

Retention and Destruction of Health Information: A Review Study

Mehdi Dehnavi

Farabi Hospital, Social Welfare Organization, Mashhad, Iran.

Mahdie Shojaei Baghini ✉

Ph.D. in Health information management, Medical Informatics Research Center, Institute for Futures Studies in Health, Kerman University of Medical Sciences, Kerman, Iran. Email : mahdiehsh@gmail.com, ORCID: <https://orcid.org/0000-0002-9857-7347>

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Abstract

Aim: Health information is used for better healthcare treatment, research, insurance, employment, auditing, and accreditation. The importance of retention of health information, the complexity of regulations, and the inability of healthcare institutions to keep such records permanently, led to this study.

Method: This scoping review explicitly refers to “retention and destruction of health information” or equivalent terms regarding relevant studies and laws, published in PubMed, Web of Science and CINAHL, SID, and websites of the Ministry of Health in countries since 2000. Data collection tool was the data collection form. It included details of the law, duration of retention, type of health information, year, and country of origin. Data analysis was conducted using comparative tables and determination of the common and different aspects of the system as a descriptive-theoretical analysis.

Results: The study was carried out on regulations concerning the storing of hospitalization records of the usual, minor, emergency, death, and legal cases in different countries. In the countries under study, health information retention laws were updated according to the type and content of medical data, type of institution, and national conditions and laws.

Conclusion: The legal period of retaining medical records is determined by variables like the type of illness or injury, location of an accident, patient's legal age, the likely course of treatment in terms of patient recovery or death, type of admission, and also the effect of these factors on medical, legal and scientific needs.

Keywords: Health; Information; Medical Records; Retention.

A medical record is a set of important and confidential information stored and used for better healthcare treatment, research, insurance, employment, auditing, and accreditation (1-9). Other benefits of health information are awareness of patients' health status, preparation and preventive actions, and assessment of the necessary human and material resources. Mann and Williams state that “records serve a myriad of purposes”(10). Federal and/or state regulations and policies determine how to store health information considering the purpose and significance of keeping health information. The purpose is useful in deciding the time needed for keeping files in various formats (11-13).

Nevertheless, studies indicate that there is still no clear legal provision or baseline for record keeping in several countries (14,15, and 8). For instance, poor paper and ink quality has become a major issue in the retention of paper medical records in most South African countries (16).

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In Zimbabwe, findings suggest that beside the poor management of hospital medical records, there is no national standard for recording health information in both Bulawayo and Matabeleland hospitals (17). A study of health records policies in Nigeria shows that there is no national policy for maintaining health information in Nigerian hospitals (18). To keep medical records, the National Healthcare Association (NHA) has enforced ambiguous regulations on health centers (19).

Notwithstanding the Medical Council Guideline (MCG) and risk management emphasis on unlimited and proper storage, evidence demonstrates that healthcare organizations are unable to store medical records indefinitely or for a long time because of financial, legal, and personnel problems, as well as space and facility shortages and the necessity of preserving the confidentiality of information (7, 13,20). In Malaysia, the limited physical space for storing paper records in public and private hospitals is a major concern (13). The results of studies in Iran also confirm that there are no clear guidelines for the retention and destruction of medical records and there is a lack of storage space, both of which amount to their early destruction (21).

Efficient solutions for storing health information would ensue from effective planning and managing of records, preventing unfavorable outcomes malinformation, poor management, and access to data, along with revising complicated regulations and clarifying standard guidelines (22). To that effect, The South African Medical Support Association highly recommends that all healthcare practitioners be informed about how to store health information (13). In a 2010 survey conducted in Boston, USA, on management, guidelines, and protocols for health information, institutions committed to improving record management by reforming retention and storage policies and recovery systems (23).

Thereby, given the significance of storing health information, the complexity of regulations, and inability of healthcare institutions to keep such records permanently, authors conducted the current study to go over the techniques and review the courses concerning retention and destruction of various types of health information in different countries. Researchers hope that comparing health information regulations will assist policymakers and administrators in understanding current challenges and working out effective solutions.

Method

This review aimed to investigate the retention time and deletion of various health information in the world.

Search strategy

This review identified relevant studies and laws published in PubMed, Web of Science, CINAHL, SID, and Websites of the Ministry of Health in countries under study. Two reviewers independently screened records for potential inclusion of abstract and full-text screening stages. Search was limited to English and Persian languages. It covered the period from 2000 to 2020. One reviewer did the data extraction, analysis and synthesis, with built-in reliability checks from the rest of the team. Then, data were extracted, analyzed and synthesized by checking the reliability. Rules appearing in print or digital format were searched. They explicitly referred to “retention of health information” and “destruction of health information” or equivalent terms such as “medical records retention” and “health records retention”, as well as related concepts such as medical records, health records, medical records management, retention, laws of medical records, and hospital records management.

Inclusion criteria

Inclusion criteria were as follows: (1) Studies were written in English or Persian, and

published from January 2000 to December 2020. (2) The publication was a non-peer-reviewed journal paper, a letter, a comment, or an editorial that was not peer-reviewed. (3) It was a law about retention or destruction of health information.

Exclusion criteria

Exclusion criteria were as follows: Studies and laws had the same title but were not reliable and valid on government sites .

Data collection

A data collection form was used. The method of data collection was by reviewing papers, journals, books, reputable websites related to government centers, academic and professional associations and other written documents. Data extraction tables were prepared to include details of the law, duration of retention, type of health information, year, and country of origin. Duplicates appearing in more than one database were excluded prior to further analysis.

Synthesis of results

Data synthesis was done using comparative tables and determination of the common and different aspects of the system as a descriptive-theoretical analysis. As this was a scoping review of laws, rather than a systematic review of research evidence, analysis did not involve appraisal of study quality.

Results

This study was carried out on regulations concerning storing of hospitalization records of the usual, minor, emergency, death, and legal cases in different countries. In some states and countries, these regulations have been investigated in a variety of cases, but in others, access to the legislation was restricted.

The most important findings are as follows: Three African countries have been put under study; South Africa, Kenya, and Egypt. Medical records are kept for 6 years in South Africa

Egypt and 10 years in Kenta and Egypt. The results indicated that in South Africa, data was more accessible.

In Asia, Iran, United Arab Emirates, and Singapore were studied. The results were more openly and accurately accessible in Iran.. Singapore keeps the medical history of patients for 15 years, while the United Arab Emirates and Iran do the same for 10 years (2012). In the United Arab Emirates, the medical history for immigrants and foreign patients were for 5 years in 2012, but in 2018, the Dubai government enforced a 15-year medical record for both the UAE citizen and foreign patients.

In the United Kingdom and its constituent nations, the National Health Service (NHS) lays down the regulations for keeping medical records, and the rules in those countries are dissimilar. A study conducted in the United States by Health Insurance Portability and Accountability Act (HIPAA) proved that based on the length of time, these records are stored across the United States. They are split into five categories, from 5 years to 20 years. In assessing federal legislation on the acquisition, retention, and access to health records, there was no regulation indicating how long they would be kept. Canadian state regulations also have various provisions, with medical records being kept from 5 to 16 years. The state regulations for keeping health records in Australia vary from 7 to 15 years.

There was no clear legislation for minor patients in the research. The age of 18 in some countries is known as the age of minors, while in others the record is retained for minors until they reach a certain age. This number varies in various countries and states.

Discussion

Medical records are vital to ensure the progress of healthcare, hospital experience, medical education, research, and also to provide legal assistance (13,24-26). Despite the great

importance of keeping health records, some places like India and the European Union have not yet specified clear rules regarding retention. A study of the other countries revealed that different rules and protocols for handling medical records in various parts of the world are introduced, modified, and revised in many ways, depending on differences, requirements, and special services that hospitals or medical facilities provide (13,27).

A review of regulations revealed that the retention of adult hospital records in the countries in Asia ranges from 10 to 15 years, (28-31). In Iran, for patients who have suffered violence, suicide, occupational conditions, heart disease, emerging diseases, accident patients as well as psychiatric patients, the number is 15 years and for the police and military patients, it has been 20 years (31). In Iran and the United Arab Emirates, records are usually kept until 18, but in Singapore, this number is 24. It is 18 years old in Egypt and South Africa. However, nothing is specified in Kenya (28-33).

Medical records are retained in the Australian states for 7 to 15 years. The guidelines for minor patients specify 10 years after the age of 18, but in some states such as Tasmania, they are retained up to 25 years of age (34). Some states require the history of minor patients to be kept a few years after the legal age. This is while some others, such as Oregon, maintain medical records until the age of 20 (35). In Canadian states, too, the legal age is 18, but a particular age for keeping minor patients' records is not designated for each state (36).

In 2016, the National Assembly for Wales mandated the retention time for adult's medical records for 8 years, but the NHS specifies a period of 10 years in Wales. In 2011, the North Scottish Ministry of Health set the adult's medical records retention time for 10 years in Scotland, whereas the National Health Service suggested maintaining the records for 6 years. In the United Kingdom, it is 8 years after

treatment or death (37). For deceased patients in the countries studied, the retention time of these records was identical to that of adults' hospital records. In a country like the United Arab Emirates, the law increased the retention period from 5 years in 2012 to 15 years in 2018, and from 10 years to 15 years regarding adults medical records (29,30).

This rule has an exception in Australian states. In Western part, medical records are retained for 15 years, but death records are kept for 10 years. Wales and England have both decided on a time period of 8 years after death (34). In Iran, where the laws were accessible in more details, not only is the record of the deaths of the ordinary adult patients maintained for 10 years but also records of the deaths of hospitalized patients, occupational diseases, accident deaths, emerging diseases, violence, rape, and poisoning are kept for 10 years. This retention time, however, is 5 years for patients with cardiac and deaths by burning. For anyone under the age of 18, 8 years after death is often specified (31). Death case laws are not accessible in Canadian states. In US states, the laws are not accessible except for a few states.

The case of mental patients is another major component of the medical records regulations. Their records are kept a few years after their death in some countries. In a country like Singapore, it is kept for six years after the person's death (28). The retention time in Australian states such as New South Wales is 25 years, and in the state of South Australia, it is 15 years after the last visit (34). The period these records are stored in South Africa falls in line with their length of time (33). In the US and Canada, such data were not available. In Iran, the specified period is 15 years after the last visit (35-36, 31). For mental patients in Wales, this period is 20 or 8 years after death, and in Scotland, the retention time is 20 years (37).

As for the retention of maternity records, some countries have specified longer periods

for keeping such records because of the nature of the issue. In certain Australian states, like South Australia, for instance, this period is up to 33 years after the last visit (34). In the US or Canada, the information was not accessible (35-36). In South Africa, the period is until the baby reaches 21 years of age and in Iran, it is up to 7 years after discharge (33,31). Maternity records are maintained for 20 and 25 years in Wales and Scotland respectively (37).

For dental records, in countries like Singapore, Iran, the United Arab Emirates, and some Australian states, the information is available. These cases are classified among common inpatient hospitalizations in a country like the United Arab Emirates. But the retention period of records in Iran is 5 years. For outpatient dental records in Iran, the files are kept for 2 years after the last visit. In three Australian states, this time is 7, and 15 years after the last visit, respectively for New South Australia, Western, and South Australia. In the UK, this information is not available (34,28-31). Electronic health records are kept for six years after the death of the patients in Singapore. This specified period has been 10 years in Iran. In the District of Columbia, it is also 10 years (35,28,31). In other states and countries, the rules have not been updated or released publicly.

Given the significance of outpatient records, authors studied them as well. The retention period in Singapore is 6 years, while it is 7 years in Tasmania and Western Australia. This case is divided into two categories in Iran: records of outpatient emergencies (emergency cards) and ambulatory surgical records. The retention period for ambulatory surgical records is 5 years after the patients' last visit, whereas for regular outpatient emergency records it is 3 years as mandated by law. Outpatient emergency records for special legal cases are kept for 5 years under this law (28,34,31). It is hereby recommended that hospital administration, institutions,

doctors, and registrars of medical records take further steps to improve the standards for retaining medical records. The most important limitation of the present study was language limitation. Authors may have missed some studies and rules in this area.

Conclusion

Despite the importance of paper medical records for patients, medical personnel, hospitals, judicial agencies, insurance companies, and other organizations, medical facilities cannot keep paper records indefinitely for a variety of reasons. The reasons include a lack of storage space, the high cost of retaining medical records, the detrimental psychological effect of clutter on employees, and the devaluation of medical information after the mandated deadline. To maintain the balance, laws and practices must be enacted for proper preservation and administration of health records. Government and corporate institutions at the state and federal levels in many nations establish and report specific policies to hospitals that consider internal situations. The legal period for keeping medical records is determined by factors such as the type of illness or injury, location of an accident, patient's legal age, likely course of treatment in terms of patient recovery or death, type of admission, and the impact of these factors on medical, legal, and scientific needs. Of course, before creating policies and ensuring their implementation, a thorough and accurate assessment of the country's situation should be done.

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