

**Assessment of Knowledge and Practice of Evidence Based Dentistry by Indian Dental Professionals: A Systematic Review**

<sup>1</sup>Dr. Anandmayee Chaturvedi, MDS, Senior Resident, Department of Prosthodontics, Maulana Azad Institute of Dental Sciences, New Delhi

<sup>2</sup>Dipti S Shah, MDS, HOD & Dean, Department of Prosthodontics, Karnavati School of Dentistry, Gandhinagar, Gujarat

<sup>3</sup>Dr. Rekha Gupta, MDS, HOD, Department of Prosthodontics, Maulana Azad Institute of Dental Sciences, New Delhi

**Corresponding Author:** Dr. Anandmayee Chaturvedi, MDS, Senior Resident, Department of Prosthodontics, Maulana Azad Institute of Dental Sciences, New Delhi

**Citation of this Article:** Dr. Anandmayee Chaturvedi, Dipti S Shah, Dr. Rekha Gupta, “Assessment of Knowledge and Practice of Evidence Based Dentistry by Indian Dental Professionals: A Systematic Review”, IJDSIR- May - 2021, Vol. – 4, Issue - 3, P. No. 206 – 217.

**Copyright:** © 2021, Dr. Anandmayee Chaturvedi, et al. This is an open access journal and article distributed under the terms of the creative commons attribution noncommercial License. Which allows others to remix, tweak, and build upon the work non commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

**Type of Publication:** Systematic Article

**Conflicts of Interest:** Nil

**Abstract**

**Background:** Evidence-based dentistry (EBD) has been a buzzword from some time but its integration in clinical practice is still in a nascent stage. The Aim of this study was to understand the reason behind non-compliance of evidence-based practice by Indian dentists.

**Methodology:** Several KAP studies have focused on assessing the relationship of knowledge, attitude, and preventive practices (KAP) regarding practice of evidence based dentistry in India among different districts, different set of dentists living in rural, urban, and semi-urban areas over the years. The search for the literature was conducted from July-September 2020 through electronic database of Google Scholar, Pub Med, and Hinari from January 2009-June 2020. 10 articles met the inclusion criteria set by 2 different reviewers. Critical Appraisal Skill Program

(CASP) (2014) for qualitative research was used to assess the risk of bias for the articles reviewed. It is essential to compile the KAP studies regarding evidence based dentistry of our country over the years, in order to project into the future on how to impart information to bring evidence based dentistry into practice.

**Result:** A total of 10 no. of studies & 1585 Dentists met the inclusion criteria and were included in the analysis. The knowledge and awareness level regarding Evidence-Based Dentistry among the subjects was found inadequate and there is significant variation in knowledge and awareness management in different studies, which could be because of difference in sample size and different study settings.

**Conclusion:** Appropriate changes need to be made to include evidence-based dentistry in graduation curriculum.

Evidence-based dentistry modules in the dental curriculum with some mock drills, workshops, or some practical examination could be beneficial to develop and practice evidence-based dentistry among dental professionals.

**Keywords:** Evidence-Based Dentistry, Indian Dental Professional, Awareness & Practice

### Introduction

Evidence-based practice (EBP) is spreading in popularity in many health care disciplines. One of its main features is the reliance on the partnership among hard scientific evidence, clinical expertise, and individual patient needs and choices.<sup>1</sup> The foundation for Evidence-Based Dentistry (EBD) was laid by Sackett who has defined it as “integrating individual clinical expertise with the best available external clinical evidence from systematic research.” EBD is the integration and interpretation of the available current research evidence, combined with personal experience. It allows dentists, as well as academics researchers, to keep update of the new developments and to make decisions that should improve their clinical practice.<sup>2</sup> The term was coined by the clinical epidemiology group at McMaster University in Canada. American Dental Association has defined EBD as: “an approach to oral health care that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patients oral and medical condition and history, together with the dentist's clinical expertise and the patient's treatment needs and preferences.<sup>3</sup>

EBP was introduced into dentistry, specifically in the early nineties and named evidence-based dentistry.<sup>4</sup> The aim of EBP is to encourage health-care professionals to look for and make sense of the evidence available to apply it to everyday clinical practice. The ultimate goal of EBP is to improve the health of patients through clinician

decisions that are based on updated health-related knowledge.<sup>5,6</sup>

Even though EBD has been introduced 3 decades back, development of this discipline is still in its nascent stage in India. Several studies have been conducted to evaluate knowledge and awareness of Indian dental professionals by different researchers to understand the factors hampering implementation of evidence based dentistry in India. This systematic review was conducted to understand the awareness, knowledge and practice of evidence based dentistry by Indian dental professional and to understand the factors hampering implementation of EBD in regular clinical practice.

### Methods

#### Exploration Approach

3 electronic databases Pubmed, Google scholar & Hinari were explored for manuscripts published from January 2009-June 2020. Three reviewers screened the titles and abstract independently. Full texts of articles that fulfilled the inclusion criteria were obtained.

This review included KAP studies that include Indian dental practitioners published from January 2009-June 2020. The bibliographies of identified RCTs, review articles and relevant systematic reviews were checked for additional studies. The Clinical Trial Registry Of India (CTRI) searched in September 2020 for ongoing studies. The relevant journals present in the institutional library were identified to be hand searched for this review. The final search was done manually from the selected articles for the cross-references and citations, to include all relevant articles and to improve the electronic search.

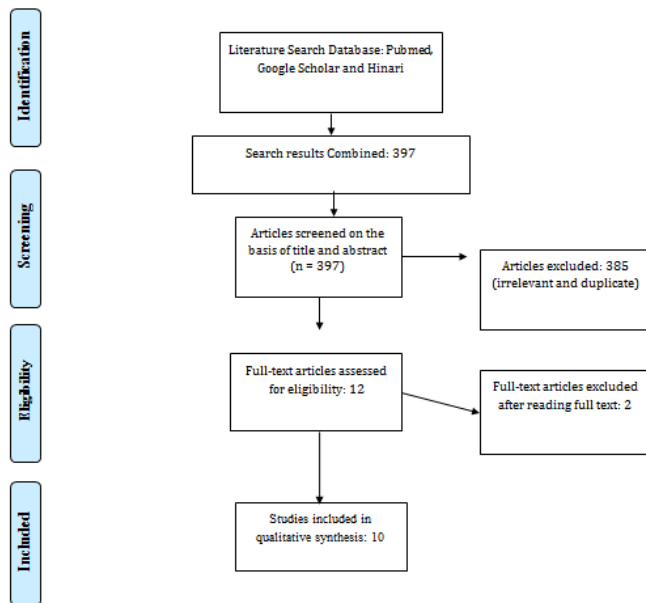
This systematic review was carried following the PRISMA guidelines. The PICO format was applied to formulate a focus question and according to that systematic search, the strategy was outlined for the study [Table 1].

Table 1: Systematic search strategy

Systematic search strategy	Protocol followed
Focus Question	Population: Indian dentists (Graduate & Postgraduate) working in a private or academic set up Intervention: Knowledge, awareness & practice survey of Indian Dentists regarding Evidence - Based Dentistry Comparison: No comparison Outcome (primary): Knowledge & practice of Evidence-based Dentistry Secondary Outcome Attitude towards incorporating EBD in regular practice in future & methods to incorporate EBD in regular day practice
Search Combination	(Knowledge) AND (evidence-based practice) AND (dentist) AND (India)
Electronic Database Searched	Pub med/Medline, Google Scholar, Hinari, Cochrane Library
Inclusion Criteria	This review included studies from January 2009-June 2020 concerning the population of all group. It included KAP studies only that include Indian dental practitioners
Exclusion Criteria	Non- English article Abstracts, editorials, review article Studies done on dentists working outside India Studies done on postgraduate students in INDIA, as it was considered that their clinical decision may not be independent & may be influenced by colleagues, seniors & staffs

After the electronic and manual search; Pub Med, Google Scholar & Hinari provided 397 Articles screened based on abstract & Title. 385 studies were excluded based on irrelevancy & duplicate articles, 12 studies were selected for a systematic review. 2 studies were excluded after reading the full text as they included postgraduate students, so finally, 10 studies were found to be relevant to the topic and fulfilled the inclusion criteria selected for the systematic review. Whereas Cochrane Library & Prospero showed no systematic review published on this topic so far. The Systematic Review was registered under PROSPERO in October 2020 and published in November 2020 with registration no. CRD42020218186.

Preferred reporting items for systematic reviews and meta-analysis (PRISMA) which had a four-phase diagram flow was used for the exploration of data (Moher et al., 2010)<sup>7</sup> as shown in Figure 1.



Assessment of risk of bias for the articles was done using the Critical Appraisal Skill Program (CASP) (2014) for qualitative research. Thus, an evaluation of the strength and limitations of each article was established.

### Results & Discussion

**Results of Data Extraction:** The full text of these 12 articles was obtained and after a thorough assessment by both the reviewer for these 12 articles independently 2 articles were eliminated as they included postgraduate students. Thus the final sample size obtained for this systematic review was 10 articles.

**Results of Included Study:** From the full-text articles identified, only 10 studies met the inclusion criteria and were included in the systematic review. These studies

were published between 2009 and 2020, included sample sizes ranging from 40 to 400 participants, and data was collected from samples from different parts of India like Chennai, Vadodara, Bhopal, Jodhpur, Modinagar, Hazaribagh, Bengaluru, Davangeree.

A total of 10 no. of studies & 1585 Dentists met the inclusion criteria and were included in the analysis. Table 2 include summary of studies. [Table 2]

Table 2: Summary of Studies

Sn.	References	Study area/ Dist	Type of study	Data	No. of items for KAP Constructs	Sample size & response rates	Methodology	Basic Findings	Comments
1	Rawat et al, 2018	Jodhpur, Raj	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	3Q-Awareness 10 Q-Understanding 5 Q- Barriers	350 & 68.57 %	Descriptive analysis, Chi-square test, ANOVA	Majority of the oral health practitioners were not aware about the concept of evidence-based dentistry and its proper integration into day-to-day practice. Time was perceived as an important barrier	The regulatory body of dental sciences in India should make some necessary changes in the dental curriculum to include the concept of evidence-based dentistry in detail.
2	Kumar et al, 2016	Modinagar, UP	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	3 Q-Awareness 10 Q-Understanding 5 Q- Barriers	174 & 91.95%	Descriptive analysis, Chi-square test	Full-time dental practitioners are not sufficiently familiarized with EBD in comparison with the full-time academicians or the dentists	Full time clinicians should be encouraged to attend CDE regarding EBD to include it in their practice.

								carrying out both practices.	
3	Patel et al,2013	Vadodara, Gujarat	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	*Not specified	87 & 91.95%	Descriptive analysis	awareness of evidence based dentistry is less amongst the dental practitioners in the city of Vadodara but have welcoming attitude towards EBP	Further training programs for evidence based dentistry should be planned and introduce the practitioners to various advantages of evidence based dental practice.
4	Catherine et al,2018	Chennai, TN	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	7 Q- Attitude 15 questions for assessing Knowledge, attitude, practice & barriers in Evidence	160 & 96.25 %	Descriptive analysis	Most respondents (75%) were extremely interested in welcoming the promotion of EBD	Shifting from a reliance on the experiential model of higher cognitive process to associate evidence-based model would profit all health-care professions, likewise due to the general public
5	Saxena et al, 2019	Hazaribau gh Jharkhand	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	*Not specified 12 questions for assessing Knowledge, attitude, practice & barriers in Evidence	107 & 89.72%	Descriptive analysis Pearson's Chi-square	Knowledge and practice of evidence-based dentistry is very low among the dentists of Hazaribag city. Majority of dentists have positive attitude towards learning the concepts of	There is need to conduct Continuing Dental Education (CDE) programs on EBP to give the dentists a better understanding regarding EBP so that they can deliver a better-quality care for patients.

								EBD	
6	Gupta et al, 2015	Bhopal, MP	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	6Q- Knowledge 5Q- Attitude 3Q- Practice 1 Q- Barrier	250 & 80%	Descriptive analysis Pearson's Correlation, Unpaired t-test, Anova	Overall awareness of EBDP among general dentists of Bhopal city was moderate when compared to specialist. The claimed practice of EBD was unsatisfactory regardless of their qualification or practice but attitude towards it was enthusiastic.	Including evidence based dental practice teaching in dental curriculum may prove to be a significant step in effective and efficient dental care delivery to the patients. Identification of barriers may help to design programs for enhancing EBDP among dental
7	Rajgopalachari et al,2017	Bengaluru, Karnataka	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	*Not specified	400 & 75 %	Descriptive statistics, t-test	Dentists had a fairly good understanding of EBD though most of them still relied on their own judgment or consulting colleagues for clinical decision making	Awareness of EBD doesn't mean dentists practice it. Most of them rely on their clinical expertise that's why we need to find barriers in implementing EBD and work on removing those barriers.
8	Ahad et al,2016	Chennai, TN	Cross-sectional study	Knowledge attitude & Practices	*Not specified	40 & 87.5%	Descriptive analysis'	Majority of dental practitioner had heard about evidence based dentistry and their knowledge about terms	Though awareness of EBD is sufficient among dentists yet training programs, research meeting and

								used in EBDP is significant.	seminars on EBD should be conducted for further awareness to implement a good quality health care for the patients.
9	Bhate et al, 2017	Davangere , Karnataka	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	14 Q for KAP	160 & 73.1 %	Descriptive analysis, Chi-square test	Awareness of the term EBP is high among the dentists of Davangere; however, their knowledge level is low and their practice is also limited and not very efficient.	Though dentists are aware but level of knowledge is limited.
10	Bansal et al, 2020	Modinagar UP	Cross-sectional study	Demographic & Practice details, Knowledge attitude & Practices	*Not specified	176 & 100%	Descriptive analysis, Chi-square test	More positive perception regarding evidence-based practice among endodontists than GDPs, knowledge was high among endodontists regarding and practice was also good among endodontists	Knowledge is high among endodontists regarding evidence-based practice and practice was also good among endodontists. Age of practicing dentist , year of clinical practice also affects EBD

**Analytical approaches**

All the selected articles were mostly cross-sectional studies. Descriptive statistics were used to summarize the socio-demographic & type of practice variables and sources of information. Statistical significance of different analytic approaches was considered at a p-value < 0.05.

Table 3: References and analytical approaches.

S.no.	References	Descriptive statistics	Correlation Analysis	Unpaired t-test	ANOVA	Chi-square test
1	Rawat et al,2018	✓			✓	✓
2	Kumar et al, 2016	✓				✓
3	Patel et al,2013	✓				
4	Catherine et al,2018	✓				
5	Saxena et al, 2019	✓	✓			✓
6	Gupta et al, 2015	✓	✓	✓	✓	
7	Rajgopalachari et al,2017	✓		✓(t-test)		
8	Ahad et al,2016	✓				
9	Bhate et al, 2017	✓				✓
10	Bansal et al, 2020	✓				✓

**Correlation**

Gupta et al. (2015)<sup>8</sup> used correlation analysis to examine the association between socio-demographic characteristics and KAP regarding Evidence based practice in Bhopal. Positive correlation was found between increasing age and knowledge score (r=0.111, p=0.054), a significant correlation was present in terms of qualification and knowledge (r=0.275, p<0.001). However, gender and years of clinical experience was not significantly associated with the knowledge scores of dentists. (p=0.07, 0.54).

**Student’s t-test**

Gupta et al. (2015) compared gender, age groups, qualification, years of clinical experience with participants’ standing in relation to the mean group EBD knowledge score, using unpaired t-test and ANOVA, as appropriate. The results of the study showed that there was significant (difference found between the familiarity with EBDP and specialization, clinical experience. (p< 0.001)

Six of the studies used combinations of different analytical methods, such as Chi-squared test ANOVA, unpaired t-test to achieve the objectives of their studies at varying degrees. Table 3 shows the summary of the analytical approaches used by different authors.

Overall mean knowledge score was 5.03±1.34. The mean knowledge score for dentists was 4.72 ± 1.37 and for specialist were 5.47± 1.19. The difference was statistically significant (p<0.001). Rajgopalachari et al , 2017<sup>9</sup> used student’s t-test to find association of Participant’s mean knowledge, attitude, and practice scores with demographic variables. The overall mean score of the respondents for knowledge, attitude and practice was 17.4 ± 6.45, 1.92 ± 0.75, and 17.06 ± 3.05, respectively. There was a statistically significant difference (P = 0.040) between field of practice, specialist having more knowledge (14.02 ± 5.86) than general dentists (12.56 ± 5.16). Positive attitude was seen with dentists having more clinical experience (1.69 ± 0.73) compare with dentist having less clinical experience (1.52 ± 0.70) and with academicians (2.09 ± 0.50); it was statistically significant. EBD was practiced by specialist dentist (P = 0.029), dentist with more clinical experience (P = 0.001),and among practitioners (P = 0.001).



### Analysis of variance (ANOVA)

Rawat et al, (2017)<sup>10</sup> used analysis of variance test were to find statistical differences among demographic variables and among three groups (academicians, practitioners, and academicians into dental practice). Statistically significant difference among the three groups was found with regard to awareness of dentists about extracting journals, review publications, and databases relevant in carrying out EBP, understanding of technical terms used in evidence-based dentistry, perceived major barriers to practicing evidence-based dentistry.

### Chi-squared Test

Kumar et al,(2016)<sup>11</sup> used chi-squared test to find the significant difference between the three groups of professionals only academicians (Group I), only clinicians (Group II), and academicians with clinical practice (Group III). The difference was noted to be statistically significant ( $P \leq 0.05$ ) regarding awareness of dentists about extracting journals, review publications, and databases relevant in carrying out evidence based practice between the three groups, except the context of “awareness of dentists about systematic reviews and databases”. Regarding Understanding of technical terms used in evidence-based dentistry the difference was noted to be statistically significant ( $P \leq 0.05$ ) with respect to the three groups, except the context of “number needed to treat”.

Saxena et al, (2019)<sup>12</sup> used chi-squared test to find the significant difference between the responses of undergraduate and postgraduate dentists for the need to be trained in EBP. There was no significant difference between undergraduate and postgraduate dentists for the responses ( $p > 0.05$ ). Also Regarding practicing EBP in decision making and without EBP their practice was incompetent; there was no significant difference among responses of undergraduate & postgraduate dentist. Ninety-one percent dentists ( $n = 40$ ) responded that they

did not practice EBP in decision making and only 47.73 % ( $n = 21$ ) felt that without EBP their practice was incompetent. Bhate et al,(2017)<sup>13</sup> used Chi-square test to study the association between variables such as gender, age, qualification, type of practice, and participation in continuing dental education (CDE) program to the utilization of EBP among dentists. It was noted that practice type had association with the response of most of the questions except few questions Qualification had association with response of most of the questions except few questions. Bansal et al, (2020)<sup>14</sup> also applied Chi-Square test in which it was determined that among Endodontists age in years was significantly ( $P = 0.01^*$ ) associated with the practice. Years of practice was significantly associated with knowledge ( $P = 0.05^*$ ) and perception ( $P = 0.05^*$ ) regarding evidence-based practice.

### Risk of bias of the selected articles

CASP (2014) checklist for the qualitative study consists of 10 items. Number 6 of the checklist was modified to conform to the feature of evaluating studies involving self-administered questionnaires. Virtually, all the studies considered had a low risk of bias from number 1 to 4 of the checklist. Out of the 10 literature reviewed, only 2 of the literatures Catherine et al,(2018)<sup>15</sup> & Rajagopalachari et al,(2017)<sup>9</sup> explained about sample size calculation which makes them a low risk of bias in terms of instrument used for the study. Out of the 10 literature reviewed, 8 of the literatures gave importance to construct validity and reliability of the questionnaire which makes them a low risk of bias in terms of instrument used for the study. On ethical issues, all the studies stated the ethical clearance for studies. Seven of the reviewed literatures had a low risk of bias on the intensity of the data analysis. Patel et al,(2013)<sup>16</sup> Catherine et al,(2018)<sup>15</sup> and Ahad et al,(2016)<sup>16</sup> used only descriptive statistics to present result without any statistical test of significance. Finally, in

terms of clear statements of findings of the study, contribution and value of the research to the society, all

the literature considered had a low risk of bias. Table 4 shows the summary of the risk of bias of the literature.

Sn.		Rawat et al, 2018	Kumar et al, 2017	Patel et al, 2013	Cathrine et al, 2019	Saxena et al, 2019	Gupta et al, 2015	Rajagopalachari et al, 2017	Ahad et al, 2016	Bhate et al, 2017	Bansal et al, 2020
1	Clear statement of the aim of study	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Methodology appropriateness	Yes	Yes	Yes	Yes	Yes	Yes	Yes	V	Yes	Yes
3	Design appropriateness to achieve aim of study	Yes	Yes	Yes	Yes	Yes	Yes	Yes	V	Yes	Yes
4	Sampling procedure appropriateness	V	V	V	Yes	V	V	Yes	V	V	V
5	Data collection procedure and quality	Yes	Yes	V	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	Content and construct validity with the reliability of the instrument	Yes	Yes	V	Yes	Yes	Yes	Yes	V	Yes	Yes
7	Ethical issues and considerations	Yes	Yes	Yes	Yes	Yes	Yes	Yes	yes	Yes	Yes
8	Intensity of the data analysis	Yes	Yes	V	V	Yes	Yes	Yes	V	Yes	Yes
9	Clear statements of findings of the study	Yes	Yes	Yes	Yes	Yes	Yes	Yes	V	Yes	Yes
10	Contribution and value of the research to the society	Yes	Yes	Yes	Yes	Yes	Yes	Yes	V	Yes	Yes

“Yes” indicates a low risk of bias, “No” indicates a high risk of bias, and “V = Vague” indicates lack of information and uncertainty over the probable bias.

**Discussion**

In developed countries like the United States, Canada, Australia, New Zealand, and Europe clinical guidelines are evidence-based, but in most developing countries like India still, evidence-based dentistry is not practiced. The lack of information about the level of EBP being implemented has been recognized as a major issue in healthcare delivery.

The focus of the present systematic review is on the knowledge, awareness, and practice of Indian Dentists

regarding Evidence-Based Dentistry. The review utilized various parameters in order to gather important information from dentists which are very evident from the results. The knowledge and awareness level regarding Evidence-Based Dentistry among the subjects is inadequate and there is significant variation in knowledge and awareness management in different studies, which could be attributed to the difference in sample size and to the different study settings.

Most of the included studies have used a structured questionnaire for gathering information from the subjects regarding Evidence-based practice. This may have increased the risk of bias while evaluating studies on

knowledge and awareness regarding EBP. Out of ten included studies, 6 have used the questionnaire design and as well presented the questions regarding knowledge and awareness of EBD to gather data whereas in four studies they haven't specified the questions they have used. Almost all the included studies used a close-ended questionnaire to gather information about various aspects of EBD from study subjects while only one study by Bhate et al, 2017<sup>13</sup> used a questionnaire that contained both open- and close-ended questions. The advantage of using a close-ended questionnaire is that it reduces recall bias, and such questions are easy to analyze and may achieve quicker responses from the subjects.

It can be seen from the results that mixed responses were gathered from the study participants in various studies regarding knowledge and awareness regarding EBD. This could be due to the reason that EBP constitutes a significant role in deciding treatment modality and its heated need in the evidence-based practice is towards changing the trend.

#### **Strength and limitation of studies**

The present review had some limitations as well. The generalizability may be inaccurate due to a review of studies that were conducted in different settings and time periods by different investigators also various statistical analytical approaches were used to determine the Knowledge Attitude Practice (KAP). The present review compared and discussed only those aspects regarding EBP that were common in all the studies as it was not practically possible to discuss and compare dissimilar characteristics of each and every study. It is important to harmonize and validate the content of all the structured questionnaires in order to reduce the variability of results based on the questionnaire used for data collection. In general, an appropriate sampling procedure, a proper validated questionnaire covering similar aspects of

evidence-based dentistry practice and the large sample size of data will increase the precisions of results.

#### **Conclusion**

Clear evidence showed that the clinical experience and job profile of the individuals influence KAP regarding evidence-based dentistry. Dentists had fairly good ideas about evidence-based dentistry but most of them still rely on their own judgment & consulting colleagues for clinical decision-making because of lack of time. Dentists with master's degrees & associated with academic institutes are more aware & practicing evidence-based dentistry. The majority of dentists have a positive attitude towards learning the concepts of EBP. The review reveals the need to include EBP in the graduation curriculum, conduct Continuing Dental Education (CDE) programs on EBP to give the Indian dental professional a better understanding regarding EBP so that they can deliver better-quality care for patients.

#### **References**

1. McKibbin K A, 'Evidence-based practice'. Bull Med Libr Assoc., vol. 86, no. 3, 1998, p. 396-401.
2. Gillette J et al. 'The benefits of evidence-based dentistry for the private dental office'. Dent Clin North Am., vol. 53, 2009, p. 33-45
3. American Dental Association. ADA Policy on Evidence-Based Dentistry, Professional Issue and Research, ADA Guidelines, Positions and Statements. American Dental Association; 2002
4. Faggion C, Tu Y. ,Evidence-based dentistry, a model for clinical practice,. J Dent Educ, vol. 71, 2007 p. 826-31.
5. Hoppe D, Bhandari M. 'Evidence-based orthopedics: A brief history'. Indian J Orthop, vol. 42, 2008, p. 104-10.
6. Doane GH, Varcoe C. 'Knowledge translation in evidence nursing, from evidence-based to inquiry-

- based practice'. ANS Adv Nurs Sci, vol 31, 2008, p. 283-95.
7. Moher D et al. 'Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement'. Int J Surg., vol. 8, no. 5, 2010, p. 336-41.
  8. Gupta M et al. 'Awareness, attitude and barriers towards evidence based dental practice amongst practicing dentists of Bhopal City'. J Clin Diagn Res., vol. 9, no. 8, 2015, p. 49-54.
  9. Rajagopalachari et al. 'Knowledge, attitude, and practices toward evidence-based dentistry among dentists of Bengaluru city'. J Indian Assoc Public Health Dent, vol. 15, no. 3, 2017, p. 239-243.
  10. Rawat P et al. 'Knowledge, Attitude, and Behavior toward Evidence-based Dentistry among Dental Professionals in Jodhpur Rajasthan, India'. J Contemp Dent Pract. Vol.19, no. 9, 2018, p. 1140-1146.
  11. Kumar J et al. 'Knowledge and usage of evidence-based practice among dentists in Modinagar, India: a questionnaire-based study'. J Indian Assoc Public Health Dent, vol. 15, no. 2, 2017, p. 170-176.
  12. Saxena et al. 'Knowledge, attitude, and practice regarding evidence-based dentistry among dentists of hazaribag, jharkhand, india.. International Journal of Advanced Research, vol. 7, no. 3, 2019, p. 808-814.
  13. Bhate et al. 'Dentists' knowledge, attitude, and practice regarding evidence-based practice in Davangere India'. J Indian Assoc Public Health Dent, vol. 15, no. 4, 2017, p. 359-367.
  14. Bansal N et al. 'Perception, knowledge, and practice of endodontists and general dental practitioners toward evidence-based practice and factors associated with it-A cross-sectional study'. J Family Med Prim Care., vol. 9, no. 6, 2020, p. 2958-2962.
  15. Catherine et al. 'Evidence-based dentistry practice among dental practitioners in Chennai, Tamil Nadu - A cross-sectional study.' Drug Intervention today, vol.11, no. 1, 2019, p. 1-15.
  16. Patel J et al. 'Awareness on Evidence Based Dentistry amongst dental professionals in Vadodara city – An Questionnaire survey'. J Integrated Health Sciences, vol.1, no. 1, 2013, p. 27-31.
  17. Ahad M, Gheena S. 'Awareness, Attitude and Knowledge about Evidence Based Dentistry among the Dental Practitioner in Chennai City'. Research J. Pharm. and Tech, vol. 9, no. 11, 2016, p. 1863-1866.