Research Report

The Dentists' Understandings on Dental Medical Records in East Java, Indonesia

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ABSTRACT

Introduction: A dental medical record is a systematic documentation of a patient, provided by the dentists. Various information including the patient data, diagnoses, treatments, and odontogram are recorded in the dental medical records. In Indonesia, the guideline of dental medical records has been established by the Ministry of Health. However, the preliminary study by the Department of Forensic Odontology, Faculty of Dental Medicine Universitas Airlangga, showed that many dentists documented the medical records, not following the Medical Record Guidelines from the Ministry of Health. **Purpose:** This study aims to determine the dentists' understandings of the completeness of dental medical records according to the Dental Medical Record Guidelines by the Ministry of Health of Indonesia. **Methods:** A total of 358 dentists in East Java participated in this study by fulfilling an online questionnaire. **Results:** The results showed that approximately 27.4% of the respondents are conducting dental medical records following Dental Medical Record Guidelines. **Conclusion:** The results of this study are expected to be considered as a reference for the implementation of socialization on the Dental Medical Record Guidelines and the formulation of policies that regulate the use of dental medical records following national standards.

Keywords: dental medical records; national standard; understanding; patient

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INTRODUCTION

Good health service is an important step to improve the community welfare as a whole. Quality control including the medical records in the health care providers is necessary to obtain the optimum health services. Good health services can be started from good management of the medical record.¹ The regulation of the medical record has been established by The Ministry of Health of Indonesia (No. 749a/MENKES/PER/XII/1989). It is stated that every health service facility is obliged to provide medical records, and it is carried out by doctors, dentists, and other health workers who provide services to patients.²

A medical record is a document that contains patient identity, examination, treatment and medication, and other services that have been given to patients. Besides carrying out medical practice, every doctor or dentist is required to make a medical record. According to Edna K Huffman, medical records are facts related to the patient's condition, past and current medical history, and treatment documented by health professionals who provide services to patients.³ Dental Medical Records can be documented in the form of written or electronic records containing complete and accurate information regarding patient identity, diagnosis, disease course, ICD 10 disease code, medical treatment, and action as well as documentation of examination results.⁴

Dental medical records can also be used for certain needs. One of them is the use of dental medical records as accurate evidence to determine the presence or absence of malpractice. Dental medical records can also be used as a tool to identify dead bodies with severe damage to their bodies, especially faces and fingerprints. This need can be helped if there is a dental medical record that is filled, standardized according to the Dental Medical Record Standard, and is easily accessible. ^{5,6}

A previous study by Rahmasari, 2012, in Padang, found that only a few dentists performed the dental medical record following the national guideline. Considering the importance of dental medical records as a legal document, this study aimed to evaluate the dentists' understandings of the completeness of dental medical records according to the Dental Medical Record Guidelines by the Ministry of Health of Indonesia.

MATERIALS AND METHODS

The design used in this research is descriptive research. This study aims to determine the objective description of a certain phenomenon. This study involved 358 dentists working in hospitals, health centers, and clinics located in East Java. Each respondent in this study had received an explanation from the researcher and had voluntarily participated after signing the informed consent.

Each subject is asked to fill out a questionnaire about dental medical records through Google Form. Furthermore, the results of the questionnaire were tabulated using Microsoft Excel. Data analysis was carried out to see the frequency distribution of the dentist's understandings of dental medical records according to the national standards.

RESULTS

The participant of this study were dentists who worked in hospitals, health care centers, and clinics in various cities in East Java, Indonesia. The detailed characteristics of the respondents are described in Table 1.

 Table 1. The characteristics of the respondents in the present study

Respondents' characteristics	Total	%
Sex		
Male	46	12.8
Female	312	87.2
Total	358	100
Age		
Early adult (20-30 y.o.)	191	53.4
Young adult (30-40 y.o.)	98	27.4
Mid adult (40-50 y.o.)	34	9.5
Elder (50-60 y.o.)	35	9.8
Total	358	100
Tenure		
New (< 10 years)	249	69.6
Old (>10 years)	109	30.4
Total	358	100



The frequency distribution of the dentists' characteristics in hospitals, health centers, and clinics in East Java in 2020 showed that most dentists, as many as 312 (87.2%), are female and 46 dentists (12.8%) are male. A total of 191 dentists (53.4%) in East Java belong to the age group of early adulthood (20-30 years). More than half of the dentists, as many as 249 dentists (69.6%), worked in hospitals, health centers, and private clinics in East Java Province for less than 10 years.

Of the 358 respondents, 113 dentists (31.6%) did not know about the Ministry of Health's Dental Medical Record Guidelines, while 245 dentists (68.4%) already knew about the Ministry of Health's Dental Medical Record Guidelines (Figure 1).

Of the 358 dentist respondents, 156 dentists (43.6%) worked in health services whose medical records were not following the national standard for Dentistry Medical Records. Meanwhile, 202 dentists (56.4%) worked in health services whose medical records were following national standards for Dental Medical Records (Figure 2).

Of the 202 dentists who filled out their medical records following the national standard for Dental Medical Records, 151 of whom (75.9%) answered that they had filled out their medical records correctly and completely following national



Figure 2. Percentage of dentists whose dental medical records were already following national standards for dental medical records.



Figure 1. Percentage of dentists who knew about the Ministry of Health's Dental Medical Record Guidelines.

Figure 3. Percentage of dentists who filled out their medical records following the national standard for dental medical records

standards. Meanwhile, 49 dentists (24.1 %) have not filled out medical records correctly and completely according to national standards (Figure 3).

Of the 358 other respondents, 248 of whom (69.3%) knew the important points that should be listed in the dental medical record. Meanwhile, 110 dentists (30.7%) did not know the important points that should be listed in the dental medical record (Figure 4).

Of the 358 respondents, 217 of them (60.6%) know the medicolegal aspects of dental medical records. Meanwhile,



Figure 4. Percentage of dentists who knew the important points that should be listed in the dental medical records.



Figure 5. Percentage on dentists who know the medicolegal aspects of dental medical records.



Figure 6. Percentage of dentists who know the complete requirements for the dental medical record.

141 dentists (39.4%) did not know the medicolegal aspects of medical records (Figure 5).

Of the 358 respondents, 207 of whom (57.8%) knew the complete requirements that must be included in the dental medical record. Meanwhile, 151 dentists (42.2%) did not know the complete requirements for the dental medical record (Figure 6).

Of the 358 respondents, 25 of whom (7%) had encountered or handled forensic dentistry cases. Meanwhile, 333 dentists (93%) had never encountered or handled forensic dentistry cases (Figure 7).

Of the 358 respondents, 98 of whom (27.4%) knew dental medical records which include: important points in dental medical records, medicolegal aspects of dental medical records, and the complete requirements that must be included in dental medical records (Figure 8).

DISCUSSION

Doctors and dentists have an important role in the provision of health services and the good quality of services for the community. Doctors and dentists must refer to applicable standards, guidelines, and procedures so that they can provide professional and safe medical services for the community. One of the things regulated in the medical



Figure 7. Percentage of dentists who had encountered or handled forensic dentistry cases.



Figure 8. Percentage of dentists with dental medical records' understanding.

practice law is medical records, which are contained in articles 46 and 47. The obligation and responsibility for the completeness and accuracy of filling out medical records are attached to the doctor or dentist who treats the patient.⁶

As health professionals, dentists are required to make medical records in carrying out their dental practice, by completing dental medical records after each time they provide health services to their patients. In addition to being signed, the completeness of the dental medical record by a dentist who provides services or actions must also follow the writing guideline (nomenclature) that applies internationally. It is very important to make sure that medical records provided can be useful, related to legal aspects for the community as well as a means of identification in forensic examinations.⁷

Dentists are required to make a medical record and fill in the odontogram at the first visit. By implementing this, a dentist can help other colleagues in taking action, can assist in solving legal, disciplinary, and ethical problems as well as for identification purposes if the patient encounters unexpected experiences.⁶

The Ministry of Health (2008)⁸ states that medical records are files that contain notes and documents about patient identities, examinations, treatments, actions, and other services that have been provided to patients. Every doctor or dentist in carrying out medical practice is obliged to make a medical record and must be made immediately and completed after the patient receives service. Hikmah, et al (2017) state that the patient's medical record after the examination is very important for the next visit. When the data is complete, it can provide useful information that can

be used as evidence of the patient's disease course as well as the treatment that has been given.⁹

Regulation of the Minister of Health of the Republic of Indonesia No. 269/MENKES/PER/III/2008 states that medical records are written or recorded information about the patient's identity, history taking, physical determination, laboratory, diagnosis of all services and actions provided to patients and treatment either at outpatient, inpatient, and emergency care.⁸ The Ministry of Health of the Republic of Indonesia in Law No.29 of 2004 states that medical records are files containing records and documents regarding patient identity, examination, treatment, actions, and other services to patients.¹⁰

Based on the National Guidelines for Dental Medical Records 2015 (Figure 9), dental medical records contain (SK PDGI No SKEP/3573PB PDGI/VIII/2015): patient identity, odontogram, treatments, attachment.¹¹ Patient identity consists of file number, date of file creation, name, gender, place, and date of birth, address, phone/mobile number, and occupation. The Odontogram part contains the date of a dental examination, odontogram, occlusion, presence or absence of extra teeth (supernumerary), presence or absence of central diastema, and any anomalies or other characteristics. The odontogram was repeated or completed at each subsequent visit. The treatment data contains the date of visit, the tooth number, complaints and diagnoses, and the treatments. Other information correlated with the patient, such as radiographic images, laboratory test results, etc. should be attached to the dental medical record. The tooth numbering system in the dental medical records is written using the FDI (Federation Dentaire Internationale) nomenclature.¹²



Figure 9. National Guideline of Dental Medical Records by Ministry of Health of Indonesia

CONCLUSION

This study indicates that the level of dentists' understandings of complete requirements, important points, and medicolegal aspects of dental medical records in East Java. The results suggest that the level of dentists' understandings is still considered low (27.4%). This may be due to the lack of a national standard dental medical record facility. There needs to be a policy from the authorized institution to create and disseminate evenly dental medical records following national standards.

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