

ORIGINAL RESEARCH

Assessment Of The Knowledge, Awareness And Attitude Of Dental Post-Graduate Students Regarding Evidence Based Dentistry In Gujarat State

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ABSTRACT

Introduction: An evidence-based approach has several advantages. One is that it will serve patients better because only tested procedures will be endorsed. A second is that it will increase the standing of the profession because it will ensure that proven treatments are offered. In a recent article, Hendricson et al. stated that "As more dental schools implement EBP training, strategies are needed to assess the effectiveness of these efforts and determine the competence of trainees."⁷ It is important to know about knowledge, attitude and awareness of Dental post-graduate students after learning EBD in their specialty. **Materials and methodology:** Post-graduate students- total 229, of every branch of dentistry were included as willingness to participate. After informing them, their informed consent was taken. The questionnaire form was taken to the Post-graduate students of all the colleges of Gujarat state by the principal investigator. **Results:** The result showed that mean percentage of knowledge between the students of different college of Gujarat was 47.02%. **Conclusion:** Thus this study showed that knowledge, awareness and attitude regarding EBD among post graduate students of dentistry, 50% of students have significant knowledge and awareness of EBD. By arranging EBD training programs and with this access to various international journals improvement can be achieved.

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INTRODUCTION

In the last 50 years a plethora of new materials, drugs, interventions, and products have appeared. Accompanying this has been the development of many clinical techniques and methods of using the materials. In order to evaluate which treatment or material is beneficial, good clinical research has to be carried out.

Evidence-based dentistry is the "integration" and "interpretation" of the available current research evidence combined with personal experience. It allows dentists, as well as academic researchers, to keep abreast of new developments and to make decisions that should improve their clinical practice¹.

The 'new improved' definition is "the integration of best research evidence with clinical expertise and patients values", now includes the patient in the

decision making process and has added value to the significance of individual clinical judgment².

An evidence-based approach has several advantages. One is that it will serve patients better because only tested procedures will be endorsed. A second is that it will increase the standing of the profession because it will ensure that proven treatments are offered. Clinicians can convert these information needs into answerable questions; track down with maximum efficiency the best external evidence (relevant research) with which to answer them; critically appraise that evidence for its validity (closeness to truth) and usefulness (clinical applicability); apply the results of the appraisal in health care practice; and evaluate performance³.

The graduates from dental schools have to be up to date with the best current practices in dentistry at the time they graduate as some of this knowledge

gradually becomes out of date compared to new information and technology appear. The evidence-based education must promote understanding of both basic and applied science, the management of uncertainty, and the development of new knowledge. As a result, the graduate dentist would willingly update and change clinical procedures over his or her lifetime of clinical practice based on the new knowledge⁴.

Fortunately, having an understanding of how to interpret research results, and some practice in reading the literature in a structured way, can turn the dental literature into a useful and comprehensible practice tool. In a recent article, Hendricson et al. stated that “As more dental schools implement EBP training, strategies are needed to assess the effectiveness of these efforts and determine the competence of trainees.”⁵

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It is important to know about knowledge, attitude and awareness of Dental post-graduate students after

learning EBD in their specialty.

MATERIALS AND METHODOLOGY

This study was a cross sectional survey. It was used to assess the views of the post-graduate students of Gujarat state towards evidence based dentistry. The questionnaire consisted of closed questions and free text sections related to awareness of dental post-graduate students towards EBD.

Approval of the institutional ethics committee, Sumandeep Vidyapeeth was obtained to study on post-graduate students of Gujarat state.

All the Dental Post-graduates of every colleges of Gujarat state who were studying during the month of December-July were included in the study.

Post-graduate students- total 229, of every branch of dentistry were included as willingness to participate. After informing them, their informed consent was taken. The questionnaire form was taken to the Post-graduate students of all the colleges of Gujarat state by the principal investigator. Verbal permission from the respective Dean of the college and Head of the Departments was also taken. The Post-graduates were asked to fill the questionnaire and were collected on the same day.

PROFORMA FOR COLLECTION OF DATA

NAME:

AGE/GENDER:

NAME OF THE INSTITUTE:

YOUR SPECIALIZATION:

YEAR OF POSTGRADUATION:

(Mark the appropriate criteria by using Bullet list “ ✓ ”)

General Knowledge About EBD Amongst Post-Graduate Students			
			KNOW
It is a process of making decisions based on scientifically proven evidence.			
It involves a series of steps from identifying the clinical question, finding the answer/evidence, assessing the validity of evidence, to applying it if clinically suitable.			
Evidence from all published articles in scientific journals can be used in EBP.			
The best and quickest way to find evidence is by reading textbooks or asking experienced colleagues.			
It benefits patients by improving quality and effectiveness of clinical treatments			
It allows dentists to improve their knowledge and clinical skills.			

Knowledge And Awareness About Important EBD Tools Used In The Practice And Analysing Of EBD				
EBD TOOLS	Understanding		know	not willing to know
P-value				
Relative risk				
Absolute risk				
Sensitivity				
Meta-analysis				
Cochrane collaboration				
Critical appraisal				
Odds ratio				
Publication bias				
Confidence interval				
Heterogeneity				
No. Needed to treat				

Frequency To Which EBD Is Practiced ?				
QUESTIONS	ALWAYS	SOMETIMES	SOMETIMES	RARELY
To what extent do you practice EBD?				

QUESTIONS	YES	NO	SOME
Are you aware of various clinical guidelines?			

QUESTIONS	YES	NO
Have you had any EBD training?		
Are you willing to have EBD training?		

Major Barriers Related During Practice Of EBD				
QUESTIONS	LACK OF TIME	LACK OF TRAINING	INTERNATIONAL JOURNALS	TRAINING IN CRITICAL APPRAISAL
What are the barriers to practising EBD?				

RESULTS

A total 229 post graduate student of Gujarat state participate in the study. Out of 51.1% were female students participants.

As per result, 90% of dental post graduate answer satisfactory. 7% to 65% of participants are well aware of the use of EBD tools. 70.1% students rarely use EBD in practice. 80% participants had attended EBD training programs. 50% students mentioned that major barrier is not having access to international journals followed by lack of training in critical appraisal.

The result showed that mean percentage of knowledge between the students of different college of Gujarat was 47.02%.

DISCUSSION

Evidence based medicine has been practicing since almost more than a decade and since the 1990s, there has been an increasing interest in Evidence-Based Dentistry internationally and from a wide variety of dental groups with the ultimate goal of improving patient care. Current dental students are expected to be lifelong learners, adept at critical thinking and evidence-based dental practice. EBD is not a new concept; however, the emphasis on critiquing science and focusing on quality science is relatively new.⁸

Post-graduate students- total 229, of every branch of dentistry were included as willingness to participate. The study showed 50% of students of Gujarat state have good knowledge and awareness regarding EBD. Changes throughout the health care delivery system are needed to encourage dentists to design treatment plans based on current scientific evidence, however medical investigators report that barriers to change occur at various points in the system.⁹ In this study, dental post-graduate students were asked about barriers and according to them major barrier is not having access to internationally journal and lack of training in critical appraisal.¹⁰

Spallek et al in 2010 did a cross sectional study to evaluate the most common barrier in implementing trust in EBD .barriers perceived as serious problems had to do with lack of clear answer to clinical questions, and contradictory information in scientific literature.¹¹

Prabhu in 2012, in one study reported that the post graduate although familiar with the knowledge of EBD.

Thus this study showed that knowledge, awareness and attitude regarding EBD among post graduate students of dentistry,50% of students have significant knowledge and awareness of EBD. By arranging EBD training programs and with this access to various international journals improvement can be achieved.

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