorized manner (Costa et al., 2020). Patients have the right to confidentiality; it refers to keeping privileged communication secret and cannot be disclosed without the patient's authorization.

C. Confidentiality of Medical Records

Medical record confidentiality is crucial for ensuring that patients receive treatment in a secure and comfortable context. Patients receive assurances that the privacy of their medical information will be maintained. All parties involved in healthcare services at healthcare facilities are required to maintain the confidentiality of the contents of medical records, even though the patient has passed away, it is by the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Medical Records.

D. Protection

The Merriam-Webster Dictionary defines protection as maintaining something or someone's safety. Things are sheltered and defended by protection. Safa'at (2016) also defines protection as the act of safeguarding someone or something from harm, damage, or danger.

E. Protection of Medical Records

Protection of medical records is available only to authorized individuals, and protection from loss or unauthorized modifications is a general definition of protection in the context of medical records as stated by (Hsu, Huang, & Chen, 2019)

F. Protected Health Information

Any information that a healthcare professional gathers, creates, uses, or discloses while providing healthcare services relates to a patient's physical or mental health (Savitri et al., 2019). The Peraturan Menteri Kesehatan (Permenkes) No. 58 Year 2021 regulation governs the management of protected health information in Indonesia. It lays out rules for the acquisition, storage, use, and disclosure of medical records and other PHI, and it mandates that healthcare providers put security, confidentiality, and privacy safeguards in place.

G. Access Control

Access control refers to the ability to determine who is authorized to access certain resources, and to limit or control the activities that a user can perform on those resources (Whitman & Mattord, 2019, p. 217).

H. Accreditation

According to (Frank et al., 2020) accreditation is a procedure that involves a formal assessment of a system, institution, or educational program following specified standards by an external authority for the goals of quality assurance and improvement. When a healthcare organization applies for accreditation, qualified external peer evaluators assess its conformity with defined performance requirements.

I. Clinic Accreditation

Clinical accreditation is the recognition of clinical health facilities offered by an independent organization administering accreditation mandated by the Minister of Health, following an evaluation that the clinic meets accreditation standards. Regulation of the Minister of Health No. 46 of 2015 concerning Accreditation of Health Centers, Primary Clinics, and Independent Practicing Places for Doctors and Dentists contains provisions about the implementation of clinical accreditation.

J. Clinic Accreditation Standard

Accreditation is a real commitment to ensuring that the healthcare environment and healthcare facilities always improve the quality and safety of care. With the emphasis that accreditation is continuous improvement, clinic accreditation standard is organized into 4 Chapters, namely:

- Chapter I. Leadership and Clinical Management
- Chapter II. Patient-Oriented Clinical Treatment
- Chapter III. Clinical Service Support Management
- Chapter IV. Clinical Quality Improvement and Patient Safety

III. RESEARCH METHODOLOGY

This study is a quantitative design, particularly a descriptive research method. The qualitative method is a method in which data generated is in the form of descriptive data where the information is collected through the form of words or speeches (Keterkaitan et al. 2020). In this study, the researchers particularly used a descriptive approach to manage problems in the study and contemplate its purpose. According to Sugiyono (2019), descriptive research is research conducted to determine the value of an independent variable, either one variable or more (independent) without making comparisons, or connecting with other variables.

A. Data collection technique

Data collection in this study is aimed at obtaining a score that serves as a director for the relationship between the effect of confidentiality protection of medical records on clinical accreditation standards 3.4. at the Klinik Prima Husada. In this study, researchers used several data collection techniques, including: Observations, literature study, and questionnaires, in answering the questionnaire, a Likert Rating Scale with a scale of 5 for Strongly Agree, 4 for Agree, 3 for Neither, 2 for Disagree and 1 for Strongly disagree were used.

B. Population and sample

According to Sugiyono (2019: 126), the population is a generalization area consisting of objects/subjects that have certain quantities and characteristics which are determined by the researcher to study and then draw conclusions. The study uses a total sampling method, namely all medical, administrative, and record officers with a total of 11 people.

C. Hypothesis

- Ho: there is no significant connection between medical records confidentiality protection and clinical accreditation standard 3.4 at Klinik Prima Husada-Bandung
- H1: there is a significant connection between medical records confidentiality protection and clinical accreditation standard 3.4 at Klinik Prima Husada-Bandung.

D. Statistical treatment of data

The obtained data will be tabulated for analysis using the Microsoft Excel 2010 software and converted to Statistical Package for the Social Sciences (SPSS) data using the Statistical Analysis System (SAS) software with the following statistical treatments:

- **Pearson's correlation.** This was utilized to test the validity of the linear relationship between the protection of medical records privacy and accreditation standard 3.4 at Klinik Prima Husada. Using the smallest coefficient limit of 0.3 to assess the validity of the item questions (Sugiyono, 2019). The results of this study cannot be drawn from items with a correlation coefficient of less than 0.3 since they are deemed invalid.
- **T-Test.** This was utilized to examine if there is a statistically significant difference between the means of the two groups that may be related to certain characteristics. The t-test is one of many statistical tests used for hypothesis testing.
- **Coefficient of determination.** It is used to calculate the percentage of variance in one factor (Y) that can be explained by knowing the values of another factor (X). This study, it is used to determine how much confidentiality of medical records is against clinical accreditation standards. 3.4.

IV. RESULTS AND DISCUSSION

A. Confidentiality Protection of Medical Records at Klinik Prima Husada (Results from statistical treatment of data) :

➤ Pearson's Correlation Results

| | Mean | Std. Deviation | N |
|--|--------|----------------|----|
| Protected Health Information | 4.4091 | .62523 | 11 |
| Health Facility Leadership and Management Requirements | 3.9545 | .72300 | 11 |
| Improvement of Clinical Quality and Patients Safety | 4.2727 | .78625 | 11 |
| Access Control | 4.8182 | .40452 | 11 |
| Patient-Oriented Clinical Service Terms | 4.3636 | .50452 | 11 |
| Requirements for Supporting Management of Clinical Service | 4.1818 | .40452 | 11 |

Table 1: Descriptive Statistics

| | | Protected Health Information | Leadership Management of Clinical Service | Clinical Quality and Patients Safety | Access Control | Patient-Oriented Clinical Service Terms | Requirements for Supporting Management of Clinical Service |
|---|---------------------|------------------------------|---|--------------------------------------|----------------|---|--|
| Protected Health Information | Pearson Correlation | 1 | .875 | .971 | .521 | .432 | .072 |
| | Sig (2-Tailed) | | .000 | .000 | .100 | .184 | .834 |
| | N | 11 | 11 | 11 | 11 | 11 | 11 |
| Health Facility Leadership - Management of Clinical Service | Pearson Correlation | .875 | 1 | .904 | .311 | .598 | .202 |
| | Sig (2-Tailed) | .000 | | .000 | .352 | .052 | .551 |
| | N | 11 | 11 | 11 | 11 | 11 | 11 |
| Improvement of Clinical-Quality and Patients Safety | Pearson Correlation | .971 | .904 | 1 | .486 | .481 | .143 |
| | Sig (2-Tailed) | .000 | .000 | | .130 | .134 | .675 |
| | N | 11 | 11 | 11 | 11 | 11 | 11 |
| Access Control | Pearson Correlation | .521 | .311 | .486 | 1 | -.134 | -.389 |
| | Sig (2-Tailed) | .100 | .352 | .130 | | .695 | .237 |
| | N | 11 | 11 | 11 | 11 | 11 | 11 |
| Patient-Oriented Clinical-Service Terms | Pearson Correlation | .432 | .598 | .481 | -.134 | 1 | .624 |
| | Sig (2-Tailed) | .184 | .052 | .134 | .695 | | .040 |
| | N | 11 | 11 | 11 | 11 | 11 | 11 |
| Requirements for Supporting-Management of Clinical Service | Pearson Correlation | .072 | .202 | .143 | -.389 | .624 | 1 |
| | Sig (2-Tailed) | .843 | .551 | .675 | .237 | .040 | |
| | N | 11 | 11 | 11 | 11 | 11 | 11 |

Table 2: Pearson’s Correlation Result

Pearson Correlation of the first indicator, Protected Health Information and Leadership Management of Clinical Service was found to be highly positive and statistically highly significant ($r=.875$. $p<0.001$), Protected Health Information and Clinical Quality and Patients Safety was found to be highly positive and statistically highly significant ($r=.971$ $p<0.001$), Protected Health Information and Patient-Oriented Clinical Service Terms was found to be low positive and not statistically significant ($r=.432$. $p>0.05$), Protected Health Information and Requirements for Supporting Management of Clinical Service was found to be highly positive and not statistically significant ($r=.072$. $p>0.05$)

Pearson Correlation of the second indicator, Access Control and Leadership Management of Clinical Service was found to be low positive and not statistically significant ($r=.375$. $p>0.05$), Access Control and Clinical Quality and Patients Safety was found to be highly positive and not statistically significant ($r=.486$ $p>0.05$), Access Control and Patient-Oriented Clinical Service Terms was found to be low positive and not statistically significant ($r=-.134$ $p>0.05$), Access Control and Requirements for Supporting Management of Clinical Service was found to be low positive and not statistically significant ($r=-.389$ $p>0.05$)

This shows that an increase in medical records confidentiality protection would lead to a good clinical accreditation rate.

➤ Hypothesis Testing (T-Test)

| Indicators | P-Value (Significant level at 0.05) |
|------------|-------------------------------------|
| A-A | 0.03994 |
| A-B | 0.41609 |
| A-C | 0.08286 |
| A-D | 0.034935 |
| B-A | 0.00249 |
| B-B | 0.03031 |
| B-C | 0.00145 |
| B-D | 0.05413 |

Table 3: T-test results

The result of a t-test is less than .05. it means that the p-value associated with the test is less than .05. Thus, the null hypothesis is rejected, it means that the observed

difference between the means of the two groups being compared is statistically significant at the chosen level of significance (typically 5%).

➤ *Coefficient of Determination*

| Coefficients ^a | | | | | | | | |
|---------------------------|--|-----------------------------|------------|---------------------------|-------|------|---------------------------------|-------------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 1.518 | .656 | | 2.313 | .060 | -0.88 | 3.124 |
| | Health Facility Leadership and Management Requirements | .010 | .213 | .012 | .049 | .962 | -.510 | .531 |
| | Patient-Oriented Clinical Service Terms | .004 | .191 | .003 | .201 | .984 | -.463 | .471 |
| | Requirements for Supporting Management of Clinical Service | -.110 | .193 | -.071 | -.569 | .590 | -.581 | .362 |
| | Improvement of Clinical Quality and Patients Safety | .770 | .177 | .969 | 4.358 | .005 | .338 | 1.203 |

Table 4. Coefficient of Determination Results Indicator 1

- a. Dependent Variable: Protected Health Information
- b. Predictors: (Constant), Health Facility Leadership and Management Requirements, Patient-Oriented Clinical Service Terms, Requirements for Supporting Management of Clinical Service, Improvement of Clinical Quality and Patients Safety

Multiple regression was run to predict: Protected Health Information from Health Facility Leadership and Management Requirements, Patient-Oriented Clinical Service Terms, Requirements for Supporting Management of Clinical Service, Improvement of Clinical Quality and Patients Safety These variables statistically significantly predicted Protected Health Information, $F(4,6) = 26.928$ $p < .005$, $R^2 = .947$ All four variables added statistically significantly to the prediction, $p < .05$.

| Coefficients ^a | | | | | | | | |
|---------------------------|--|-----------------------------|------------|---------------------------|-------|-------|---------------------------------|-------------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
| | | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| 1 | (Constant) | 5.561 | 1.300 | | 4.278 | .005 | 2.380 | 8.743 |
| | Health Facility Leadership and Management Requirements | -.251 | .421 | -.448 | -.595 | .574 | -1.282 | .780 |
| | Patient-Oriented Clinical Service Terms | -.094 | .378 | -.1173 | -.249 | .8124 | -1.019 | .83 |
| | Requirements for Supporting Management of Clinical Service | -.368 | .382 | -.368 | -.964 | .372 | -1.303 | .556 |
| | Improvement of Clinical Quality and Patients Safety | .514 | .350 | 1.000 | 1.469 | .192 | -.342 | 1.371 |

Table 5. Coefficient of Determination Results Indicator 2

- a. Dependent Variable: Access Control
- b. Predictors: (Constant), Health Facility Leadership and Management Requirements, Patient-Oriented Clinical Service Terms, Requirements for Supporting Management of Clinical Service, Improvement of Clinical Quality and Patients Safety

Multiple regression was run to predict: Access Control from Health Facility Leadership and Management Requirements, Patient-Oriented Clinical Service Terms, Requirements for Supporting Management of Clinical Service, Improvement of Clinical Quality and Patients Safety. These variables statistically significantly predicted Access Control, $F(4,6) = 1.533$ $p > .05$, $R^2 = .505$ All four variables added were not statistically significant to the prediction, $p < .05$.

- B. *Problems Relating to the Confidentiality Protection of Medical Records In Compliance with the Clinical Accreditation Standards 3.4. at the Klinik Prima Husada*
- Regulations consisting of existing policies and SOPs do not regulate the confidentiality of medical records, including anyone who can access medical information. In addition, the limitations of patient medical information have not been strictly followed.
- The medical record storage rack is still mixed with other items, the storage shelf holds medical records and other files like accounting documents and staff files. So that the storage rack can be accessed by anyone.
- Access to the medical records storage room door is still unsecured, although the door is still closed.

- The CCTV is installed outside the room and is not limited to the storage room only.
- There are missing medical records. And other medical records are still not recovered because the medical records that are returned have not been properly monitored by officers. Patients can bring their medical record files after leaving the doctor's room

V. CONCLUSION

Based on the results of research through observation and questionnaire at the Klinik Prima Husada from Jan to March 2022, the authors conclude the analysis of medical records confidentiality protection in compliance with the clinical accreditation standard 3.4 at Klinik Prima Husada as follows:

- The confidentiality of medical records at Klinik Prima Husada has not fully complied with the confidentiality aspects of medical records in terms of environmental conditions, cleanliness, and tidiness of medical record storage rooms which have not been properly controlled. In terms of protection, there is no effort to guarantee medical records are not lost. In maintenance, medical/administrative record officers have to make repairs to medical record files if they see that they are no longer feasible (damaged). Handling of medical records, medical records have been stored in a storage rack but are still joined with other items besides medical records. And the storage room is easily accessible to anyone.
- Clinical accreditation cannot be implemented optimally where there are no policies and standard operating procedures regarding the confidentiality of medical records, so officers have to carry out their duties according to accreditation standards regarding medical record confidentiality.
- Access to the door of the medical record storage room does not yet have special security, even though the door is always closed, The CCTV is installed outside the room and is not limited to the storage room only.

REFERENCES

Documents

- [1.] Peraturan Menteri Kesehatan No. 9 Tahun 2014 Tentang Penyelenggaraan Klinik
- [2.] Peraturan Menteri Kesehatan No. 24 Tahun 2022 Tentang Rekam Medis
- [3.] Peraturan Menteri Kesehatan No. 26 Tahun 2018. Tentang Pelayanan Perizinan Berusaha Terintegrasi Secara Elektronik Sektor Kesehatan
- [4.] Peraturan Menteri Kesehatan No. 46 Tahun 2015 Tentang Akreditasi FKTP
- [5.] Peraturan Menteri Kesehatan Nomor 58 Tahun 2021 tentang Penyelenggaraan Rekam Medis pada Pelayanan Kesehatan.

Online Sources

- [6.] *Merriam-Webster's Collegiate Dictionary* (10th ed.). (1999). Merriam-Webster Incorporated.

Textbooks

- [7.] Mardiani, R., Sulistyowati, I., & Asyary, A. (2019). The quality of medical records in a hospital in Indonesia. In R. T. Abdullah, N. N. Sari, & S. M. Yusuf (Eds.), *Healthcare management in developing countries* (pp. 45-56). New York, NY: Springer.
- [8.] Mustikasari, Y. (2016). *Pengantar rekam medis [Introduction to medical records]*. Salemba Medika.
- [9.] Safa'at, M. A. (2016). *Rekam medis dan aspek hukumnya [Medical records and their legal aspects]*. Rajawali Pers.
- [10.] Whitman, M. E., & Mattord, H. J. (2019). *Principles of information security* (6th ed.). Cengage Learning.
- [11.] Wijaya, I. K., Novitasari, D., & Yusuf, A. (2020). Quality and safe health services. In M. S. Rizkita (Ed.), *Medical records: Principles and practices* (pp. 123-139). Jakarta: Sagung Seto.

Journals

- [12.] Bogh, S. B., Blaaka, G., & Henriksen, M. (2016). Accreditation is a trigger for quality improvement: a Danish perspective. *International Journal for Quality in Health Care*, 28(6), 654-659. doi: 10.1093/intqhc/mzw093
- [13.] de Sousa Costa, R., & de Castro Ruivo, I. (2020, October). Preliminary Remarks and Practical Insights on How the Whistleblower Protection Directive Adopts the GDPR Principles. In *Privacy Technologies and Policy: 8th Annual Privacy Forum, APF 2020, Lisbon, Portugal, October 22–23, 2020, Proceedings* (pp. 95-109). Cham: Springer International Publishing.
- [14.] Frank, J. R., Taber, S., van Zanten, M., Scheele, F., Blouin, D., & International Health Professions Accreditation Outcomes Consortium. (2020). The role of accreditation in 21st-century health professions education: report of an International Consensus Group. *BMC Medical Education*, 20, 1-9.
- [15.] Keterkaitan, L., Hidayat, R., & Nurdin, I. (2020). The Use of Qualitative Research Methods in Management Accounting Research. *Journal of Applied Accounting and Taxation*, 1(2), 115-122. doi: 10.5281/zenodo.4007688
- [16.] Rosadi, S. D. (2016). Implikasi Penerapan Program E-Health Dihubungkan Dengan Perlindungan Data Pribadi. *Arena Hukum*, 9(3), 403-420.
- [17.] Savitri, H. E., Nurchayati, S., & Hadi, S. P. (2019). Implementation of Health Information Privacy and Security Based on Health Information Systems Development Model in Indonesia. *Journal of Physics: Conference Series*, 1341(1), 012071.
- [18.] Sugiyono. 2019. *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. Bandung :Alfabeta.
- [19.] Hsu, J., Huang, K., & Chen, H. (2019). Security and privacy protection for electronic health records: A review of architectures and methods. *Journal of Medical Systems*, 43(4), 75