Evidence-based practice instruction by faculty members and librarians in North American optometry and ophthalmology programs

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APPENDIX B

Evidence-based clinical practice instruction in optometry and ophthalmology programs survey

Welcome and thank you in advance for completing the survey.

As indicated by the email information letter, the researchers who created this survey are interested in how you teach evidence-based clinical practice (EBCP). The term EBCP will be used in this survey to denote all variations in terminology used by different health care professions including evidence-based medicine (EBM), evidence-based practice (EBP), evidence-informed practice (EIP). The definition of EBCP we will use is the standard EBM definition:

"the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine requires the integration of individual clinical expertise with the best available external clinical evidence from systematic research and our patient's unique values and circumstances."

Source: Straus SE, Richardson WS, Glasziou P, Haynes RB. Evidence-based medicine: how to practice and teach EBM. 3rd ed. Edinburgh, Scotland, UK: Elsevier Churchhill Livingstone; 2005.

The five steps of EBCP are:
Step 1: Ask: converting the need for information into an answerable question
Step 2: Acquire: finding the best evidence with which to answer the question
Step 3: Appraise: critically appraising the evidence for validity, impact, and applicability
Step 4: Apply: integrating the critically appraised evidence with clinical expertise and patient values etc.
Step 5: Assess: evaluating our own effectiveness

Source: Straus SE, Richardson WS, Glasziou P, Haynes RB. Evidence-based medicine: how to practice and teach EBM. 3rd ed. Edinburgh, Scotland, UK: Elsevier Churchhill Livingstone; 2005.
Prasad K. Fundamentals of evidence-based medicine: basic concepts in easy language. New Delhi, India: Meeta Publishers; 2007.

Part A: Background information

1. What is your educational background? [check as many as apply]

Master of library and information science, master of information science, master of library science	
Library technician	
Optometrist	
PhD	
Family physician	
Specialist physician (e.g., ophthalmologist)	
Resident (family medicine or specialty training)	
Graduate student (master or PhD)	
Other	

If other, please describe…

SKIP LOGIC: Depending on the response to the answer of question 1, the respondent will be taken to a one of two surveys that ask the same questions but may have been slightly adapted to suit the language or roles of one of two groups: librarians or faculty/staff.
Librarian version – see below

Librarian survey

About you

2. What kind of program do you support as a librarian?

Optometry	
Ophthalmology	
Other (e.g., medical undergraduate, hospital)	

If other, please describe…

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3. How long have you been involved in teaching as a librarian? _____years

4. How much of your workload is devoted to library services for optometry or ophthalmology?
_____ (approximate percentage)

About your academic institution

5. Which one of the following describes your program?

An professional program within a university or college	
A standalone educational institution	
Hospital	
Other	

If other, please describe…

About your library

6. How would you best describe your library? [check one box only]

Discipline/department specific library (e.g., optometry only)	
Multidisciplinary health sciences library	
Multidisciplinary science library	
General academic library	
Other	

If other, please describe ….

7. Approximately how many professional students does your library serve? (e.g., if you are a branch or departmental library how many students are associated with your program)
_____ users

8. What is your educational background with respect to learning the process of EBCP? [check all that apply]

It was part of my professional training program	
I have taken courses on EBCP as part of a postgraduate degree	
I have taken a course or courses in the area outside of a degree program for personal/professional development	
Self-directed learning	
None	
Other	

If other, please describe ….

9. Do you teach *any of the steps* of the EBCP process?   Yes   No

If *yes* continue to question #10 (below) and complete sections B, C, D, E, F If *no* please go to page # 10 and complete sections G, H

Part B: Teaching evidence-based clinical practice (EBCP)

10. Which aspects of the EBCP process do you teach? [check all that apply]

Step 1: Ask: converting the need for information into an answerable question	
Step 2: Acquire: finding the best evidence with which to answer the question	
Step 3: Appraise: critically appraising the evidence for validity, impact, and applicability	
Step 4: Apply: integrating the critically appraised evidence with clinical expertise and patient values etc.	
Step 5: Assess: evaluating your own effectiveness	
Other	

If other, please describe…

11. How often do you teach EBCP to the following learners? [check all that apply]

	Frequently	Occasionally	Rarely	Never
Optometry students				
Medical students (pregraduate learners)				
Ophthalmology residents				
Other medical residents and fellows				
Graduate students (master and PhD level)				
Faculty members				
Continuing education participants				
Other				

If other, please list:

Part C: How and where you teach EBCP

12. Indicate the frequency that you use the following formats to teach EBCP.

	Frequently	Occasionally	Rarely	Never
As part of a course (face-to-face or online)				
A workshop not linked to a specific course but linked to a program (e.g., milestone for program requirement)				
Via an independent workshop that students voluntarily take with no credit/requirement attached				
One-on-one instruction/consultation				
Continuing education course				
Other				

If other, please describe…

13. In total, how many hours do you spend teaching EBCP in a year?

Less than 2 hours	
2–5 hours	
6–10 hours	
11–15 hours	
16–20 hours	
21+ hours	
Other	

If other, please describe…

14. How often do you teach EBCP in the following settings?

	Frequently	Occasionally	Rarely	Never
Large lecture hall/large classroom (>100 seats)				
Small classroom (30–100 seats)				
Seminar room (1–29 seats)				
Computer lab				
Office consultation				
Virtual (web-based/online/remote/course management software)				
Clinical setting				
Other				

If other, please list…

15. How often do you use the following instructional methods when teaching EBCP?

	Frequently	Occasionally	Rarely	Never
Lecture				
Small group problem-based learning				
Small group case-based learning				
Discussion within in lecture				
Case discussion (e.g., grand rounds)				
Journal club				
Live demonstration of tools, resources, processes				
Interactive session (e.g., clickers, think-pair-share)				
Practical sessions: hands-on computer lab exercises				
Tutorials, handouts, and guides (print or electronic)				
Individualized instruction				

Formal mentor/coach/preceptor built into program				
During the course of clinical care in clinical setting				
Other				

If other, please describe…

16. How often do you use *live* web-based instructional tools when teaching EBCP?

	Frequently	Occasionally	Rarely	Never
Webinar/videoconferencing				
Chat				
Smartboards				
Other				

If other, please describe…

17. How often do you use *any time* web-based instructional tools when teaching EBCP?

	Frequently	Occasionally	Rarely	Never
Online tutorials/modules				
Discussion boards				
Course management software (e.g., Angel, WebCT, BlackBoard)				
Email or email discussion lists				
Streaming video or screencasts				
Other				

If other, please describe…

18. Have you created any teaching aids or tools to assist in the teaching of EBCP? [check all that apply]

Question development worksheets	
Search strategy worksheets	
Critical appraisal worksheets	
EBCP resource lists	
EBCP subject guides	
Other	

If other, please describe…

19. What are your preferred reference sources or textbooks?

Part D: Instructional collaboration

20. How often are the following individuals involved with you in teaching EBCP?

	Frequently	Occasionally	Rarely	Never
Faculty member(s)				
Librarian(s)				
Someone other than a faculty member or librarian				

If someone other than a faculty member or librarian, please describe…

21. Identify any campus support services you have accessed to help your course development in the teaching of EBCP. [check all that apply]

Teaching Support Centre	
Instructional Technologies Support Centre	
Other	

If other, please describe…

22. How often do you engage with faculty members with respect to teaching EBCP?

	Frequently	Occasionally	Rarely	Never
You co-teach in classrooms or computer labs				
You discuss course structure, formats, approaches, and content (assignments, etc.) with faculty member(s) outside of class				
You are requested by faculty member(s) to teach specific sessions on specific topics, and they are not present in class				
You teach together in the clinical setting				
Other				

If other, please describe…

23. Do you have any additional comments on engaging with faculty members with respect to teaching EBCP?

Part E: Assessment

24. How often are the following strategies used to assess student learning with respect to EBCP?

	Frequently	Occasionally	Rarely	Never	Don't know
Critically appraised topic (CAT) reports					
Case study reports (e.g., grand rounds, journal club)					
Library research assignments involving self-evaluation of research process and skills					
Questions on final examinations (multiple choice/short answer/essay)					
Quizzes					
EBCP worksheets					
Critical appraisal exercises					
Part of clinical examinations (e.g., one task in a 10-step clinical exam—involves being marked on the search & appraisal done to make a clinical decision with respect to a case of a standardized patient)					
Questionnaire on clinical behaviours/attitudes					
Portfolios					
Observation of clinical practices					
Other					

If other, please describe…

_____

25. How often are you involved in the creation of the following student assessment tools related to EBCP?

	Frequently	Occasionally	Rarely	Never
Develop and mark assignments				
Develop and mark a portion of assignments				
Mark a portion of assignments developed by the faculty member (e.g., search strategy, bibliography)				
Develop and mark quizzes or exam questions				
Develop and mark worksheets or exercises				
Develop and create marking schemes for assignments, exam, quizzes, worksheets, or exercises that others mark				

Other						

If other, please describe…

_____

Part F: School/program support for EBCP

26. Please indicate your degree of agreement or disagreement you have with the following

	Strongly agree	Agree	Somewhat agree	Somewhat disagree	Disagree	Strongly disagree	Don't know
EBCP is formally integrated into the mission statements, goals, and objectives of the program.							
EBCP is formally integrated into the curriculum as a milestone or some other graduation requirement.							
EBCP is formally part of the learning objectives of one or more courses.							
EBCP is informally taught in one or more courses but at the discretion of faculty (i.e., it is not formally mandated and therefore can be removed from course).							
EBCP is formally integrated into the learning objectives of clinics and taught by clinical supervisors during clinical interactions with students.							
EBCP is taught by clinical supervisors, at their own discretion, during clinical interactions with students.							

EBCP is taught in the library during reference/consultation sessions.							

If none of the above apply, please comment…

Thank you for completing the survey.

Please click the Finish button to submit your survey results.

Part G: For those who answered *no* to the question #10 (whether or not they taught EBCP)

1. If you do not teach any part of the EBCP process, do you teach students another approach to finding and/or using research to support their clinical decision making?
Yes   No

2. What do you teach? [Textbox]

3. How often do you teach this approach to the following learners? [check all that apply]

	Frequently	Occasionally	Rarely	Never
Optometry students				
Medical students (pregraduate learners)				
Ophthalmology residents				
Other medical residents and fellows				
Graduate students (master & PhD level)				
Faculty members				
Professionals in the community				
Other				

If other, please describe…

Part H: How and where you teach

4. Indicate the frequency that you use the following formats when teaching this approach.

	Frequently	Occasionally	Rarely	Never
As part of a course (face-to-face or online)				
A workshop not linked to a specific course but linked to a program (e.g., milestone for program requirement)				
Via an independent workshop that students voluntarily take with no credit/requirement attached				

One-on-one instruction/consultation				
Continuing education course				
Other				

If other, please describe…

5. In total, how many hours do you spend teaching this approach in a year?

Less than 2 hours	
2–5 hours	
6–10 hours	
11–15 hours	
16–20 hours	
21+ hours	
Other	

If other, please describe…

6. How often do you teach in the following settings when teaching this approach?

	Frequently	Occasionally	Rarely	Never
Large lecture hall/large classroom (>100 seats)				
Small classroom (30–100 seats)				
Seminar room (1–29 seats)				
Computer lab				
Office consultation				
Virtual (web-based/online/remote/course management software)				
Clinical setting				
Other				

If other, please list…

7. How often do you use the following instructional methods when teaching this approach?

	Frequently	Occasionally	Rarely	Never
Lecture				
Small group problem-based learning				
Small group case-based learning				
Discussion within in lecture				
Case discussion (e.g., grand rounds)				
Journal club				
Live demonstration of tools, resources, processes				

Interactive session (e.g., clickers, think-pair-share)				
Practical sessions: hands-on computer lab exercises				
Tutorials, handouts, and guides (print or electronic)				
Individualized instruction				
Formal mentor/coach/preceptor built into program				
During the course of clinical care in clinical setting				
Other				

If other, please describe…

8. How often do you use *live* web-based instructional tools when teaching this approach?

	Frequently	Occasionally	Rarely	Never
Webinar/videoconferencing				
Chat				
Smartboards				
Other				

If other, please describe…

9. How often do you use *any time* web-based instructional tools when teaching this approach?

	Frequently	Occasionally	Rarely	Never
Online tutorials/modules				
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Course management software (e.g., Angel, WebCT, BlackBoard)				
Email or email discussion lists				
Streaming video or screencasts				
Other				

If other, please describe…

Thank you for completing the survey.

Please click the Finish button to submit your survey results.