Awareness, Attitude and Knowledge about Evidence-Based Dentistry among Dental Practitioners in Haldia (WB)

Dr. Pooja Hampannavar
HOD- Department of Public Health Dentistry
Haldia Institute of Dental Sciences & Research Banbishnupur, Purba Medinipur, Haldia, India

Abstract

Background: Evidence-Based Dentistry (EBD) is essential for enhancing clinical decision-making by integrating scientific research, clinical expertise, and patient preferences. Despite increasing awareness, challenges such as limited training, time constraints, and difficulty in accessing quality evidence hinder its effective implementation. **Aim:** This study aims to assess the awareness, knowledge, and attitude toward EBD among dental practitioners in Haldia, West Bengal. **Methodology:** A descriptive cross-sectional study was conducted among dental practitioners in Haldia, West Bengal, from January to March 2025. A structured, prevalidated questionnaire with 22 items was used to assess awareness, knowledge, attitude, and barriers related to EBD. The questionnaire's internal consistency (Cronbach's alpha) was 0.85. A total of 288 dentists participated, selected randomly from academic institutions and private clinics. Data were collected through personal visits, and informed consent was obtained from all participants. The study was approved by the Institutional Ethics Committee. Statistical analysis was performed using SPSS version 22. Descriptive statistics were used to summarize data, and a t-test was applied to compare differences based on demographic and professional factors. A p-value of <0.05 was considered statistically significant. **Results:** Most participants (88.8%) were aware of EBD, and all understood key terminologies. While 94.4% knew how to apply EBD, 16.9% faced difficulties. A majority (94.4%) used search tools like PubMed and believed EBD improved patient care, yet only 28.1% found it helpful in clinical decision-making. Time constraints (66.3%) and lack of skills (15.7%) were major barriers. Senior practitioners had greater familiarity, but challenges remained across experience levels ($p = 0.52$). All participants supported integrating EBD into undergraduate curricula. **Conclusion:** While dental practitioners exhibit high awareness and a positive attitude toward EBD, barriers such as inadequate training and resource accessibility limit its application. Structured educational initiatives and improved access to scientific literature are essential for strengthening EBD adoption in clinical practice.

Key words: Cross-Sectional Studies, Dental Education, Evidence-Based Practice, Dental Information Seeking Behavior

Introduction

Evidence-Based Dentistry (EBD) is a crucial approach that integrates scientific evidence, clinical expertise, and patient preferences to enhance the quality of dental care. This method helps bridge the gap between research and clinical practice, ensuring treatment decisions are based on systematic and reliable evidence.[1] Incorporating EBD into routine care improves efficiency and effectiveness in dental interventions.[2,3] While awareness of EBD is increasing among dental practitioners and students, knowledge, attitudes, and practices vary across different professional groups. Studies indicate that factors such as education, gender, and time constraints influence EBD adoption.[4,5] Similarly, varying levels of familiarity and confidence in applying EBD have been observed among dental students and professionals.[2,6]

The adoption of Evidence-Based Dentistry (EBD), despite its transformative potential, faces several challenges. Limited knowledge and awareness among practitioners highlight the need for structured education and training.[7,8] Many perceive EBD as time-consuming or difficult to integrate into clinical workflows, further hindering its implementation. Targeted educational initiatives can help address these concerns and encourage its adoption. Incorporating EBD principles into dental curricula is essential to developing competence in evidence-based decision-making.[9] Access to resources, mentorship, and well-structured training programs can significantly enhance understanding and application in clinical practice.[10]Growing awareness of Evidence-Based Dentistry (EBD) among dental professionals reflects a positive shift, yet challenges persist in translating knowledge into practice.[3,6] Globally, barriers such as insufficient training, limited access to evidence, and time constraints hinder implementation. Academic institutions, professional bodies, and policymakers must work together to establish EBD as a standard in dental practice. The COVID-19 pandemic underscored the importance of EBD, with practitioners relying on scientific evidence for patient safety. Additionally, the rise of teledentistry presents opportunities to integrate evidence-based approaches into remote consultations.[11]

Awareness, attitude, and knowledge about evidence-based dentistry (EBD) vary significantly among dental practitioners globally, influenced by regional, educational, and systemic factors. Addressing these gaps requires enhanced education, improved access to evidence, and fostering a positive outlook toward EBD. This study aims to assess the awareness, attitude, and knowledge of EBD among dental practitioners, with specific objectives to evaluate their understanding and perceptions, identify the benefits of EBD in treatment planning, recognize barriers to its adoption, and explore strategies for its integration into clinical practice. Promoting EBD is essential for advancing dental care standards and improving patient outcomes in an evolving professional landscape.

Methodology

A descriptive cross-sectional study was conducted among dental practitioners in Haldia, West Bengal, from January to March 2025. The study was approved by the Institutional Ethics Committee, and all necessary permissions were obtained from the respective dental institutions. Informed consent was obtained from all participants before data collection. The calculated sample size was 300, of which 288 dentists participated in the study, and 12 dropped out. The questionnaire developed for the study contained 22 questions. Internal consistency (Cronbach's alpha) for the questionnaire was found to be 0.85. Necessary modifications were made to the questionnaire based on the feedback from the pilot study.

Dental practitioners were selected randomly from a list of colleges and private clinics in Haldia, representing a diverse geographical sample. The study included a representative sample of 288 dentists, with 144 academicians and 144 practitioners. The first section of the questionnaire gathered demographic and professional information such as age, gender, years of experience, field of practice, and specialty. The second section focused on assessing the knowledge, attitude, and practice regarding evidence-based dentistry (EBD). Data were collected through personal visits to each selected facility, where participants were asked to fill out the questionnaire after signing the informed consent form. The completed questionnaires were immediately collected.

Statistical analysis: Data were analyzed using SPSS version 22 (IBM Corporation, SPSS Inc., Chicago, IL, USA). Descriptive statistics were computed for each section of the questionnaire. The frequency and percentage distribution of responses for each domain of knowledge, attitude, and practice regarding EBD were calculated. To compare differences in responses based on demographic and professional factors, a t-test was applied. A p-value of < 0.05 was considered statistically significant.

Results

Table 1 provides demographic details of the 178 participants in the study. The majority were male (69.1%, n=123), with females comprising 30.9% (n=55). In terms of qualification, 48.9% (n=87) were academics, 33.7% (n=60) were general practitioners, 10.7% (n=19) worked in corporate hospitals, and 6.7% (n=12) in government hospitals. Regarding work experience, 65.2% (n=116) had over 10 years of experience, while 34.8% (n=62) had less than 10 years. These values highlight the predominance of male practitioners, academics, and experienced professionals in the sample, which may influence awareness, attitude, and knowledge of evidence-based dentistry (EBD) and provide insights into demographic trends relevant to the study. Table 2 highlights the knowledge and attitudes of participants toward evidence-based dentistry (EBD). A significant majority (88.8%, n=158) were aware of EBD, and all participants (100%, n=178) understood key EBD terminologies. Most (94.4%, n=168) knew how to apply

EBD in practice, though 16.9% (n=30) faced difficulties. Nearly all (94.4%, n=168) used search tools like PubMed, and 94.4% (n=168) believed EBD improved patient care quality. However, only 28.1% (n=50) felt EBD aided diagnosis and treatment decisions. Key barriers included lack of time (66.3%, n=118) and skills (15.7%, n=28). All participants (100%, n=178) supported integrating EBD into undergraduate curricula and clinical practice, emphasizing its importance in dental care. Table 3 presents the knowledge and attitude of dental practitioners toward evidence-based dentistry (EBD) based on their years of experience (>10 years vs. <10 years). The findings indicate that awareness of EBD is high in both groups, with a slightly higher proportion of senior practitioners (>10 years) acknowledging familiarity with EBD terminologies, usage in practice, and information extraction. However, both groups faced some challenges in applying EBD, with no significant difference in perceived difficulty ($p = 0.52$). While the majority of respondents believed that EBD improves patient care and treatment efficiency, only a small percentage found it directly helpful in making diagnostic and treatment decisions. Time constraints and lack of skills were identified as major barriers. Notably, all participants agreed on integrating EBD into undergraduate curricula and clinical practice. These results suggest that while experience enhances EBD awareness, structured training is needed to improve its practical application. Figure 1 illustrates how clinicians decide to conduct new clinical procedures. The majority (148) prefer consulting specialists, whereas 30 rely on scientific journals. No participants reported using online databases or educational courses, highlighting a gap in digital and structured learning resources for clinical decision-making. Figure 2 shows the sources dentists rely on for complex cases, with 178 choosing expert opinions and 30 referring to textbooks. Notably, electronic journals and colleagues were not preferred, emphasizing the dominance of direct expert consultations in critical decision-making. Figure 3 presents barriers to Evidence-Based Dental Practice (EBDP), where the most significant obstacle is the lack of time to access information (118), followed by a lack of skills in appraising journals (28). Financial constraints (10) and internet resource limitations (22) were lesser concerns. These findings suggest that despite awareness of EBDP, practical challenges hinder its effective implementation.

Table 1: Demographic details of the participants in the study

S.no	Question	Options	Response (n)	Percentage (%)
1.	Gender	Male	123	69.1
		Female	55	30.9
2.	Qualification	Academics	87	48.9
		General practitioner	60	33.7

		Corporate hospital	19	10.7
		Government hospitals	12	6.7
3.	Work Experience	>10 years	116	65.2
		<10 years	62	34.8

Table 2: Knowledge, attitude of the participants towards the EBD

S.no	Question	Options	Response (n)	Percentage (%)
1.	Do you know what is evidence-based dentistry (EBD)	Yes	158	88.8
		No	20	11.2
2.	Do you know terminology in EBD like systematic review, Meta-analysis or randomized control trial etc	Yes	178	100
		No	0	0
3.	Do you know how to use EBD in dental practice	Yes	168	94.4
		No	10	5.6
4.	Do you conflict difficulty in application of EBD	Yes	30	16.9
		No	148	83.1
5.	Do you extract information from different source before taking decision on treatment plan	Yes	154	86.5
		No	24	13.5
6	Do you use search tool for extracting information by search engines like google, PubMed etc	Yes	168	94.4
		No	10	5.6
7	How do you take decision to conduct new clinical procedure	Consult specialist	148	83.1
		Preferred scientific journal	30	16.9
		Education courses	0	0

		Online data base	0	0
8	Do you take help in taking decision in complicated procedures in dental practice	Expert opinion	178	100
		Text books	0	0
		Printed journals/ electronic journals	0	0
		Other colleagues	0	0
9	Did EBD helped in making diagnosis and treatment decision	Yes	50	28.1
		No	128	71.9
10	Did EBD increase the quality of patient care and prognosis	Yes	168	94.4
		No	10	5.6
11	Do you think EBD increase the effectiveness and efficiency of treatment modalities	Yes	158	88.8
		No	20	11.2
12	Did EBD reduce the health care cost	Yes	163	91.6
		No	15	8.4
13	Did you patient appreciate when you use EBD in plaining his treatment plan or modalities	Yes	168	94.4
		No	10	5.6
14	Did you ever share information with your colleague about EBD	Yes	168	94.4
		No	10	5.6
15	Do you think EBD should be integral part of under graduate curriculum	Yes	178	100
		No	0	0
16	Do you think EBD should be part of clinical	Yes	178	100

	practise	No	0	0
17	Barriers in EBDP can be	Lack of time to access	118	66.3
		Lack of skill to appraise scientific journals	28	15.7
		Lack of internet resources	22	12.4
		Financial constraints	10	5.6

Figure 1: How do you take decision to conduct new clinical procedure?

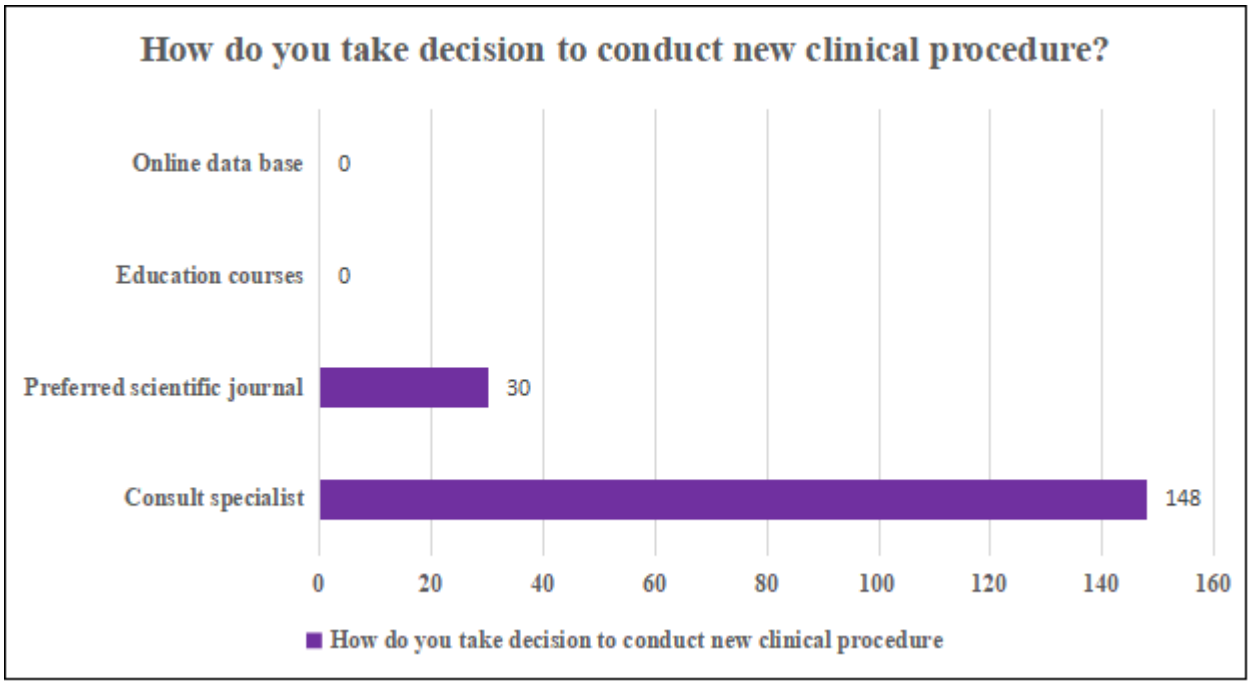

Figure 2: Do you take help in taking decision in complicated procedures in dental practice?

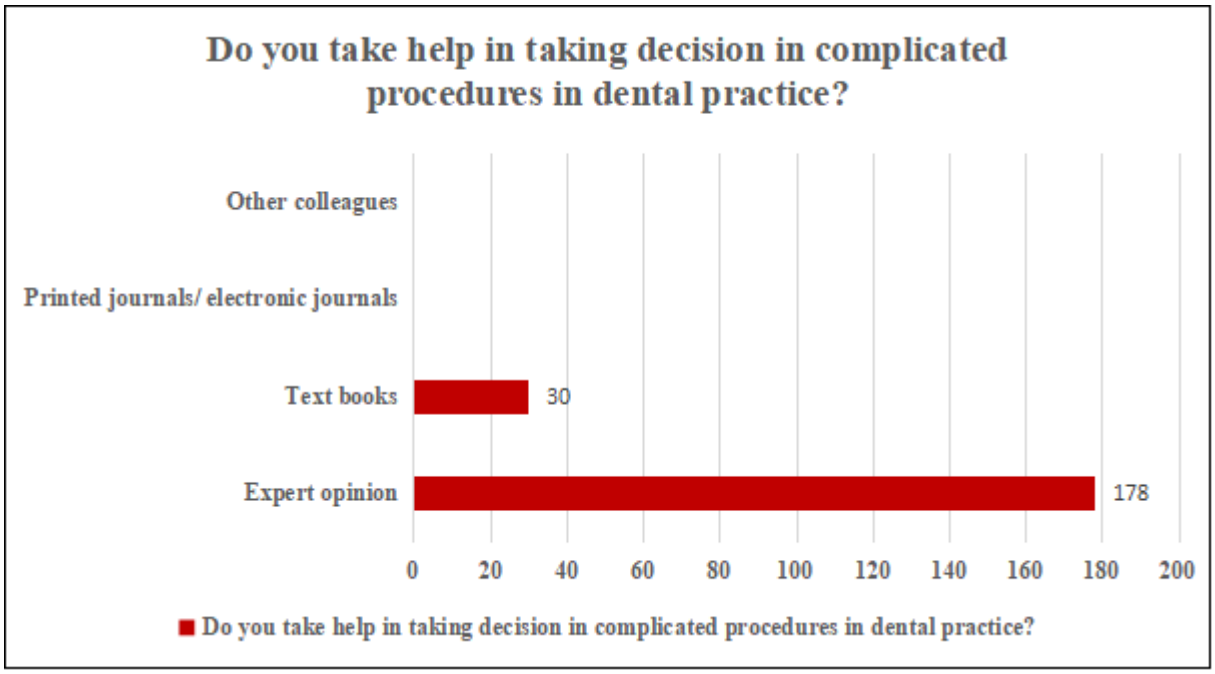

Figure 3: Barriers in EBDP can be

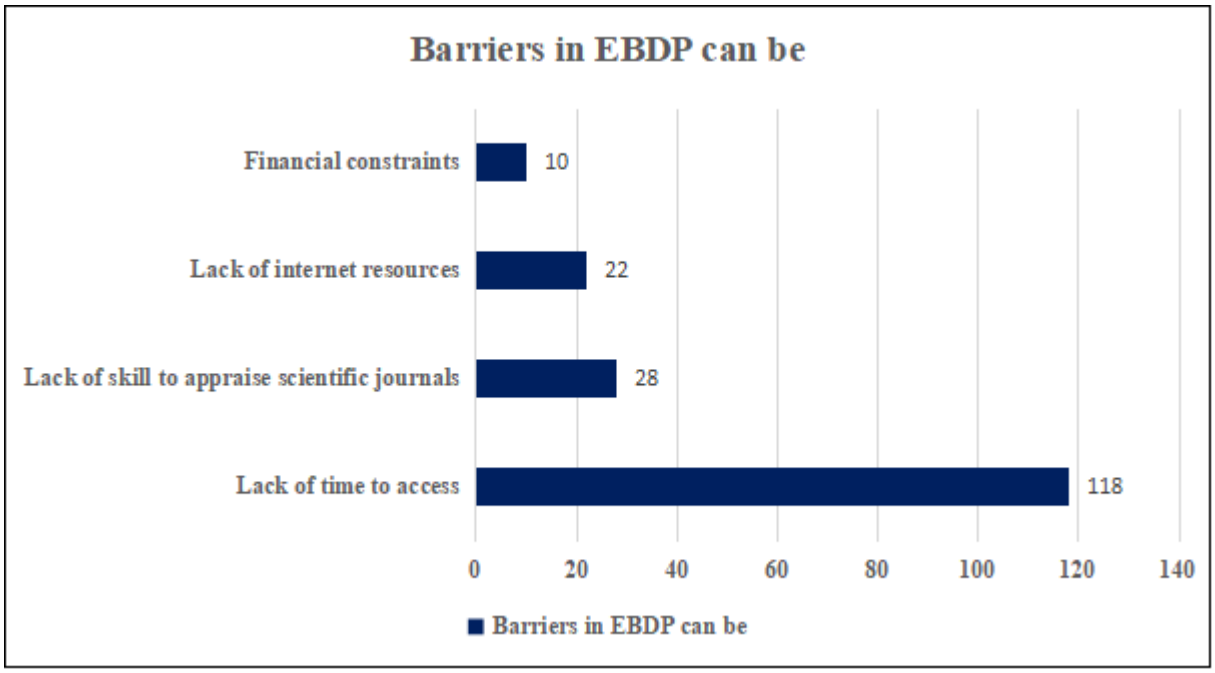

Table 3: Knowledge, attitude of the participants towards the EBD between different years of experience

Question	Experience	Mean	S. D	Frequency (Yes)	Frequency (No)	P value
Do you know what is evidence-based dentistry (EBD)?	>10 years	1.14	0.346	100	16	**0.14**
	<10 years	1.06	0.248	58	4	
Do you know terminology in EBD like systematic review, Meta-analysis, or randomized control trial?	>10 years	1.00	0.000	116	0	-
	<10 years	1.00	0.000	62	0	
Do you know how to use EBD in dental practice?	>10 years	1.04	0.204	111	5	**0.30**
	<10 years	1.08	0.275	57	5	
Do you conflict difficulty in application of EBD?	>10 years	1.84	0.364	18	98	**0.52**
	<10 years	1.81	0.398	12	50	
Do you extract information from different sources before taking a decision on treatment plan?	>10 years	1.10	0.306	104	12	**0.10**
	<10 years	1.19	0.398	50	12	
Do you use search tools for extracting information	>10 years	1.04	0.204	111	5	**0.30**

by search engines like Google, PubMed, etc.?	<10 years	1.08	0.275	57	5	
How do you take decisions to conduct new clinical procedures?	>10 years	1.21	0.407	92	24	**0.06**
	<10 years	1.10	0.298	56	6	
Did EBD help in making diagnosis and treatment decisions?	>10 years	1.70	0.461	35	81	**0.40**
	<10 years	1.76	0.432	15	47	
Did EBD increase the quality of patient care and prognosis?	>10 years	1.08	0.269	107	9	**0.10**
	<10 years	1.02	0.127	61	1	
Do you think EBD increases the effectiveness and efficiency of treatment modalities?	>10 years	1.10	0.306	104	12	**0.61**
	<10 years	1.13	0.338	54	8	
Did EBD reduce healthcare costs?	>10 years	1.09	0.282	106	10	**0.90**
	<10 years	1.08	0.275	57	5	
Did your patients appreciate when you used EBD in planning their treatment plan or modalities?	>10 years	1.04	0.204	111	5	**0.30**
	<10 years	1.08	0.275	57	5	

Did you ever share information with your colleagues about EBD?	>10 years	1.04	0.204	111	5	**0.30**
	<10 years	1.08	0.275	57	5	
Do you think EBD should be an integral part of the undergraduate curriculum?	>10 years	1.00	0.000	116	0	-
	<10 years	1.00	0.000	62	0	
Do you think EBD should be part of clinical practice?	>10 years	1.00	0.000	116	0	-
	<10 years	1.00	0.000	62	0	
Barriers in EBDP can be	>10 years	1.50	0.839			**0.15**
	<10 years	1.71	1.03			

Discussion

The present study assessed the awareness, attitude, and knowledge of Evidence-Based Dentistry (EBD) among dental practitioners in Haldia, West Bengal. The findings indicate that while most participants were aware of EBD and recognized its importance in improving patient care, significant barriers still exist in its effective implementation. The study's results are consistent with previous research conducted in different regions, highlighting both the progress and challenges associated with integrating EBD into clinical practice.

Awareness and Knowledge of EBD

A substantial proportion of dental practitioners (88.8%) in the present study demonstrated awareness of Evidence-Based Dentistry (EBD), with all participants (100%) exhibiting familiarity with key EBD terminologies. These findings align with those of Rajagopalachari et al. (2017), who reported that most dentists in their study had a good awareness of EBD, with a mean knowledge score of 17.41 ± 6.45, yet faced challenges in its practical application.[3] Similarly, Gupta et al. (2015) found that while a high percentage of dentists in their study were aware of EBD, only a limited number actively incorporated it into their clinical decision-making, citing barriers such as lack of access to evidence.[6] Kadri et al. (2022) also reported comparable results, where 60.3% of participants identified a lack of training in critical appraisal as a major challenge, despite having strong theoretical knowledge of EBD.[7] These findings reinforce the trend observed in the present study, where high awareness did not necessarily translate into effective utilization, emphasizing the need for targeted educational interventions to bridge the gap between knowledge and practice. Although dental professionals demonstrate a sound understanding of EBD concepts, their application in clinical settings remains inconsistent.[12] Some studies indicate moderate awareness but a greater inclination toward integrating scientific evidence into practice compared to others.[13] A recurring challenge is the continued reliance on traditional classification systems and subjective clinical judgment rather than contemporary evidence-based approaches. Additionally, key barriers such as limited resources, patient-related constraints, and skepticism about the practical applicability of newly acquired evidence hinder effective implementation. Addressing these challenges through targeted training programs and improved access to reliable evidence sources could significantly enhance the adoption of EBD in routine dental practice.

Attitude toward EBD

Dental practitioners generally exhibit a positive attitude toward Evidence-Based Dentistry (EBD), but significant gaps in knowledge and implementation persist. In the present study, 88.8% of participants were aware of EBD, and all (100%) understood key EBD terminologies. However, only 28.1% felt that EBD directly aided diagnosis and treatment decisions, a trend similarly observed by Navabi et al. (2014), where 56.1% of

Iranian dentists had little and 20.7% had no knowledge of EBD, with lack of time (44.1%) being a major barrier.[5] Fedorowicz et al. (2004) also reported incomplete EBD understanding among Saudi dental students, with 28.4% considering it culturally inapplicable.[14] In line with our findings that clinicians primarily consult specialists rather than relying on scientific journals or online databases, Iqbal and Glenny (2002) found that 60% of UK general practitioners turned to colleagues instead of scientific evidence.[15] Similarly, Haron et al. (2012) noted that while 60.9% of Kuwaiti dentists practiced EBD, only 40.8% had a strong understanding, preferring personal judgment over databases like PubMed (28.3%) and Cochrane Library (6.7%).[16] These results underscore the need for structured EBD training, better access to resources, and integration into undergraduate curricula to enhance its application in clinical practice.

Barriers to EBD Implementation

Despite a generally positive attitude toward Evidence-Based Dentistry (EBD), significant barriers hinder its effective implementation. The most reported obstacle is a lack of time, which prevents practitioners from thoroughly searching, appraising, and applying scientific evidence in clinical practice.[17,18,19] Moreover, insufficient skills in critically evaluating research further limit the effective use of EBD, leading many to rely on personal judgment or expert opinions rather than evidence-based sources.[18,20] Limited exposure to EBD during professional education and the complexity of understanding and integrating evidence-based practices into daily workflows also contribute to these challenges.[19,20] Financial constraints and restricted access to reliable databases create additional hurdles in implementing EBD effectively.[19] These barriers highlight the need for structured training programs, improved resource availability, and dedicated time allocations to support the integration of EBD into routine dental practice.

Sources of Clinical Decision-Making

The present study revealed that dental practitioners primarily rely on expert opinions and consultations with specialists when making clinical decisions, with minimal use of online databases or scientific literature. This trend is consistent with previous studies that have highlighted similar preferences among dental professionals. Ramachandran et al. (2021) found that despite a high awareness of EBD, only a small proportion of postgraduate dental students actively applied it in practice, suggesting that clinical decisions were more often based on personal experience or expert consultation rather than structured evidence-based approaches.[21] Similarly, Gowdar et al. (2023) reported that only a minority of private dental practitioners utilized EBD in patient management, further reinforcing the limited role of scientific literature in routine clinical decision-making.[22] The preference for expert opinions over self-directed literature searches or online databases may be attributed to time constraints, lack of confidence in appraising research, or the convenience of seeking direct guidance. Lin et

al. (2022) also observed that while dental practitioners had high awareness of teledentistry, their practical adoption remained low, indicating a broader trend where awareness does not necessarily translate into application.[11] These findings emphasize the need for enhanced training in critical appraisal skills and the promotion of accessible, evidence-based resources to support more informed decision-making in clinical practice.

Educational Implications and Future Recommendations

The findings of the present study emphasize the importance of structured educational interventions to improve knowledge, awareness, and implementation of Evidence-Based Dentistry (EBD) among dental professionals. Despite a generally positive attitude toward EBD, gaps in actual knowledge remain a concern, highlighting the need for continued training programs to strengthen understanding and application.[10] There is a strong correlation between knowledge and EBD-related behavior, suggesting that well-structured curricula can enhance its practical implementation.[23] While dental professionals show interest in EBD, structured educational courses are essential to bridge the gap between theoretical knowledge and clinical application.[24] Limited awareness and a neutral attitude among dental students highlight the need for improved training methodologies to strengthen evidence-based practice.[4] Regular training in critical appraisal, database usage, and hands-on workshops can enhance EBD adoption. Continuing dental education programs, including targeted workshops and structured mentorship, are crucial for addressing barriers.[8] Integrating EBD principles into curricula with increased access to reliable resources can further promote research-based decision-making. Incentivizing EBD use in clinical settings will ultimately improve patient care through evidence-driven practices, ensuring a more consistent and effective application of EBD.

Conclusion

This study highlights that while dental practitioners in Haldia, WB, demonstrate high awareness and a positive attitude toward Evidence-Based Dentistry (EBD), significant barriers, including time constraints and limited critical appraisal skills, impede its effective implementation. These findings align with global trends, emphasizing the need for structured interventions to bridge the gap between knowledge and clinical application. To enhance EBD integration in daily practice, targeted educational programs, improved access to scientific literature, and hands-on training in critical appraisal are essential. Encouraging the use of digital databases and fostering a culture of evidence-based decision-making within dental education and professional development can further support its adoption. Future research should assess the effectiveness of structured EBD training programs, explore digital resource utilization, and evaluate the long-term impact of such initiatives on clinical decision-making. Strengthening EBD practice is crucial for advancing patient care, optimizing

treatment outcomes, and ensuring that clinical decisions are guided by the best available scientific evidence.

References

1. Kishore M, Panat SR, Aggarwal A, Agarwal N, Upadhyay N, Alok A. Evidence based dental care: integrating clinical expertise with systematic research. J Clin Diagn Res. 2014 Feb;8(2):259-62. Epub 2014 Feb 3. PMID: 24701551; PMCID: PMC3972581.
2. Baqir AH, Firman DR, Putri FM. Survey of dental students'self-perceived practice, attitude, and knowledge toward evidence-based dentistry in Indonesia. Jurnal Pendidikan Kedokteran Indonesia: The Indonesian Journal of Medical Education.;12(1):41-8.
3. Rajagopalachari US, Puranik MP, Rajput S. Knowledge, attitude, and practices toward evidence-based dentistry among dentists of Bengaluru city. Journal of Indian Association of Public Health Dentistry. 2017 Jul 1;15(3):239-43.
4. Sarani A, Sarani M, Abdar ME, Abdar ZE. Awareness, knowledge, and attitude of dentistry students in Kerman towards evidence-based dentistry. Electronic physician. 2016 May;8(5):2366.
5. Navabi N, Shahravan A, Pourmonajem S, Hashemipour MA. Knowledge and Use of Evidence-based Dentistry among Iranian Dentists. Sultan Qaboos Univ Med J. 2014 May;14(2):e223-30. Epub 2014 Apr 7. PMID: 24790746; PMCID: PMC3997540.
6. Gupta M, Bhambal A, Saxena S, Sharva V, Bansal V, Thakur B. Awareness, Attitude and Barriers Towards Evidence Based Dental Practice Amongst Practicing Dentists of Bhopal City. J Clin Diagn Res. 2015 Aug;9(8):ZC49-54. Epub 2015 Aug 1. PMID: 26436047; PMCID: PMC4576641.
7. Kadri G, Enejjari Z, Bouziane A. Knowledge, attitudes and practices towards Evidence-Based-Dentistry regarding dental practitioner: A cross-sectional study. Ann Med Surg (Lond). 2022 Aug 11;81:104289. PMID: 36147137; PMCID: PMC9486421.
8. ALmalki WD, Ingle N, Assery M, Alsanea J. Dentists' Knowledge, Attitude, and Practice Regarding Evidence-Based Dentistry Practice in Riyadh, Saudi Arabia. J Pharm Bioallied Sci. 2019 Nov;11(Suppl 3):S507-S514. JPBS_247_18. PMID: 31920267; PMCID: PMC6896580.
9. Rath A, Wong Li Zheng M, Hesarghatta Ramamurthy P, Sidhu P, Pannuti CM, Fernandes B, Termizi Bin Zamzuri A. Evidence-based dentistry: Knowledge, Practice, Confidence and Attitude amongst Malaysian dental undergraduate students: A Multi-institutional study. Eur J Dent Educ. 2023 Feb; 27(1):9-18. Epub 2022 Jan 22. PMID: 35023265.

10. Sabounchi SS, Nouri M, Erfani N, Houshmand B, Khoshnevisan MH. Knowledge and attitude of dental faculty members towards evidence-based dentistry in Iran. Eur J Dent Educ. 2013 Aug;17(3):127-37. Epub 2013 Feb 1. PMID: 23815689.
11. Lin GSS, Koh SH, Ter KZ, Lim CW, Sultana S, Tan WW. Awareness, Knowledge, Attitude, and Practice of Teledentistry among Dental Practitioners during COVID-19: A Systematic Review and Meta-Analysis. Medicina (Kaunas). 2022 Jan 15;58(1):130. PMID: 35056438; PMCID: PMC8781277.
12. Elkady DM, Khater AGA. Knowledge and attitudes toward evidence-based cariology and restorative dentistry among Egyptian dental practitioners: a cross-sectional survey. BMC Oral Health. 2023 Sep 1;23(1):622. PMID: 37658399; PMCID: PMC10474780.
13. Rabe P, Holmén A, Sjögren P. Attitudes, awareness and perceptions on evidence based dentistry and scientific publications among dental professionals in the county of Halland, Sweden: a questionnaire survey. Swed Dent J. 2007;31(3):113-20. PMID: 17970167.
14. Fedorowicz Z, Almas K, Keenan JV. Perceptions and attitudes towards the use of evidence-based dentistry (EBD) among final year students and interns at King Saud University, College of Dentistry in Riyadh Saudi Arabia. Braz J Oral Sci 2004;3:470-4.
15. Iqbal A, Glenny AM. General dental practitioners' knowledge of and attitudes towards evidence based practice. Br Dent J. 2002 Nov 23;193(10):587-91; discussion 583. PMID: 12481184.
16. Haron IM, Sabti MY, Omar R. Awareness, knowledge and practice of evidence-based dentistry amongst dentists in Kuwait. Eur J Dent Educ. 2012 Feb;16(1):e47-52. Epub 2011 Jan 11. PMID: 22251353.
17. Aboalshamat K, Alharbi R, Alharbi A, Alfozan A, Alahdal S, Aldehri S, Nassar AA. The Perception of Evidence-based Dentistry among Dental Professionals in Saudi Arabia during COVID-19 Pandemic. J Pharm Bioallied Sci. 2022 Jul;14(Suppl 1):S99-S105. Epub 2022 Jul 13. PMID: 36110818; PMCID: PMC9469449.
18. Bahammam MA, Linjawi AI. Knowledge, attitude, and barriers towards the use of evidence based practice among senior dental and medical students in western Saudi Arabia. Saudi Med J. 2014 Oct;35(10):1250-6. PMID: 25316471; PMCID: PMC4362121.
19. Upton D, Upton P. Knowledge and use of evidence-based practice by allied health and health science professionals in the United Kingdom. J Allied Health. 2006 Fall;35(3):127-33. PMID: 17036666.
20. Jafari A, Mohtashamrad Z, Yazdani R, Moscowchi A, Akhgari E, Elyasi M. Awareness, knowledge and attitude of dental students of Tehran and ShahidBeheshti universities of medical sciences about evidence-based dentistry. Journal of Iranian Dental Association. 2012 Oct 10;24(4):197-203.

21. Ramachandran A, Murali R, Shamala A, Yalamalli M. Knowledge and Attitude towards Evidence-Based Dentistry among Final Year Post Graduate Dental Students in Bangalore City. Int J Dent Med Sci Res. 2021;3(2):942-47
22. Gowdar IM, AlMrikhan F, Alanazi F, Alfaifi K, Alanazi B, Al-Qahishi S. Knowledge and Attitude about Evidence-Based Dental Practice among Dentists in Al-Kharj, Saudi Arabia. J Pharm Bioallied Sci. 2023 Jul;15(Suppl 1):S771-S774. Epub 2023 Jul 5. PMID: 37654258; PMCID: PMC10466660.
23. Fadhila O, Kusumo AD. The Association between Sex, Knowledge, and Education Level of Evidence-Based Dentistry Behavior among Dentistry Students. Indian J Forensic Med Toxicol. 2020 Oct 7;14(4):4167-71.
24. Eslamipour F, Ghaiour M. Assessment of knowledge, attitude, and practice with regard to evidence-based dentistry among dental students in Isfahan University of Medical Sciences. J Educ Health Promot. 2016 Jun 23;5:12. PMID: 27500165; PMCID: PMC4960919.