



Aspects Of Security And Confidentiality Of Medical Record Documents In Hospitals

(Literature Review)

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Abstract:

In accordance with the regulations of the Minister of Health of the Republic of Indonesia Number 24 (2022), the contents of medical records must be kept confidential by all parties involved in health services even if the patient has died. All medical records unit officers are fully responsible for the completeness and provision of files that are needed by the hospital at any time. Officers must be able to ensure that these files are stored and organized properly and protected from the possibility of file theft or leakage of the contents of medical records. The aim of this research is to determine the security and confidentiality aspects of medical record documents in hospitals based on journal review literature. This research method uses a literature review or literature study design. This data search uses databases published on the internet via open access channels such as Google Scholar. The keywords used are "aspects of security and confidentiality of medical records", "hospital". The selected articles are articles that meet the inclusion criteria: maximum journal publication deadline of 5 years (2020-2024), while the exclusion criteria used are different research objectives, journals only display abstracts or not full text, journals cannot be downloaded, titles and the same author but different sources. After searching for scientific articles via the Google Scholar channel, 7 articles were found that met the inclusion criteria from a review of 2,550 research articles. Continue data processing by carrying out data extraction and data synthesis. The results of the research include that medical record security from a physical perspective, generally medical record documents use quality paper that does not tear easily, and good ink. The lighting conditions in the filing room are not fully in accordance with theory, generally there is an APAR but it is placed outside the medical records room. In terms of biological aspects: generally there is insect medicine used to prevent files from insect attacks, there is spraying every month to protect medical records from insect attacks. From the chemical aspect: generally there are still officers who bring food or drink near medical records, carry out activities such as eating and drinking in the filing room, and the prohibition on bringing food in the medical record unit storage room has not been implemented. From the aspect of confidentiality of medical records, efforts have generally been made to maintain the confidentiality of the contents of medical record documents, for example, there is a warning at the front entrance "Entry is prohibited for other than medical records officers, but this has not been implemented properly.

Index Terms - confidentiality, hospital, medical record documents, security.

I. INTRODUCTION

Medical records according to the Republic of Indonesia Minister of Health Regulation No. 24 (2022) is a file containing notes and documents regarding the patient's identity, examination, treatment, procedures and other services that have been provided to the patient. Medical records are useful as written evidence of service actions for a patient, and are also able to protect the legal interests of the patient concerned. Every health service facility, including hospitals, is responsible for maintaining the security and confidentiality of each patient's medical record documents. In accordance with the regulations of the Republic of Indonesia Minister of Health No. 24 (2022) article 32 states that the contents of medical records must be kept confidential by all parties involved in health services even if the patient has died. All medical records unit officers are fully responsible for the completeness and provision of files that may be needed by the hospital at any time. Officers must be able to ensure that these files are stored and organized properly and protected from the possibility of file theft or leakage of the contents of medical records.

Based on the National Hospital Accreditation Standards (SNARS) edition 1.1 on Medical Information and Records Management (MIRM) 14 states that the confidentiality and privacy of information is maintained. The research results of Tarigan and Herfiyanti (2021) show that in terms of physical aspects the ink used was black and the paper used was A4 size. There are no Out guides, loan receipts and camphor. Apart from that, there are still officers outside of medical records who can come in and out and borrow medical record documents without the Filing officer's knowledge, so that many medical record documents are lost or carried away by officers. In terms of biological aspects, there are fungi, insects such as termites, cockroaches and mice. The chemical aspect of medical records officers eating or drinking in the Filing room. The aspect of confidentiality is that there are still medical record documents that are carried away or lost by officers outside of the medical record. Based on this background, researchers are interested in conducting research with the title Aspects of Security and Confidentiality of Medical Record Documents in Hospitals (Literature Review).

RESEARCH METHODS

This research uses a literature review or literature study design. To write about a particular topic or issue, readers carry out literature searches and read various relevant books, journals and other manuscripts (Marzali, 2016). The research uses a literature review design related to aspects of security and confidentiality of medical record documents in hospitals. This data search uses databases published on the internet via open access channels such as Google Scholar. The keywords used are "security and confidentiality aspects", "medical records".

The selected articles are articles that meet the inclusion criteria: maximum journal publication deadline of 5 years (2020-2024), using Indonesian and English, original articles (research articles). Meanwhile, the exclusion criteria used are different research objectives, the journal only displays the abstract or not full text, the journal cannot be downloaded, the title and author are the same but the source is different. Data extraction is an activity to summarize important information found in each research article reviewed. This information is used to answer research questions. Synthesis is the activity of summarizing various understandings or opinions from two or many readings to produce new writing according to the writer's needs. After searching for scientific articles via the Google Scholar channel, 7 articles were found that met the inclusion criteria from a review of 2,550 research articles published between 2020 and 2024.

RESULTS AND DISCUSSION

A. RESULTS

Table 1. Data Extraction Results

Author (Year)	Journal Name	Title	Method	Result
Sri Nurmariza, Ulil Kholili, Ahmad Hanafi (2021)	Jurnal of Medical Records	Overview of Security and Confidentiality Aspects of Medical Records in the Filling Room at Petala Bumi Regional General Hospital in 2021	Study qualitative	Based on physical aspects using HVS A4 paper, ink black, there are still many medical record files that are not placed on the storage shelf. Biological aspects that exist spraying every month to protect medical records from insect attack and no medical records have been damaged due to insects. The chemical aspect is that there are still officers bringing food or drinks near the medical records. Human resources that medical record officers in the filling room are still lacking. From the aspect of confidentiality, it is not in accordance with the theory because there are still other officers who enter the medical records storage room.
Muhammad Rizal Fauzi1, Rizky Miftah Fauzia2, Sali Setiatin (2021)	Cerdi ka: Jurnal Ilmiah Indonesia,	CONFIDENTIALITY AND SECURITY OF MEDICAL RECORDS AT HERMINA ARCAMANIK HOSPITAL	method qualitative descriptive approach,	From the research results, there are still problems, both from internal and external factors in medical records at Hermina Arcamanik Hospital. There are still missing files outside the medical records room, damaged, and the shelves are full.
Septy Handayani dan Arif Budiman (2024)	Jurnal Manajemen Informatika dan Kesehatan Indonesia Vol. 12 No. 1, Maret 2024	Review of Security Factors and Confidentiality of Medical Records at TK Hospital. III Dr. R. Soeharsono Banjarmasin	Qualitative approach with a descriptive research design.	The research results showed that the paper used was A4 type with a weight of 70 GSM (210x297 mm) and black ink with oil ink. The highest document damage occurred in the 2019 visit year, with a total of 24 files damaged. Lighting conditions in the medical records room ranged from 40-99 lux, and the temperature in the medical records room is in the range of 18 degrees Celsius – 28 degrees Celsius. There is a light fire extinguisher (APAR) placed outside the room medical records. There are 2 medical record documents that are experiencing moisture. No whereabouts reported nuisance insects in the medical records room, and activities such as eating or drinking by officers were found in indoor. Two medical record documents were found with the patient's name faded. SOP regarding security and confidentiality in the medical records room is available, and on the door of the medical records room there is a warning prohibit anyone other than the medical records officer from entering. The door to the medical records room is always closed, however several medical record documents were found to be arranged incorrectly (missfile). Not yet available in the room CCTV, and tracer related issues discovered. Intrinsic factors are good, extrinsic factors

				are quite safe, and Confidentiality of medical records is maintained.
ORIZA SATIVA dan Supriyanti (2022)	Jurnal serambimekah	REVIEW OF SECURITY AND CONFIDENTIALITY ASPECTS OF MEDICAL RECORD FILES IN STORAGE ROOMS AT ACEH MENTAL HOSPITAL IN 2022	qualitative methods	Based on the physical aspect, it shows that the medical record file is in accordance with hospital standards. Torn and folded files are caused by files being damaged the map is full. Based on biological aspects, there are Insect medicine used to protect against insect attacks
Jovierius daeli, Malihah Ramadhani, Risky Kusuma Hartono (2024)	Health & Medical Sciences Volume: 1, Nomor 2, 2024	Security and Confidentiality System for Medical Records at Pasar Minggu Regional General Hospital in 2023	observational research design and qualitative approach,	The results of research on medical record security are that fire handling includes APARs, fire smoke detectors and no smoking warnings. Meanwhile, when dealing with flooding, the position of the cupboard is higher than the floor and there is a gutter to collect rainwater. Uses uniform ink, clear and easy to read. The paper used is 70 gram HVS A4 which does not tear easily. The medical record folder is made of thick cardboard and is quite strong. The shelves are roll o'pack made of iron so they are water, fire and heat resistant. Regularly maintain humidity and temperature, with temperatures ranging between 27oC and humidity of 56%. For the confidentiality of medical records, there is a warning in front of the entrance "No entry other than Medical Records Officers!", The door to the medical records room uses a finger print, only medical records officers can open and enter the room. All staff at the hospital are sworn to maintain the confidentiality of medical record information, including patient identity information, diagnosis, disease history, examination history and treatment history.
Santi Lestari, Zulfikar Adhar Rita D Pratiwi, Selta Saputra (2022)	Edisi RMIK Journal page Vol 2 No 1, Juni 2023	REVIEW OF SECURITY AND CONFIDENTIALITY ASPECTS OF THE MEDICAL RECORDS UNIT AT SETIA MITRA HOSPITAL, SOUTH	descriptive method	In implementation and implementation it is quite good However, security-related applications still exist policies that have not been fully implemented. Facilities and infrastructure to ensure the security and confidentiality of records medical at the hospital.

		JAKARTA, 2022		
PEB ERIW ATI BR KABA N (2022)	JU RNA L ILMI AH KOH ESI Vol. 6 No. 4 Oktob er 2022	ANALY SIS OF SECURITY AND CONFIDE NTIALITY ASPECTS OF MEDICAL RECORD DOCUME NTS IN THE FILING ROOM OF THE VINA ESTETICA HOSPITAL IN 2020	desc riptive method	<p>Security of the filing room at Vina Estetica Hospital from a physical perspective includes: The lighting conditions in the filing room are not yet there completely in accordance with theory, but the room already uses natural lights and lighting, namely sunlight and does not directly hit the DRM because the glass window is on the south side. In space filing Vina Estetica Hospital already uses air conditioning but it is not active for 24 hours (damaged) and the average air temperature is 27°C and humidity between 65% and 71%, this is not in accordance with theory because the temperature is still below normal, which should be 18.8°C to 24.24°C and humidity 50% to 65% and the AC is not active for 24 hours which will result in damage to medical record documents. Condition of the filing room from attacks The fire or fire is not in accordance with the theory because there is no fire tube device. On space filing Vina Estetica Hospital is on the 5th floor, there is a water channel (water pipe gutter) through it so it is risky leaking and there is still a leaky roof in the room. Security of the Vina Estetica Hospital filing room from a biological perspective, caused by paper-eating insects, filing officers do not provide camphor to filing wine but the filing officer immediately sprayed the tool insect control in the form of an aerosol liquid when found insects and rat poison as a tool to get rid of rats. Filing space security From a chemical perspective, black ink has been used to avoid fading during filling medical record documents. However, to unify medical record documents only by using staples, even though staples are a material that rusts easily. And the officers still found him who carry out activities such as eating and drinking in the filing room which results in damage in medical record documents. Confidentiality of medical record documents is not appropriate in theory because the filing door was not locked properly. Apart from that, the entrance to the filing room It hasn't written "No entry other than medical record officers is permitted" and there is still DRM still on the floor. Vina Estetica Hospital already has policies and procedures that regulate security and confidentiality. However, it has not been implemented completely well. Who is responsible if it happens. the loss of medical record documents is all medical record officers. This is not in accordance with theory because the service facility leader is responsible for lost, damaged, counterfeit and used by other bodies or people who do not have rights to medical records. The filing officer doesn't know yet completely perfect regarding security and medical record documents. Filing officer already knowing that medical record documents are confidential and cannot be disseminated, this is appropriate with theory.</p>

B. DISCUSSION

1) Problems with the security of medical record documents can be caused by various factors, including:

a) Aspects of Medical Record Security Viewed in terms of Physical Factors

From the results of research by Nurmariza, and friends (2021) in the Filing Room at the Petala Bumi Regional General Hospital, based on the physical aspects of medical record documents, HVS A4 paper is used, black ink. Similarly, research by Fauzi, M. Rizal and friends (2021) states that security at Hermina Arcamanik Hospital for medical record files is seen from the quality of the paper which is not easily torn, good ink so as to produce clear print outs for recording media and folders. It is also made from cardboard and has bright colors, namely dark green and light green.

Likewise, research results from Septy Handayani and Arif Budiman (2024) show that medical record paper is A4 with a weight of 70 GSM (210x297 mm) and black ink with oil ink. Based on research by Sativa O and Supriyanti (2022), the physical aspect shows that the medical record files are in accordance with hospital standards. Torn and folded files are caused by files that are already full in the folder. The research results of Daeli J, and friends (2024) are for the security of medical records using ink that is uniform, clear and easy to read. The paper used is 70 gram HVS A4 which does not tear easily. The medical record folder is made of thick cardboard and is quite strong. The shelves are roll o'pack made of iron so they are water, fire and heat resistant.

The results of research by Septy Handayani and Arif Budiman (2024) regarding lighting conditions in the medical records room ranged from 40-99 lux, and the temperature in the medical records room was in the range of 18 degrees Celsius - 28 degrees Celsius. PEBERIWATI BR KABAN's research (2022) found that the lighting conditions in the filing room were not fully in accordance with theory, however the room already used lamps and natural lighting, namely sunlight and not directly on the medical record documents because the glass windows were on the south side. In the filing room at Vina Estetica Hospital, AC is used but it is not active for 24 hours (it is broken) and the average air temperature is 27 degrees Celsius and humidity is between 65% and 71%. This is not in accordance with theory because the temperature is still below normal, which is what it should be. namely 18.80 degrees Celsius to 24.24 degrees Celsius and humidity of 50% to 65% and the AC is not active for 24 hours which will result in damage to medical record documents.

The results of research by Daeli J, and friends (2024) showed that the filing room temperature ranged between 27 degrees Celsius and humidity of 56%. Regarding the security of medical record documents, the filing room must have a fire extinguisher such as a light fire extinguisher (APAR). As the results of research by Daeli J, and friends (2024) show that for the safety of medical records, fire handling includes fire extinguishers, fire smoke detectors and no smoking warnings. Likewise, according to research by Lestari and friends (2022), fire extinguishers are available, but these devices are not always checked for quality, and they are only placed on the floor, not stored where they should be placed. Likewise, Septy Handayani and Arif Budiman (2024) stated that there was a light fire extinguisher (APAR) placed outside the medical records room. However, research by Kaban P (2022) shows that there is no fire tube in that room. From research by Santi Lestari, Zulfikar Adha, Rita D Pratiwi, Selta S Saputra (2022), the facilities and infrastructure to ensure the security and confidentiality of medical records at Setia Mitra Hospital are mostly available. related to the implementation of facilities/infrastructure for security and confidentiality of medical record files at Setia Mitra Hospital, it can be seen that they include facilities, air conditioning, computers, telephones, expedition books, no-entry stickers for medical record unit rooms. And there are some that have not been implemented, such as smoke detectors during fires and digital hygrometers/temperature measuring devices in the medical records room.

b) Aspects of Medical Record Security Viewed in terms of biological factors

Research by Sativa O and Supriyanti (2022) Aspects of Medical Records Security Viewed from the Biological Factors: There are insecticides that are used to prevent files from being attacked by insects. Likewise, research by Nurmariza, et al (2021) from Biological Aspects states that there is spraying every month to protect medical records from insect attacks and no medical records have been damaged by insects.

Likewise with research by Kaban P (2022) Security of the filing room at Vina Estetica Hospital from a biological perspective, which is caused by paper-eating insect pests, filing officers do not provide camphor to filing wine, but filing officers immediately spray insect control equipment in the form of aerosol liquid when they encounter insects. and rat poison as a tool to get rid of rats. In contrast to Septy Handayani and Arif Budiman's (2024) research, there were no reports of the presence of nuisance insects in the medical records room.

c). Medical Record Security Aspects Viewed from the perspective of chemical factors,

From the research results of Nurmariza, and friends (2021) Aspects of Medical Record Security Viewed from the perspective of chemical factors, it was found that there were still officers who brought food or drinks near medical records. Likewise, the results of PEBERIWATI BR KABAN's research (2022) regarding the safety of the filing room at Vina Estetica Hospital from a chemical perspective still found officers carrying out activities such as eating and drinking in the filing room which resulted in damage to medical record documents. Likewise, research results from Septy Handayani and Arif Budiman (2024) show that activities such as eating or drinking by officers were found indoors. From research by Santi Lestari, Zulfikar Adha, Rita D Pratiwi, Selta S Saputra (2022), there are several things that have not been implemented, such as the prohibition on bringing food in the medical records unit storage room.

2) Aspects of confidentiality of medical records

Based on the research results of Nurmariza, and friends (2021), from the aspect of confidentiality, it is not in accordance with theory because there are still other officers who enter the medical records storage room. Likewise, the results of PEBERIWATI BR KABAN's research (2022) regarding the confidentiality of medical record documents in the filing room at Vina Estetica Hospital do not match theory because the filing door is not locked properly. Apart from that, the entrance to the filing room does not yet have a sign saying "No entry other than medical record officers is permitted" and there are still medical record documents still on the floor. Vina Estetica Hospital already has policies and procedures that regulate security and confidentiality.

However, it has not been implemented completely well. The filing officer already knows that medical record documents are confidential and cannot be disseminated, this is in accordance with theory. This is different from research by Septy Handayani and Arif Budiman (2024) that SOPs regarding security and confidentiality in the medical records room are available, and on the door of the medical records room there is a warning prohibiting anyone other than the medical records officer from entering. The door to the medical records room is always closed. There is no CCTV in the room. It is the same as the research results of Muhamad Rizal Fauzi, M.Rizal et al (2021) that there are confidential documents written, there are statements or warnings that say not to be taken out of the hospital. Likewise, research by Daeli, J and friends (2024) To maintain the confidentiality of medical records, there is a warning at the entrance "No entry other than Medical Records Officers!", The door to the medical records room uses finger print, only medical records officers can enter. open it and enter the room. All staff at the hospital are sworn to maintain the confidentiality of medical record information, including patient identity information, diagnosis, disease history, examination history and treatment history. Similarly, research by Lestari, and friends (2022) shows that there are no-entry stickers for medical record unit rooms, but there are several things that have not been implemented in medical record unit facilities.

CONCLUSION

1. Medical Record Security Viewed from the Point of View:

- 1) Physical: generally medical record documents use HVS A4 paper, black ink, paper quality that does not tear easily, good ink. The lighting conditions in the filing room are not fully in accordance with theory, the average air temperature is 27 degrees Celsius and humidity is between 65% to 71%, this is not in accordance with theory because the temperature is still below normal, which should be 18.80 degrees Celsius to 24. 24 degrees

Celsius and humidity 50% to 65%. Regarding the security of medical record documents, the filing room must have a fire extinguisher such as a light fire extinguisher (APAR). Generally there are APARs, but the equipment is not always checked for quality, and the equipment is only placed on the floor rather than stored where it should be placed and some are also placed outside the medical records room.

- 2) Biology: generally from the research results it was found that from a biological aspect, there is insect medicine that is used to prevent files from insect attacks, there is spraying every month to protect medical records from insect attacks and there have been no medical records damaged by insects, spraying the equipment insect control in the form of aerosol liquid when encountering insects and rat poison as a tool to get rid of rats.
 - 3) Chemical: generally the research results found that there are still officers who bring food or drink near medical records, carry out activities such as eating and drinking in the filing room which results in damage to medical record documents, and the ban on bringing food in the storage room has not been implemented medical records unit.
2. Aspects of Confidentiality of Medical Records from several research results: generally efforts have been made to maintain the confidentiality of the contents of medical record documents such as there is a warning at the front entrance "Not allowed to enter other than medical record officers!" medical staff who can open and enter the room. All staff at the hospital are sworn to maintain the confidentiality of medical record information. However, there are also research results where there is no warning at the entrance to the filing room that entry is prohibited for anyone other than medical records officers. However, there are several research results that even though there are prohibition entry stickers for the medical records unit room, this has not been implemented in the medical records unit facilities, because the filing door is not locked properly.

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