



Patient Record Maintenance Among Private Dental Practitioners in Bangalore City

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Article History	Abstract
Received: 06 June 2023 Revised: 05 Sept 2023 Accepted: 11 Oct 2023	<p>Aim and Objectives: The aim of the study was to obtain information on documentation of patient record maintenance among private dental practitioners in Bangalore city". The objective was to assess the knowledge, attitude and behavior regarding documentation and patient record maintenance among private dental practitioners in Bangalore city. Method: A self-administered questionnaire survey was conducted in August-September 2021 among Dentists engaged in active clinical practices in private clinics/hospitals in Bangalore city, India [N=470]. Results: A response rate of 86.4% [n=411] was obtained. 73% of them were aware of the documentation of patient records as per Laws, Ethics and Jurisprudence act of 1997. 53% of them documented patient records in their clinical practice and 64% mentioned that only they have access to patient records. 13% mentioned that they include patient consent as a part of documentation. Although 73% of them said that they were aware of all the guidelines, a large proportion of respondents lack knowledge about the minimum time period for which patient records should be maintained in their possession. 21% of them felt that patient record keeping is not necessary and the most common problem cited for documentation of patient records was lack of time to give attention to the records. Conclusion: Dentists needs more information and should spare more time for documentation of patient records.</p>
CC License CC-BY-NC-SA 4.0	<p>Keywords: Dental records, Documentation, Private dental practitioners, Patient consent, Ethics</p>

1. Introduction

Dental records are of crucial importance for the smooth administration of the clinic and for follow up of patients. It also plays a key role in research and knowledge development as they maintain a link between the past and present and provide an accurate base of information and statistics for further discussion and research.¹ Good and appropriate record keeping is not only in the interest of dental practitioner, but also part of Dentist ongoing duty care of his patients. Dental records are property of dentist and should be preserved.² Good Record keeping of patients is as important as the provision of good dental services and is an integral part of the use of reasonable skill and care.³ The extreme importance of records is highlighted in medico-legal cases and also for any unusual sequelae of dental services. Documentation of patient records provide a link between the past and present and Governing bodies have put forth norms and regulations pertaining to accurate maintenance of patient records. Moreover, keeping in interest as an effective means of communication, the importance of patient records is underlined. The purpose of documentation is to provide accurate, current comprehensive and concise information concerning the diagnosis, treatment care of the patient and associated observations.⁴ Inadequate and inappropriate record keeping affects patient care by impairing continuity

of the care and creates the risk of treatment procedure being duplicated, omitted or inappropriately applied.⁵ Thus, the aim of the study was to assess the knowledge, attitude and behavior regarding documentation of patient record maintenance among private dental practitioners in Bangalore city.

2. Materials And Methods

The study was done during the period of August - September 2021. Initially, a pilot study was conducted and the size of the sample was determined to 470 and the participants were Dentists engaged in active clinical practices in private clinics/hospitals in Bangalore city. The June 2020 edition of Karnataka State Dental directory was utilized for reference of the dental practitioners in Bangalore city. The instrument used for the study was a self- administered questionnaire pertaining to Knowledge, Attitude and Behavior. The questionnaire consisted of a battery of 20 questions. Details pertaining to number of years in clinical practice and qualification (BDS/MDS) was collected in the first part of the questionnaire. A single investigator was responsible for the collection of information for research. The identity of all the study participants was kept confidential by not depicting the questionnaire against their name but only by reference numbers in serial order. Statistical software SPSS (stastical package for social studies) version 20 was utilized for data entry and statistical analysis. Chi-square test was used as test for significance. The results were also subjected to Bivariate Logistic regression analysis.

3. Results and Discussion

A response rate of 86.4% [n=411] was obtained that included 330(80.2%) male dentists and 81(19.8%) female dentists. A total of 121(29.4%) were BDS practitioners and 290(70.5%) were MDS practitioners [Table1]. 301(73%) of them were aware of the documentation of patient records as per Laws, Ethics and Jurisprudence act of 1997 but 290(70.5%) of them documented patient records in their clinical practice. 263(64%) mentioned that only they have access to patient records and 53(13%) mentioned that they include patient consent as a part of documentation [Table-2]. Although 258(63%) of them said that they are aware of all the guidelines, a large proportion of respondents lack knowledge about the minimum time period for which patient records should be maintained in their possession. 87 (21%) of them felt that patient record keeping is not necessary.

The most common problem cited for improper documentation of patient records was lack of time to give attention to the records (52%) followed by difficulty or lack of knowledge regarding computers (33%) and lack of space to store the paper work (25%) [Table-3]. The advantages cited by the participants regarding patient record maintenance were as an important aid in Medico legal implications (52%), for means of communication (43%) and for patient follow up & effective treatment planning (5%) [Table-4].

Table 1-Distribution of Respondents by Gender and Qualification degree

Qualification	No.of respondents(n)	% Who documented patient records	P value
BDS	121	29.44%	0.43
MDS	290	70.55%	
Male	330	80.29%	0.01
Female	81	19.7%	

Table 2- Percentage Access to Patient Records and Patient Consent

Variable	No.of respondents
Only Dentist has access to patient records	263(64%)
Inclusion of patient consent in record documentation	53(13%)

Table 3- Problems Cited by the Dentists for maintaining Patient Records.

Variable	No. of respondents
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Lack of time to give attention to records	231(52%)
Deficiency of knowledge and skill regarding computers	135(33%)
Lack of Space to store the paper work	102(25%)

Table 4- Advantages cited for record keeping.

Variable	No. of respondents(n) and %
Important aid in Medico legal implications	231(52%)
Means of Communication	176(43%)
For effective treatment planning and follow-up	21(5%)

Good and appropriate record keeping is not only in the interest of dental practitioner, but also part of Dentist ongoing duty care of his patients. The basic idea behind documentation is to provide accurate current comprehensive and concise information concerning the diagnosis, treatment care of the patient and associated observations.⁶ Inadequate and inappropriate record keeping affect patient care creating the risk of treatment procedure being duplicated omitted or inappropriately applied.⁷

Some rules and ethics in dental record maintenance are:^{8,9}

Dental records have to be accurate and identifiable in every detail, and allow other health care providers to quickly read, understand the patient's history and current dental problems.

- ❖ It should be filed safely and in an organized manner.
- ❖ Under no circumstances records should be left with unauthorized persons.
- ❖ Information stored is confidential and should not be disclosed without the consent of the patient.
- ❖ Dental records should be preserved for a minimum prescribed time period and destroyed only after issuing appropriate notification.

In this study a total of 470 dentists practicing in Bangalore city were included. The questionnaire was personally given to them and in case of lack of time cited for answering the same; the questionnaires were collected the following day.

A total of 411(86%) completed questionnaires were considered for statistical analysis. The rest were discarded due to incompleteness of the format. The validity and reliability of questionnaire-based survey can be influenced by survey design, question content, analysis and response rates.

A limitation of this study was that only practitioners who are listed in the latest Karnataka state dental directory were included. However appropriate measures were taken to eliminate this limitation by choosing appropriate sample through cluster random sampling from all zones of study area.

This study shows that though most of the participants (73%) claim to be aware of the norms of record keeping and (70%) of them practice record documentation. Approximately 23% of the participants practice categorization of the documented records and nearly 64% claim that only they have access to the patient records. Another point of interest is though 73% were aware of the ethics and jurisprudence act; only 33% of them were able to answer the correct minimum time required for having records in possession before disposing them. A similar study conducted by Sari et al 1995 showed that specialists in dentistry had a higher hand in comparison with bachelor degree holders in knowledge and practice of patient record documentation.¹⁰

In this study it is also seen that 64% of the participants cited that only they have private access to patient records, whereas the remaining participants cited that the auxiliary personal as well as the consultant specialist also had access to all patient records in the absence of the practitioner.

Approximately 13% (53) dentists cited that they considered recording patient consent and documenting the same during all routine dental procedures. The most common reason claimed was for medico legal importance and for further patient follow up. A similar study by R.G Morgan highlighted that nearly 98% of the participants documented records for the sole purpose of medico legal implications.¹¹

On the whole 79% of the dentists felt that documentation of patient records is important and should be done routinely but only 53% of them followed the same. On the contrary 21% of the dentists cited that record documentation is not absolutely necessary and the most common reason claimed for not maintaining patient records was lack of time to dedicate towards that purpose, deficiency of skills and knowledge pertaining to computers and difficulty in allotting physical storage space for the records.

4. Conclusion

From the present it can be concluded that Dentists require more information regarding documentation of patient records to improve their knowledge. It appears that certain dentists due to time factor and the reasons of their own are not in a position to follow the guidelines. However, it should be remembered that maintenance of such records will prepare them to face ethics and jurisprudence act if required in the future. The best way to encourage record maintenance will be incorporation of record maintenance in curriculum and by continuing dental education programmes.

References:

1. Helminen SE, Vehkalahti M, Murtomaa H, Kekki P, Ketomaki TM. Quality evaluation of oral health record- keeping for Finnish young adults. *Acta Odontol Scand.* 1998 Oct; 56(5):288-92.
2. Rasmusson L, Rene N, Dahlbom U, Borrmann Quality evaluation of patientrecords in Swedish dental care. *Swedish Dent Journal* 1994; 18(6):233-41.
3. Rene N, Rasmusson L, Dahlbom U, Borrmann H. Knowledge among Swedish dentists about rules for patient records. *Wed Dent J.* 1994; 18(6):221-32.
4. Morgan RG. Quality evaluation of clinical records of a group of generaldental practitioners entering a quality assurance programme. *British DentalJournal* 2001 Oct 27;191(8):436-41
5. Crawford JR, Beresford TP, Lafferty KL. The CRABEL score--a method for auditing medical records. *Ann R Coll Surg Engl.* 2001 Jan; 83(1):65-8.
6. Staroselsky M, Volk LA, Tsurikova R, Pizziferri L, Lippincott M, Wald J, BatesDW. Improving electronic health record (EHR) accuracy and increasingcompliance with health maintenance clinical guidelines through patient access and input. *Int J Med Inform.* 2005 Dec- pg33-35.
7. Ottens J, Baker RA, Newland RF, A. The future of the perfusion record: automated data collection vs. manual recording. *Extra Corpor Technol* 2005 Dec; 37(4): 355-9.
8. Dimond B. Exploring the principles of good record keeping in nursing.*Br Jou Nurs.* 2005 Apr 28-May 11; 14(8):460-2.
9. Prinsloo PM. [The ethics of dental records] *South African dental journal* 2000 Jan; 55(1):38-40.
10. Sari E.Helminen et al;Quality evaluation of Oral health record keeping Finnish young adults,*Acta Odont Scand* 1998(56) pg 13-19
11. Morgan RG. Quality evaluation of clinical records of a group of general dental practitioners entering a quality assurance programme. *Br Dent J.* 2001 Oct 27; 191(8): 417.