Dentistry Section

# Awareness, Attitude and Barriers Towards Evidence Based Dental Practice Amongst Practicing Dentists of Bhopal City

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#### **ABSTRACT**

**Introduction:** Evidence based dental practice is said to be the recent best approach to provide treatments or interventions, methodically proven to be safe and sound, efficient and cost effective. So, for providing quality dental care, clinical expertise, research evidence and patient's preferences all should be given equal importance.

**Aim:** To assess the awareness, attitude & barriers of evidence-based dental practice (EBDP) amongst dentists of Bhopal city.

**Materials and Methods:** The target population of this crosssectional study involves dentists of Bhopal city. Two hundred fifty private dentists of Bhopal were selected using convenience sampling technique. Data was collected using a self-administered questionnaire containing 15 questions for assessing Knowledge, attitude, practice & barriers in Evidence based practice. Chisquare, t-test & one-way ANOVA were applied for data analysis and p<0.05 was considered statistically significant.

**Results:** The study revealed that dental practitioners had low knowledge about evidence based dental practices but they showed positive attitude towards adopting it in their future practice. There exist certain barriers in practice of evidence based dentistry.

**Conclusion:** 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. Barriers in evidence based practice needs to be identified & eliminated.

**Keywords:** Decision making, Informational resources, Knowledge

#### INTRODUCTION

Quality dental care is an appropriate blend of science and art which is basically learnt in undergraduate days of dentistry. The knowledge gained during those days if not updated according to the changing trends of current dental practice might create a knowledge gap since the amount of information is increasing and time to meet those information needs is decreasing. This information overload [1] hardly provides quality knowledge required at times by practitioners. Moreover, traditional practice involves decision making principally based on past experiences of clinician often neglecting current scientific knowledge and patient preferences or values. In developing countries like India, the concept of experienced dentist providing quality dental care is often emphasized. But in reality, an inverse relationship might exist between the number of years of practice and the quality of care provided [2]. So, for providing quality dental care, clinical expertise, research evidence and patient's preferences all should be given equal importance what actually constitutes evidence based dental practice. Lawrence had given a simple definition of evidence based dentistry as a "Process that restructures the way in which we think about clinical problems" and is characterized by: "making decisions based on known evidence" [3].

Evidence based dental practice provides dentists the chance to apply relevant scientific research findings to the care of their patients [4]. In fact such practice is now regarded as current best approach to offer methodically proven, safe, sound, efficient and cost effective treatments or interventions to the patients [5]. Improvements in dentist's skills and knowledge through such practice, as well as improved communication between patients and dentists about the rationale behind clinical recommendations made, might be the possible reasons [6,7]. Evidence is based on the existence of at least one well-conducted randomized control trial (RCT) [8].

Although concept of Evidence based Practice was born two decades ago [9] but its arrival is relatively new in India especially in dentistry. There have been relatively few studies done in the past to assess the level of awareness and practice of evidence based dental practice among dentists in India specially in this part of country. Additionally, results of one part of such diverse country cannot be generalized to other part, so the objective of the present study was to:

- To assess the knowledge, attitude & barriers towards evidence based dental practice among private dental practitioners of Bhopal city.
- 2. To identify the various informational resources to support clinical decisions used by practitioners.

#### **MATERIALS AND METHODS**

Study design and setting- This descriptive cross-sectional study involved dentists of Bhopal city which was conducted for 3 months during the period of March 2014 to May 2014. Two hundred fifty private dentists of Bhopal were selected using convenience sampling technique. Dentists who had atleast one year of clinical practice and who agreed to give their consent were included in the study. Dentists practicing in a government setting or only involved in academic field were excluded from the study. The study was approved by the institutional ethics committee of People's College of Dental Sciences, Bhopal, India.

**Questionnaire:** Data was collected using a self-administered questionnaire containing demographic details and 15 questions for assessing Knowledge, attitude, practice & barriers in Evidence based dental practice. A close ended questionnaire was used which consisted of two parts i.e. Demographic details and 15 questions. Demographic details included age, gender, qualification and years of clinical experience. Age was further subdivided into four groups i.e. from 26-30, 31-35, 36-40 and more than 40 years.

Participant's qualification was categorized as BDS or MDS and their clinical experience was also categorized into four groups 1-5, 6-10, 11-15 and > 15 years. Questionnaire comprised 6 Knowledge based Questions and the score range from 0-6, 5 Attitude based Questions, 3 questions on use of informational resources (Practices) and 1 Question was on Perceived Barriers towards evidence based dental practice. For question on attitudes (11 to 14) and perceived barriers (Q.15) a five point Likert scale was used including options "strongly agree, agree, uncertain, disagree, strongly disagree [10].

Most of the questions were pretested taken from previous studies and used with minor modifications. A pilot study was done on 10 % of sample size to confirm validity and reliability of remaining questions. Questionnaire was distributed personally to the individual practitioners and collected on the same day. Only completely filled questionnaires were considered for the study.

#### STATISTICAL ANALYSIS

Data was entered into SPSS version 17.0 by using appropriate codes and analyzed. Chi-square test was applied for data analysis. A mean EBD knowledge score for the participants was obtained. Knowledge scores were found to be normally distributed. Therefore, different factors, including gender, Age groups, Qualification, years of clinical experience were compared with participants' standing in relation to the mean group EBD knowledge score, using unpaired t-test and ANOVA, as appropriate. Pearson Correlation was used to find any correlation of Knowledge score with age, years of clinical experience and specialty. p < 0.05 was considered statistically significant.

#### **RESULTS**

Out of 250 dentists of Bhopal city, 200 responded to the questionnaire giving an overall response rate of 80%. There were 62.5% males and 37.5% females. In terms of qualification, 58.5% of the respondents were general dentist (BDS) [Table/Fig-1]. Out of 200 respondents, only 6% of the participants were of 40 years or more. In terms of clinical experience, more than two-third (69%) had at least experience of 1-5 years [Table/Fig-1].

#### Dentist's Familiarity with Evidence Based Dental Practice

When dentists were asked whether they had heard of Evidence based dental practice before, 70.5% of participants reported to have heard of EBDP before this study. There was significant (difference found between the familiarity with EBDP and specialization, clinical experience. (p< 0.001) [Table/Fig-2].

# **Knowledge of Common Terms Used in Evidence Based Practice**

When the participants who had heard of EBDP, were asked whether they understood some common terminologies used in the EBP like Systematic reviews & meta-analysis, Randomized control trials, Hierarchy of evidence etc., 44.7% reported that they had some knowledge of terms like Systematic review and meta-analysis. When further asked if they need additional information of these terms or not, 32.6% wanted to know more about systematic review and meta-analysis [Table/Fig-3].

# **Use of Informational Sources to Support Clinical Decisions**

Firstly when all the participants (n=200) were enquired about current informational source utilized in clinical difficulties, 38% participants reported of referring a text book, followed by internet Search (32%). Furthermore, 77.5% participants said that they had ease of access to information in clinical uncertainties. When asked about past one year frequency of use of different informational resources by the participants who were familiar with EBP, 60.2% had never used any

Cha	Distribution of Respondents (n= 200)		
		n (%)	
	26-30 years	123 (61.5%)	
Age	31-35 years	47 (23.5%)	
	36-40 years	18 (9%)	
	>40 years	12 (6%)	
	Male	125 (62.5%)	
Gender	Female	75 (37.5%)	
	BDS	117 (58.5%)	
Qualification	MDS	83 (41.5%)	
	1-5 years	138 (69%)	
Clinical Experience	6-10 years	39 (19.5%)	
	11-15 years	12 (6%)	
	>15 years	11 (5.5%)	

[Table/Fig-1]: Frequency distribution of demographic variables of the respondents (N=200)

Characteristics		Familiar with EBDP	Not Familiar with EBDP	χ² value	p-value	
Age	26-30 years	70(35%)	53(26.5%)			
	31-35 years	42(21%)	5(2.5%)	$\gamma^2 = 28.9$	< 0.001 (HS)	
	36-40 years	17(8.5%)	1(0.5%)	λ =20.5	< 0.001 (FIO)	
	>40 years	12(6%)	0(.0%)			
Gender	Male	90(45%)	35(17.5%)		p=0.63	
	Female	51(25.5%)	24(12%)	$\chi^2 = 0.54$		
Qualification	BDS	60(42.6%)	57(28.5%)		< 0.001* (HS)	
	MDS	81(57.4%)	2(1%)	$\chi^2 = 50$		
Clinical	1-5 years	81(57.4%)	57(28.5%)	0.00	0.004##10	
Experience	6-10 years	37(18.5%)	2(1%)	χ²=30	< 0.001* (HS)	
	11-15 years	12(6.0%)	0(.0%)			
	>15 years	11(5.5%)	0(.0%)			
Total		141(70.5%)	59(29.5%)			

**[Table/Fig-2]:** Participant's familiarity with Evidence based dental practice according to demographic variables

\* HS- Highly significant

Some terms used in EBDP	Participants requiring additional information (%)		
1. Systematic Review and Meta-analysis	46 (32.6%)		
2. Randomized Control Trial	6 (4.3%)		
3. Case Series / Case Report	29 (20.6%)		
4. Expert Opinion	20 (14.2%)		
5. Hierarchy of Evidence	18 (12.8%)		
6. All of above	17 (12.1%0		
7. None of the above	5 (3.5%)		

[Table/Fig-3]: Participants requiring additional information about knowledge of common terms used in evidence based dental practice

Information Sources	Frequently (%)	Sometimes (%)	Never (%)	$\chi^2$ value	p-value
Dental Practice Expert	32(22.7%)	38 (27%)	71(50.4%)	28.2	< 0.001
Textbooks	54 (38.3%)	45 (31.9%)	42(29.8%)	2.1	0.349
Other Professionals	33 (23.4%)	84 (59.6%)	24 (17%)	3.6	0.161
Print Journals	40 (28.4%)	35 (24.8%)	66(46.8%)	22.5	< 0.001
Electronic Database (PubMed)	31 (22%)	25 (17.7%)	85(60.3%)	24.7	< 0.001

[Table/Fig-4]: Participants who heard about EBDP and use of informational sources to support clinical decisions during past one year. (n= 141)

electronic database such as PubMed (p< 0.001) whereas textbooks were the most frequently used source of information during past one year [Table/Fig-4].

Regarding the source of information for new clinical procedure, material or advances in dentistry, 38.3 % out of 141 reported to

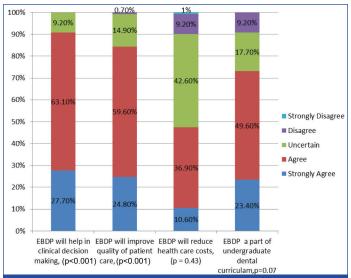
search online databases followed by 22.7% dentists who used Continuing education courses.

In general when participants were asked "What do you think which is better to support the clinical decision", Out of all participants, 60.5 % dentists answered past clinical experience. But out of 141, who heard of EBDP, almost 50% of dentists favoured evidence from scientific literature and 50% preferred "Past clinical experience".

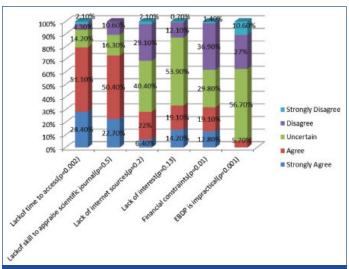
Characteristics		Mean "K" Score	t or f value	p-value	
Gender	Male	4.90±1.31			
	Female	5.25±1.39	t = -1.8	p= 0.07 (NS)	
Qualification	BDS	4.72±1.37			
	MDS	5.47±1.19	t = -4.0	<0.001*(HS)	
Age Groups	26-30 years	4.85±1.37		p = 0.14 (NS)	
	31-35 years	5.40±1.21	f = 1.6		
	36-40 years	5.22+/-1.35			
	>40 years	5.08±1.37			
Clinical	1-5 years	4.93±1.39			
Experience	6-10 years	5.23±1.22	f = 0.8	p = 0.54 (NS)	
	11-15 years	5.75±1.13		. ,	
	>15 years	4.70±1.16			

[Table/Fig-5]: Participants Mean knowledge score & its association with their demographic details

K= knowledge, NS = Not significant, \* HS = Highly significant



[Table/Fig-6]: Attitude of dentists who heard of EBDP



[Table/Fig-7]: Perceived barriers reported by dentists who were familiar with EBDP

Overall mean knowledge score was  $5.03\pm1.34$ . The mean knowledge score for dentists was  $4.72\pm1.37$  and for specialist were  $5.47\pm1.19$ . The difference was statistically significant (p<0.001) [Table/Fig-5].

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).

### Participants' Attitude and Perceived Barriers Towards EBDP

The dental practitioners were also assessed in terms of their attitudes towards EBDP. It was found that the majority of the respondents (n=141) who had heard of EBDP, agreed that EBDP will help in clinical decision making (63.1%) and improve quality of patient care (59.6%). But only 36.9% agreed that it can reduce health care costs [Table/Fig-6]. When the respondents who had heard of EBP were asked to identify perceived barriers to EBP, the most commonly reported barrier was lack of time (79.5%) followed by lack of skill to appraise scientific journals (73.1%) [Table/Fig-7].

#### **DISCUSSION**

The present study targeted private dental practitioners of Bhopal city with the objective to assess their awareness on evidence based dental practice, overall attitude and perceived barriers towards it and what sources they were utilizing to support their clinical decisions. This study assessed awareness of both general as well as specialist private practitioners towards EBDP which is different from previous studies. Study group in most of the previous studies were general dentists, post-graduate students or medical students. Moreover, present study also makes an attempt to compare the level of knowledge and use of evidence-based dental practice between the two groups.

Dentists only involved in academic field and not practicing were excluded from the study due to their ease of access to informational resources in comparison to the majority of private practitioners. Similarly, Government dentists usually are not allowed to do private practice and their count is negligible in comparison to private dentists in the Bhopal city, for this reason they were also excluded from the study to make the study population more homogenous. Majority of participants were relatively fresh in terms of their clinical practice and it is presumed that evidence based dental practice should be instilled in the younger age group for it to be fruitful in their future career.

The response rate of the present study was 80% similar to Haron et al., (80%) [11] and Prabhu et al., (86.7%) [12] but more than the study of Iqbal et al., (69.6%) [13] [Table/Fig-8]. Such high response might be attributed to the same day retrieval of questionnaires from respondents after giving them sufficient time. Majority of the respondents (70.5%) had heard of EBDP before, similar to the results of Yusof et al., but higher than the study of Pratap et al., [14,15]. This was a significant finding since scenario of treating patients is now changing more towards scientifically proven basis mixed with patient's preferences and clinician's experience. EBDP can prove to be a useful tool in assisting practitioner in terms of providing better quality of care and at the same time fulfilling patient's demands. Less than fifty percent of respondents, who heard of EBDP, had some knowledge of systematic review and meta-analysis. A significant number of participants (44.7%) needed additional information about systematic review and meta-analysis. This was guite similar to the findings of Haron et al., but significantly lesser than Yusof et al., [11,14] [Table/Fig-8]. This form of evidence ranks highest in the hierarchy of evidence and must be primarily sought in clinical difficulties. Most of the respondents as they claim to understand the

Authors	Results		
Straub-Morarend CL et al., [1]	The most commonly reported resource utilized at during the past year (frequently or sometimes) was traditional continuing education (CE) courses(98.4%) followed by Print journals (96.9 percent) and "consultation with other health professionals in community" (95.3 percent).		
Haron MI et al., [11]	While 60.9% of the group acknowledged that they practice EBD most of the time, fewer (40.8%) had a reasonable understanding of EBD. Clinical decisions appeared to be mostly based on the clinician's own judgment (73.3%) rather than on evidence-based sources such as PubMed (28.3%) or the Cochrane Library (6.7%). The mean EBD knowledge score for the group were 9.03, with 40.8% of the group being above the mean. Training in EBD was perceived essential by a majority of the group.		
Prabhu S et al., [12]	65 (27.8%) participants were not familiar with evidence based dentistry, Mean knowledge regarding terms used in evidence based dentistry was high among clinical than non-clinical students. A positive attitude was seen among the post graduates in practice of evidence based dentistry. Lack of skills to appraise scientific journals, financial constraints and difficulties in application of EBD were the commonest felt barriers		
Iqbal A et al., [13]	Most of the respondents had some understanding of technical terms associated with EBP. Only 29% (60/204) could correctly define the term EBP. In clinical uncertainties 60% (122/204) of general dental practitioners asked friends and colleagues for help and guidance. Eighty one percent of respondents were interested in finding out further information about EBP (165/204). Barriers to its use included a lack of time and financial constraints.		
Yusof Z YM et al., [14]	50.3 % response rate, More than two-thirds (135/193, 69.9 percent) of the respondents had heard of EBP. Out of the 135 respondents who had heard of EBP, a high percentage agreed that EBP enhanced their knowledge and skills (132/135, 97.8 percent) and treatment quality (132/135, 97.8 percent). Out of the 135 respondents, many perceived EBP as very important (59/135, 43.7 percent) and important (58/135, 43.0 percent) wanted to learn more information about EBP (132/135, 97.8 percent). The main reported barriers were lack of time (87/135, 64.4 percent), financial constraints (54/135, 40.0 percent), and lack of knowledge (38/135, 28.1 percent). A majority of the 135 respondents had knowledge of and positive attitudes towards EBP.		
Pratap et al., [15]	About 49.3% of the students were unfamiliar of evidence based dentistry, and 29.5% students could apply the concept. About 80% of the students were interested in finding information about evidence based dentistry and 33% of the students agree that the evidence based dentistry provides best decision-making skills. 76% of the students agreed that it improves skills in clinical performance.		
Ashri N et al., [16]	Physicians and dentists had an overall encouraging attitude toward EBP, with 85% showing interest in the current promotion for this process and 97% agreeing that it improves patients' care. No significant differences were found between dentists and physicians with respect to all attitude items.		
Bahammam AM et al., [17]	The students' (dental and medical) knowledge and attitude were low with no significant difference between the 2 groups. More than half of the students in both groups did not use EBP in their treatment (DS=85%, MS=84.4%; p=0.842). The greatest reported barriers were; "EBP is difficult to understand" (DS=88.9%, MS=72.2%; p=0.000), and no time (DS=54.6%, MS=46.7%; p=0.210).		
[Table/Fig-8]: Results	of some similar studies done in the past.		

term "Randomized Controlled trial and Hierarchy of evidence" might be only their perceived knowledge not the accurate understanding. Regarding informational sources utilized, almost similar percentage (38%) of respondents were using textbooks whether heard or not about EBDP. This was higher than results of lqbal et al., but lower than that of Yusof et al., [13,14]. Friends or colleague consultation was also an important source (27.5%) in the results which were significantly lower than that of lqbal et al., and Yusof et al., [13,14] [Table/Fig-8]. Respondents who heard of EBDP, when asked about past one year use of informational sources, 60.2% (85/141) had never

used an electronic database such as PubMed and Textbooks and internet search were the most frequently used resources. Authentic textbooks can provide good evidence but they cannot cover all the aspects of evidence based practice. On many occasions outdated information is sought and used by the relatively new dentists for supporting their clinical decisions. They remain; however, a source for background information that many practitioners' prefer [1]. Similarly, friends and colleague provide experience based information not evidence based one. Every patient is a different individual and treatment option also differ and imported information from someone else might not fit apt to the current patient. This also emphasizes the fact that dentist should have the correct knowledge of EBDP and its effective use in the practice. About 50 % of the participants who heard of EBDP reported that they would favour past clinical experience in uncertain situation. Dentists as professionals should avoid intuition based practice as it not only is unethical, but also breaks the confidence placed in dentists by the society, and might be damaging to the patient-doctor relationship [13].

Dentists with higher qualification (MDS Vs BDS) scored better in terms of mean knowledge scores which could be attributed to their involvement in research activities during postgraduation. There were no significant differences found between mean knowledge scores with regards to age and clinical experience. With increased age and experience, time constraints due to busy practice schedule might hinder their search of valid evidence.

Most of the respondents had positive attitude towards EBDP which is encouraging, similar to the results of Prabhu S et al., and Ashri N et al., [12,16] [Table/Fig-8]. Majority of the participants agreed that it will help in decision making as well as improve the quality of care. A significant percentage of the respondents wanted to have EBDP as part of their curriculum. Undergraduate curriculum of dentistry especially in India is vastly based on textbooks and theoretical and students do not learn any evidence based approaches to clinical situation. They are also not prepared enough to appraise scientific articles. Although Continuing education programs are quite regular now but they tend to focus more on post graduate students. Major portions of practicing dentists are not specialist so they are the one who are in need to learn EBP before the start of their practice. Relevant courses such as seminars on EBP are the ideal platform. Therefore, it is strongly recommended that concept of EBP should be introduced into the dental curriculum as an integral part of continuing dental education.

In terms of major perceived barriers towards EBDP, Lack of time was the most common barrier followed by lack of skill to appraise which were similar to earlier studies [12-14,17] [Table/Fig-8]. Although, financial constraints was considered as fourth commonest barrier dissimilar to the results of Haron et al., and Yusof et al., [11,14]. Time constraints and lack of appropriate skills to appraise were two important reasons for Indian dentists not practicing EBDP in this study. Lack of time might be linked to busy practitioners while newer dentists might find it difficult to search and appraise the valid evidence in relatively quick time as they are not fully equipped with the skills and knowledge to do such practice.

Lack of time to assimilate proper evidence can be partly attributed to busy work schedule and can be resolved by practicing a proper search time. A 30 minute search time can be a starting point which can be reduced to 10-15 minutes with practice. For this, some continuing programs on quick & effective evidence search should happen for the dentists.

#### LIMITATION OF THE STUDY

Dentists of a single city cannot actually represent the entire nation like India so limited generalizability is one drawback of this study. Self reporting can also introduce the social desirability bias as the participants presume about their knowledge which actually they don't possess. As not all technical terms used in EBP were asked

to assess dentist's knowledge, this might also overestimates the knowledge scores found in the study.

The important recommendations are:

- To conduct formal training of practitioners to develop necessary skills required in EBDP.
- 2. Continuing dental education programs on EBDP by Dental council of India for practitioners.
- Development of programs on how to effectively apply evidence in clinical uncertainties especially for Interns might prove to be beneficial for their future practice.
- 4. Further studies evaluating actual knowledge through different clinical case situation on dentists should be done.

#### CONCLUSION

The overall awareness of EBDP among general dentists of Bhopal city was moderate when compared to specialist in terms of their qualification. The claimed practice of EBD was unsatisfactory regardless of their qualification or practice but attitude towards it was enthusiastic. The findings of this study provide an insight towards the use of evidence based practice in dentists which suggests that incorporation of such practice will be greatly beneficial in providing quality care. EBDP also provides regular update to clinicians on current treatment modalities and recent advances in the field of dentistry. 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 professionals.

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#### **ANNEXURE**

# Awareness, Attitude and Barriers Towards evidence based dental practice amongst practicing dentists of Bhopal city

**Evidence based dental practice:** Clinical practice that uses systematic assessment of known scientific evidence to support the clinical decision making for a particular patient to provide best possible dental care. The following study aims to know the knowledge & awareness about such kind of practice amongst the dental practitioners.

#### Questionnaire

S. No.	Age (years) 26-30 (1)	Years of Clinical experience (years)		Gender	Speciality
1.	31-35(2)	1-5(1)	11-15(3)	M (1)	
2.	36-40(3)	6-10(2)	> 15(4)	F (2)	General Dentist (1)
3.	>40(4)				Specialist (2)

- Q1. Do you encounter difficulty in clinical decision making? (A) Yes- 1 (B) No 2
- Q2. What kind of source of information do you utilize to support your clinical decisions?
  - A). Asking a friend or collegue -1 (B). Referring a text book-2 (C). Internet Search -3 (D) Others 4
- Q3. Have you ever heard of Evidence Based Dental Practice before? (A) Yes -1 (B) No 2
- Q4. Are you familiar with these terms used in Evidence Based Dental Practice? (A) Yes- 1 (B). No -2
  - (A). Systematic reviews & meta-analysis 1 (B). Randomized control trials -2 (C). Case series & case reports -3 (D). Expert opinion -4 (E.) Hierarchy of evidence -5
- Q5. Which of the above terms you need additional information?

  (A) Systematic reviews & meta-analysis -1 (B). Randomized control trials -2 (C). Case series & case reports -3 (D). Expert opinion -4 (E). Hierarchy of evidence -5 (F.)All of the above (6) G Don't require 7
- Q6. Do you have ease of access to information sources to support your clinical decisions? (A) Yes - 1(B) No - 2
- Q7. In the past one year, how often have you referred to following resources to support the clinical decisions in your practice? Frequently (1) Sometimes (2) Never (3)
- 7A. Dental practice Expert
- 7B. Textbooks
- 7C. Consultation with other professional
- 7D. Print Journals
- 7E. Electronic journal (Pub med)
- Q8. Do you feel your search for information relevant to clinical practice is efficient & effective?
  - (A) Always -1 (B) Some of the time -2 (C) Most of the time -3 (D) Never 4  $\,$
- Q9. What resources would you most likely use next to obtain more information about any new clinical procedure?
  - (A) Consultation with specialist -1 (B) Print journal -2 (C) CE courses-3 (D) Online Database -4
- Q10. What do you think which is better to support the clinical decision?
  - (A) Past clinical experience -1 (B) Evidence from scientific literature -2

- Q11. Do you agree that EBDP will help in clinical decision making? (A) Strongly agree -1 (B) Agree -2 (C) Uncertain -3 (D) Disagree -4 (E) Strongly disagree -5
- Q12. Do you agree that EBDP will improve quality of patient care? (A) Strongly agree -1 (B) Agree -2 (C) Uncertain -3 (D) Disagree -4 (E) Strongly disagree -5
- Q13. Do you agree that EBDP will reduce health care costs? (A) Strongly agree -1 (B) Agree -2 (C) Uncertain -3 (D) Disagree -4 (E) Strongly disagree -5
- Q14. Do you think EBDP should be an integral part of undergraduate dental curriculam?

- (A) Strongly agree -1 (B) Agree -2 (C) Uncertain -3 (D) Disagree-4 (E) Strongly disagree -5
- Q15. In your opinion what are the major barriers in EBDP?
  - A) Strongly agree-1 (B) Agree-2 (C) Uncertain-3 (D) Disagree-4 (E) Strongly disagree-5
  - (a) Lack of time to access
  - (b) Lack of skill to appraise scientific journals
  - (c) Lack of Internet sources
  - (d) Lack of Interest
  - (e) Financial constraints
  - (f) EBDP is impractical

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