



ROME 2019

DOMVS OF OPTOMETRY AND OPTICS

Evidence-based Practice Training for Optometry Educators: Mixed Results from a Two-day Workshop

SPEAKER

CATHERINE SUTTLE



Co-funded by the
Erasmus+ Programme
of the European Union

The OCULUS Project

Collaboration between four optometry schools in Europe, two in Israel and three India.



<https://pixabay.com>



Co-funded by the
Erasmus+ Programme
of the European Union



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS

The OCULUS Project

Collaboration between four optometry schools in Europe, two in Israel and three India.



<https://pixabay.com>



Co-funded by the
Erasmus+ Programme
of the European Union



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS



Co-funded by the
Erasmus+ Programme
of the European Union

The OCULUS Project

- Bar Ilan University
- Chitkara University
- City, University of London
- Hadassah Academic College
- HU University of Applied Sciences Utrecht
- Manipal Academy of Higher Education
- Polytechnic University of Catalonia
- University of Hyderabad
- University of South-Eastern Norway
- Association of Schools and Colleges of India
- European Council of Optometry and Optics
- Israel College of Optometry
- Sapir Academic College



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS



Co-funded by the
Erasmus+ Programme
of the European Union

The OCULUS Project

Aims:

- Enhance the quality of teaching in optometry in the participating institutions, to the level required by the European Council for Optometry and Optics (ECOO)
- Ensure that optometry graduates from the participating institutions are equipped for evidence-based practice (EBP), and that optometry educators from those institutions are equipped for evidence-based practice



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS



Co-funded by the
Erasmus+ Programme
of the European Union

The OCULUS Project

Aims:

- Enhance the quality of teaching in optometry in the participating institutions, to the level required by the European Council for Optometry and Optics (ECOO)
- Ensure that optometry graduates from the participating institutions are equipped for evidence-based practice (EBP), and that optometry educators from those institutions are equipped for evidence-based practice



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS

Train-Trainers workshops



Co-funded by the
Erasmus+ Programme
of the European Union

McMaster University
FACULTY OF HEALTH SCIENCES
Evidence-Based Clinical Practice Workshops
HEALTH SCIENCES HOME WHAT TO EXPECT WHO'S WHO LOGISTICS COURSE MATERIALS REGISTRATION CONTACT US
Welcome to EBCP
Learn more about the McMaster Evidence-Based Clinical Practice Workshops
See Video →
EBCP WORKSHOP

CEBM
The Centre for Evidence-Based Medicine develops, promotes and disseminates better evidence for healthcare.
HOME STUDY WITH US BLOG RESOURCES RESEARCH CEBM OUTREACH
Teaching EBM – 2019

Journal of
Interprofessional
Care

<http://informahealthcare.com/jic>
ISSN: 1356-1820 (print), 1469-9567 (electronic)
J Interprof Care, 2015; 29(4): 367-369
© 2015 Informa UK Ltd. DOI: 10.3109/13561820.2014.962127

informa
healthcare

SHORT REPORT

An interprofessional train-the-trainer evidence-based practice workshop: Design and evaluation

Jonathan Koffel¹ and Shannon Reidt²

¹Bio-Medical Library, University of Minnesota, Minneapolis, MN, USA and ²Department of Pharmaceutical Care & Health Systems, College of Pharmacy, University of Minnesota, Minneapolis, MN, USA



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS



Co-funded by the
Erasmus+ Programme
of the European Union

Workshop Format: Day 1

Knowledge, skills or attitude	Topic	Format	Duration (mins)
Knowledge and attitude	Clinical decision making – how do we make clinical decisions?	Small group discussion followed by whole group	30
Knowledge	EBP concept	Small group discussion followed by whole group	60
Attitude	Is EBP important?	Small group discussion followed by whole group including examples (from facilitator if needed).	30
Knowledge	How is EBP ‘done’?	Small group discussion followed by whole group	30
Skills	Form an answerable question	Small group work	30
Skills	Find evidence	Discussion – what is evidence? (includes study designs)	60
Skills		How do we look for research evidence? A demonstration	30
Skills		Workshop – find evidence using Pubmed, Cochrane and Trip databases	60

2-day workshop at five schools

Small groups, up to 25 in total group

Focus on knowledge, then attitude and skills

Skills focused on phrasing a clinical question and finding related evidence.



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS



Workshop Format: Day 2

Knowledge, skills or attitude	Topic	Format	Duration (mins)
Skills	Appraise evidence	Tutorial – appraisal and CATs	60
Skills		Workshop – use a CAT to appraise a cohort study	60
Skills		Workshop – use a CAT to appraise a controlled study	60
Skills		Workshop – use a CAT to appraise a systematic review	60
Skills	Apply evidence	Workshop – using a hypothetical scenario, apply evidence to a patient case	60
Skills / Attitude	Troubleshooting – what are barriers to EBP? How could we overcome these?	Small group discussion followed by whole group	30

Focus on skills on 2nd day.

Main focus on critical appraisal and applying evidence.

Tutorial demonstrating appraisal of an RCT using a critical appraisal tool.

Then small group work on appraisal of RCT and systematic review.

Applying evidence based on clinical scenarios.



Assessment



Co-funded by the
Erasmus+ Programme
of the European Union



ELSEVIER



CrossMark

Journal of Clinical Epidemiology 68 (2015) 1261–1269

**Journal of
Clinical
Epidemiology**

The “evidence-based practice inventory”: reliability and validity was demonstrated for a novel instrument to identify barriers and facilitators for Evidence Based Practice in health care

Nina M. Kaper^{a,*}, Maartje H.J. Swennen^b, Arjen J. van Wijk^c, Cor J. Kalkman^d,
Nanda van Rheenen^b, Yolanda van der Graaf^b, Geert J.M.G. van der Heijden^{b,c}

Based on existing method by Kaper et al (2015) which assesses self-reported EBP skills, attitude and behaviour. Questionnaire wording was changed to remove ‘EBP’ and to apply to educators not necessarily making clinical decisions themselves.

26 items reduced to 16 plus one open question on the value of research for clinical decision-making in optometry.

Modified questionnaire applied before and after the workshops in three Indian optometry schools.



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS



1. I feel that research is useless ① ② ③ ④ ⑤ ⑥ useful to
improve patients' outcomes.

[unmodified]

4. I am unlikely ① ② ③ ④ ⑤ ⑥ likely to apply research
principles in considering or making clinical decisions.

[I rarely / frequently use research evidence to
support my clinical decisions]

7. I feel that I am incapable ① ② ③ ④ ⑤ ⑥ capable of
applying research to clinical decisions.

[I feel that I am incapable / capable of applying EBP
principles in my clinical decisions]



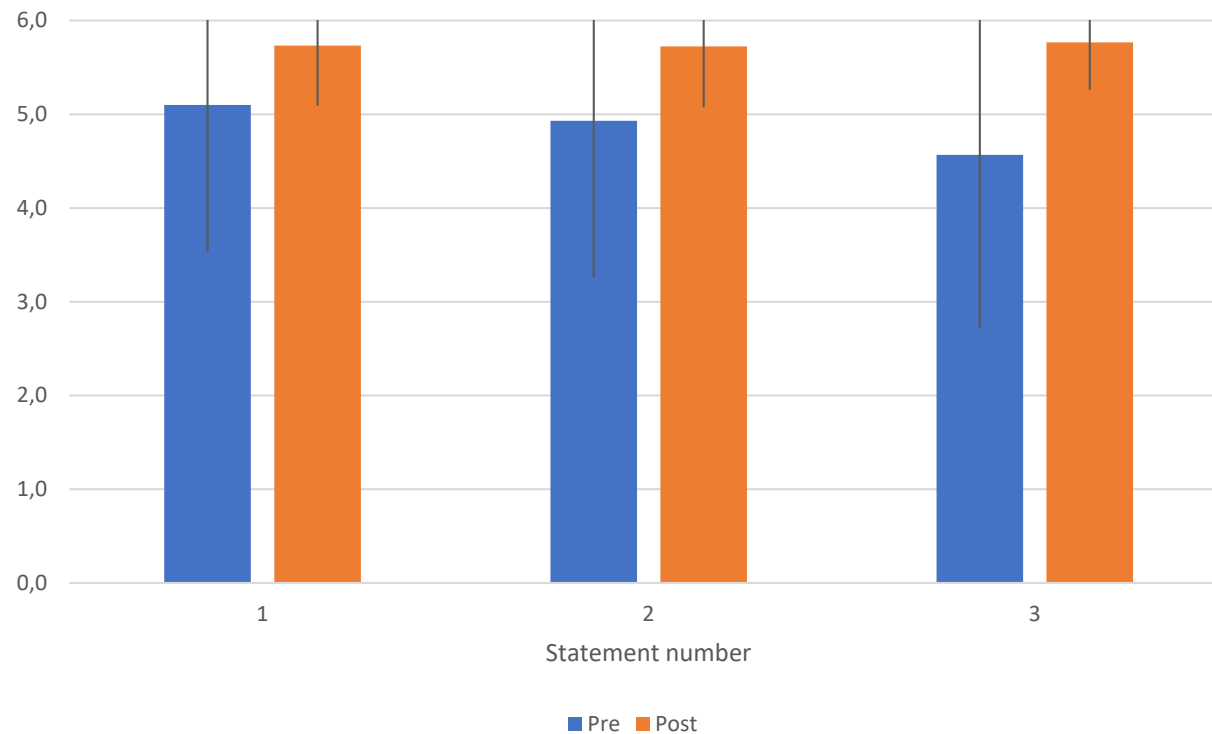
Results

- At one of the five schools, few participants were able to attend the 2nd day
- 15 participants at one school and 16 at another attended the two days and completed pre- and post-workshop assessment.
- At each of these two schools, participants included those teaching optometry, with backgrounds in optometry and other clinical and non-clinical backgrounds.
- Mean scores were similar at the two schools ($p > 0.9$) at pre and post workshop stages, so data were combined for further analysis.





Results: Attitude

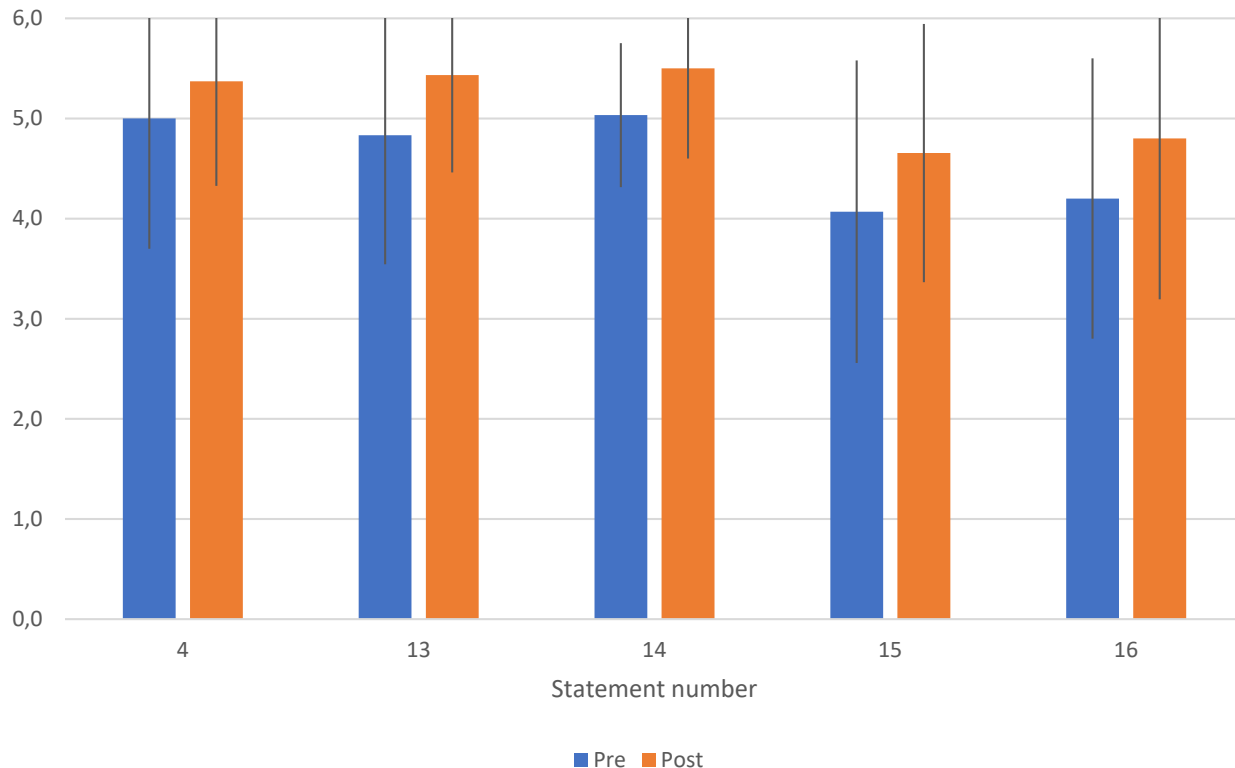


Statement		P value
1	I feel that research is useful to improve patients' outcomes	0.011
2	I feel that research is an important feature of high quality patient care	0.007
3	I feel that research improves the quality of clinical decisions	0.001





Results: Clinical decisions



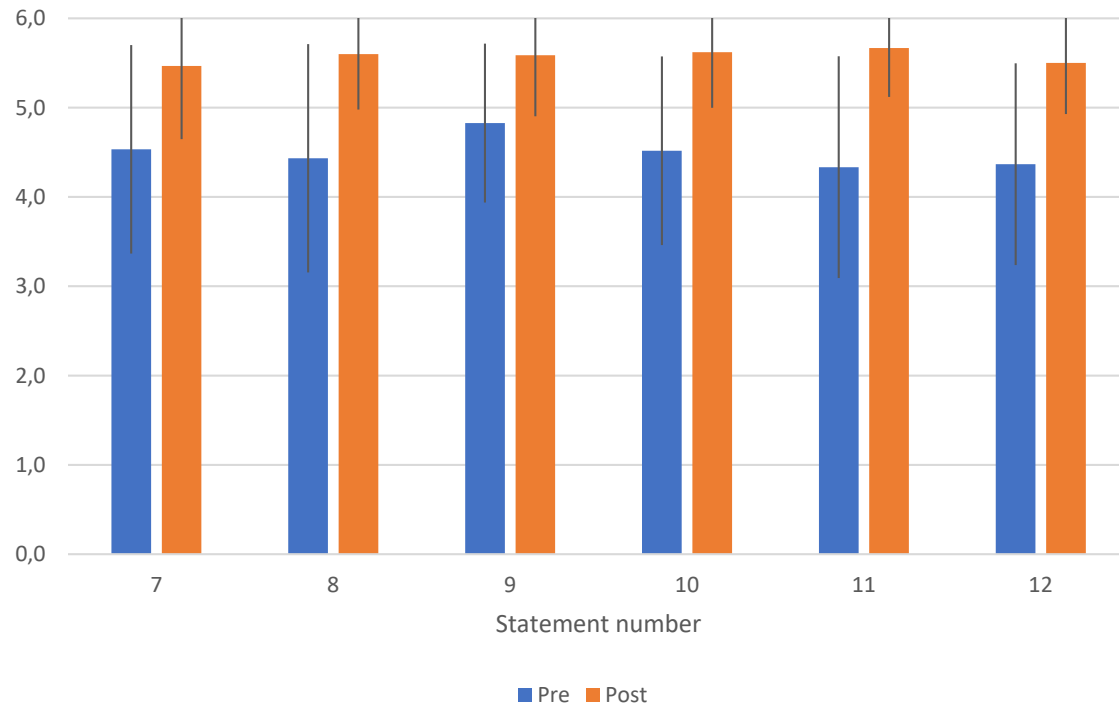
Statement number		P value
4	I am likely to apply research principles in considering or making clinical decisions	0.218
13	I give high priority to a thorough understanding of the background of the answers to clinical questions	0.022
14	I am likely to use research evidence to support clinical decisions	0.028
15	I would prefer to use research evidence for considering or making clinical decisions	0.035
16	I am likely to look for research to find answers to clinical questions	0.053



Results: Perceived behavioural control



Co-funded by the
Erasmus+ Programme
of the European Union



Statement number		P value
7	I feel that I am capable of applying research to clinical decisions	<0.0001
8	I feel that I am capable of translating information needs into relevant and feasible clinical questions	<0.0001
9	I feel that I am capable of searching for research evidence	<0.0001
10	I feel that I am capable of critically appraising research	<0.0001
11	I feel that I am capable of translating research evidence to the care of individual patients	<0.0001
12	I feel capable of regularly keeping up with latest research evidence from literature	<0.0001



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS

“What are your views on the value of research for clinical decision making in optometry?” Pre-workshop

- Clinical decisions should be evidence based
- High quality research is very important ... for best clinical decision making for any healthcare profession
- Research provides us new pathways to follow to treat or diagnose any problem
- It helps in better understanding of disease process, helps in quick and accurate diagnosis and management
- Research should be conducted in every field of clinical study based programme
- Research is much more important than the clinical decision making...need more workshops about research evidence



“What are your views on the value of research for clinical decision making in optometry?” Post-workshop

- Patient care and clinical decisions can be improved by using research
- Evidence based practice should be adopted in every field especially for physicians not only for upgrading knowledge but also improve patient care
- Research does play a vital role in decision making
- Very vital for up to date practice
- High quality research evidence is very important for the evidence based clinical decision making in any healthcare profession
- Quality research should be done to improve evidence based clinical practice





Summary

- After the workshop, participants were more inclined to view research as useful and important in patient care.
- They also felt more capable of finding and using research in clinic.
- However, they were no more inclined to look for research

I feel that I am capable of searching for research evidence	<0.0001
---	---------

I am likely to use research evidence to support clinical decisions	0.028
--	-------

I am likely to look for research to find answers to clinical questions	0.053
--	-------





Co-funded by the
Erasmus+ Programme
of the European Union

Conclusion

- This workshop format may be useful to develop EBP abilities in educators
- But, abilities were perceived and not tested
- Additional assessment should test actual skill development and behaviour
- While participants felt more able and held positive views about using clinical they might not do so
- Engagement in EBP training may be challenging



ROME 2019
DOMVS OF OPTOMETRY AND OPTICS