

Supplementary Information

Questionnaire Instruments

- Your age: ☐ 20-25
☐ 26- 30
☐ 31-35
☐ 36-40
☐ 41 and over

- Do you have a previous degree? ☐ Yes ☐ No
- If yes, could you tell us what is it?
- Sex: ☐ Male ☐ Female ☐ Prefer not to say
- Have you read any current guidelines ☐ Yes ☐ No
- If Yes, Please name the last two guidelines you checked
- Are you familiar with using medical search engines to read guidelines (such as PubMed, Scopus)? ☐ Yes ☐ No
- Are you familiar with the technical search hints normally used to look for a specific clinical question (such as, Boolean operators (AND, OR, NOT), PICO, MeSH headings, asterisk (*)) ☐ Yes ☐ No

For each of the following activities, please indicate how confident you are in your current level of ability by choosing the corresponding number on the following rating scale:

○ 0%	○ 10	○ 20	○ 30	○ 40	○ 50	○ 60	○ 70	○ 80	○ 90	○ 100
No Confidence					Completely Confident					
... identify a gap in your knowledge related to a patient or client situation (e.g., history, assessment, treatment)?										
... formulate a question to guide a literature search based on a gap in your knowledge?										
... effectively conduct an online literature search to address the question?										

... critically appraise the strengths and weaknesses of study methods (e.g., appropriateness of study design, recruitment, data collection and analysis)?
... critically appraise the measurement properties (e.g., reliability and validity, sensitivity and specificity) of standardized tests or assessment tools you are considering using in your practice?
... interpret study results obtained using statistical tests such as t-tests or chi-square tests?
... interpret study results obtained using statistical procedures such as linear or logistic regression?
... determine if evidence from the research literature applies to your patient's or client's situation?
... ask your patient or client about his/her needs, values and treatment preferences?
... decide on an appropriate course of action based on integrating the research evidence, clinical judgment and patient or client preferences?
... continually evaluate the effect of your course of action on your patient's or client's outcomes?

If you feel that you cannot respond because of lack of information, lack of experience, or uncertainty, please check the column Labelled "uncertain."					
	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
I now believe that evidence-based practice will be more valuable in my future practice as a dentist than I did one year ago.					
I personally appreciate the advantages of practicing evidence-based patient care.					

Evidence- Based Practice (EBP) should be an integral part of the dental school curriculum					
I support EBP principles more than I did one year ago.					
EBP is a routine part of my professional growth as a dentist.					
The practice of evidence-based dentistry has changed the way I learn					
It has been difficult for me to practice evidence-based dentistry in the past year.					
EBP is "cook-book" dental care that disregards clinical experience in providing the best treatment for patients.					
It is feasible to use EBP routinely when providing care for patients in the dental school clinic.					
EBP improves the quality of dental patient care.					
How frequently do you access dental evidence from...					
	Never	Rarely	Occasionally	Often	Very Frequently

Colleagues: other dentists or health care providers/VT trainer					
Textbooks					
The Internet (excluding Cochrane reviews)					
Original research papers published in peer-reviewed journals					
The Cochrane Database of Systematic Reviews					
Journal of Evidence-Based Dental Practice, Evidence-Based Dentistry, Journal of Evidence-Based Medicine					
Continuing education courses/workshops					
Podcasts and web conferences (webinars)					
Databases of Critically Appraised Topics (CATs)					

Select the one best response for each question.

Please do not guess. Circle "I don't know" if that is the most appropriate response

Published reports on treatments can be ranked with respect to the strength of the evidence. Which one of the following is the most correct statement with respect to ranking of evidence?

- Clinical case studies are ranked higher than randomised controlled trials.

- Expert opinion is the lowest level of evidence.
- Lab animal research is the highest level of evidence.
- Research supported by the National Institutes of Health is the highest level of evidence.
- I don't know.

In judging the quality of the dental literature, which one of the following is the highest level of evidence?

- Article on a non-randomized clinical trial that includes references.
- Case series article that has been peer-reviewed and published in the *Journal of Dental Research*.
- Cochrane review of an oral health topic.
- Detailed report of a clinical case by a recognised dental expertise
- I don't know.

If you were conducting a PubMed search to answer a clinical question pertaining to a dental patient, which one of the following would be the least productive search strategy?

- Limit search to current year.
- Limit search to specified Type of Article.
- Limit search using Clinical Queries.
- Search using appropriate MeSH terms.
- I don't know.

Which statement is the most accurate with respect to the number of subjects in a clinical trial?

- A power analysis should be conducted after the data are collected to assess whether sufficient numbers of subjects were enrolled in the study.

- If data are obtained from a large sample, an investigator can be confident that findings are clinically meaningful.
- Only large treatment effects can be observed when very large numbers of subjects are enrolled.
- Too few subjects may not allow true treatment effects to be seen when they, in fact, exist.
- I don't know

Which of the following statements best describes a PICO?

- Checklist of guidelines to assist investigators with the reporting of the findings from a meta-analysis.
- Defines a specific MeSH heading and provides synonyms covered by that heading.
- Process for converting a clinical problem into questions that can be answered by searching for evidence.
- Technique for combining search terms in order to restrict a search to articles with specified elements.
- I don't know

A recent study published in the *Journal of the American Dental Association* reports that patients with myofascial pain who received soft occlusal splints had less pain after two weeks than patients receiving a home physical therapy program consisting of jaw movement exercises. Which one of the following factors could have contributed to this result?

- Clinical examiners were blinded.
- Patients in one group or the other did not adhere to treatment.
- Patients were assigned to treatments randomly.
- Too many patients were enrolled in the study.
- I don't know.

A statistical process that quantitatively pools the results of several research studies into one analysis is known as a:

- Cochrane review.
- Meta-analysis.
- Numbers needed to treat (NNT) analysis.
- Systematic review.
- I don't know.

Which of the following is the most appropriate study design to evaluate the efficacy of a new diagnostic device for assessment of oral health problems?

- Blind comparison with a gold standard.
- Case-control study.
- Randomised clinical trial.
- Relative risk difference (RRD).
- I don't know

Which one of the following statements about test sensitivity and specificity is true?

- Test sensitivity defines how many normal individuals the test will correctly identify as normal.
- Normal individuals who have a positive rather than a negative result is classified as true-positives.
- Sensitivity answers the question "If a patient has a positive test result, how likely are they to have the disease?" and specificity answers the question "if a patient has a negative test, how likely are they not to have the disease?"
- Test specificity is the percentage of diseased individuals who have a positive test result as determined by a reference method or a gold standard procedure.
- I don't know.

Which one of the following statements about disease prevalence and incidence is true?

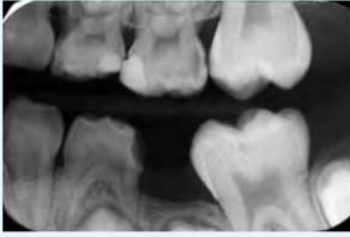
- Incidence refers to the percentage of geographic locations in a region where outbreaks of a certain disease are reported.
- Prevalence refers to the frequency of true-positive tests results per 100,000 population within a one-year period of data collection.
- Incidence is the number of patients per 100,000 population who have a disease at a specific point in time
- Prevalence is the number of patients per 100,000 population who have a disease at a specific point in time.

Which of the following statements describes clinical guidelines?

- Systematically developed statements to assist practitioner decisions about appropriate health care for specific clinical circumstances.
- An agreed framework outlining the care that will be provided to patients in a designated area of practice. They do not describe how a procedure is performed, but why, where, when and by whom the care is given.
- A statement, reached through consensus, which clearly identifies the desired outcome. Usually used within audit as a measure of success.
- A formal written statement detailing the particular action to be taken in a particular situation that is contractually binding.
- I don't know.

Could you tell us how you would manage your patient in the following clinical cases and why you decided on such treatment plan?

How you would manage the proximal carious lesion on his upper left first permanent molar (26) and Distal-proximal lesion on the adjacent upper second primary molar (65) for your seven-year-old patient?



Upper left first permanent molar (26):

Upper second primary molar (65):

2. A four-year-old patient attends your practice for the first time. He has no medical history of note with a good oral hygiene and minimal plaque deposits. He has healthy dietary habits that suggest no specific factors likely to increase his risk of developing carious lesions and brushes with fluoride toothpaste twice daily. What is your recommended interval for taking radiographs for this new patient? And why?

Recommended interval _____

Reason _____

Would you prescribe radiographs at a different interval if the patient drank carbonated drinks at least three times per day?

Yes / No

Why?

Would you prescribe radiographs at a different interval if the patient was three years old?

3- A three-year-old patient has attended twice before. He has no medical history of note and his father is a smoker. Dietary habits: discussions with the mother suggest that the patient's sweet consumption is relatively low, although the review of the parents' dietary habits at their Oral Health Assessment finds them to have quite a high sugar consumption, with sugar added to tea and coffee. The three-year-old has a full primary dentition and there are few signs of clinical lesions with early enamel lesions visible on the buccal sulcus around the first and second primary molars.

What is your recommended check-up interval for this patient? And why?

Recommended check-up interval _____

Why _____

Could you tell us how you would manage your patient in the following clinical cases and why you decided on such treatment plan?

Thank you for your time

Supplementary Table 1: Median and IQ values for EPIC scale items for both rounds. R1 (n=34) and R2 (n=21). 11-point scale range 0%-100%. with 100% represented the highest perceived self-efficacy. Based on valid responses rounded to nearest whole number.

Item No.	Self-efficacy statements (Shortened Descriptor)	R1 results (n=34) Median (IQ range)	R2 results (n=21) Median (IQ range)
1	Identify a gap in your knowledge	80 (10)	70 (20)
2	Formulate a PICO question	70 (30)	70 (20)
3	Conduct an online literature search	70 (20)	60 (40)
4	Critically appraise study design	50 (20)	60 (25)
5	Critically appraise the measurement properties of assessment tools you are considering using in your practice	50 (30)	60 (35)
6	Interpret study results obtained using statistical tests such as t-tests or chi-square tests	40 (20)	50 (45)
7	Interpret study results obtained using statistical procedures such as linear or logistic regression	50 (20)	40 (25)
8	Determine if evidence applies to patient	70(10)	60 (25)
9	Considering patients' interests in clinical judgement	80 (20)	60 (30)
10	Evaluate the effect of your course of action	80 (10)	60 (20)

11	Integrate patient preference, research evidence and experience in the decision-making process	80 (20)	60(35)
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Supplementary Table 2: Median and IQ values of the attitude items of KACE scale for both rounds. R1 (n=34) and R2 (n=21). 5-point Likert scale: 1: Strongly disagree; 2: Disagree; 3: Uncertain; 4: Agree; 5: Strongly agree. Based on valid responses and rounded to nearest %

Item No.	Attitude statements	R1 results (n=34) Median (IQ range)	R2 results (n=21) Median (IQ range)
1	I now believe that Evidence-Based Practice will be more valuable in my future practice as a dentist than I did one year ago.	4 (0)	3 (1)
2	I personally appreciate the advantages of practising evidence-based patient care.	4 (1)	4 (2)
3	Evidence-Based Practice should be an integral part of the dental school curriculum	4 (2)	3 (1)
4	I support Evidence-Based Practice principles more than I did one year ago.	4 (1)	3 (2)
5	Evidence-Based Practice is a routine part of my professional growth as a dentist.	4 (1)	3 (1)
6	The practice of evidence-based Dentistry has changed the way I learn	4 (1)	3 (1)

7	It has been difficult for me to practice evidence-based Dentistry in the past year.	3 (2)	3 (1)
8	Evidence-Based Practice is "cook-book" dental care that disregards clinical experience in providing the best treatment for patients	4 (2)	3 (2)
9	It is feasible to use Evidence-Based Practice routinely when providing care for patients in the dental school clinic.	4 (1)	3 (2)
10	Evidence-Based Practice improves the quality of dental patient care.	4 (1)	3 (0)

Supplementary Table 3: Median and IQ values of the confidence in appraisal skills items of KACE scale for both rounds. R1 (n=34) and R2 (n=21). 5-point Likert scale: 1: not at all confident; 2: not confident; 3: confident; 4: fairly confident; 5: very confident. Based on valid responses and rounded to nearest whole number.

	Confidence items related to critical appraisal skills	R1 results (n=34) Median (IQ range)	R2 results (n=21) Median (IQ range)
1	Appropriateness of study design	3 (2)	2 (2)
2	Bias in study design or data analysis	2 (1)	2 (2)
3	Adequacy of sample size	2 (1)	2 (1)
4	Generalisability of findings	2 (2)	1(2)
5	Appropriate use of statistical tests	2 (1)	2 (2)
6	Overall value of research report	4 (2)	3 (2)

Supplementary Table 4: Median and IQ values of the accessing evidence items of KACE scale for both rounds. R1 (n=34) and R2 (n=21). 5-scale point: 1: Never; 2: Rarely; 3: Occasionally; 4: Often; 5: Very Frequently. Based on valid responses and rounded to nearest whole number

	Evidence sources	R1 results (n=34) Median (IQ range)	R2 results (n=21) Median (IQ range)
1	Databases of Critically Appraised Topics (CATs)	2 (1)	1 (0)
2	Podcasts and web conferences (webinars)	2 (1)	1 (2)
3	Continuing education courses/workshops	3 (1)	2 (1)
4	Evidence-Based Dental Practice Journal	2 (1)	2 (2)
5	The Cochrane Database of Systematic Reviews	3 (1)	1(1)
6	Original research papers published in peer-reviewed journals	2 (1)	1(1)
7	The Internet (excluding Cochrane reviews)	4 (2)	3 (1)
8	Textbooks	3 (2)	2 (1)
9	Colleagues: other dentists or health care providers/VT Trainer	4 (1)	4 (2)