

Online Medical Education Can Significantly Improve Ophthalmologists' Knowledge and Confidence to Use Imaging to Screen and Monitor Patients With Advanced Age-Related Macular Degeneration (AMD)

DISCLOSURES



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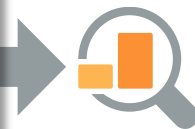
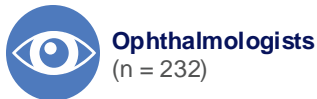
Outcome study and medical education programme supported by an independent educational grant from Apellis.

Methods

PURPOSE

To determine if online medical education could increase knowledge on Classification of Atrophy (CAM) and Age-Related Eye Disease Study (AREDS) criteria and knowledge and confidence when to use various imaging modalities for screening/ monitoring AMD patients to predict disease progression.

METHODS OUTCOME STUDY



<https://www.medscape.org/viewarticle/1001152>

Measure

Participants completed a 3-item questionnaire plus a confidence assessment before and after watching a 30-minute peer-to-peer discussion with accompanying slides.

A matched pair design compared the average number of correct responses overall with a paired samples t-test and proportion of questions answered correctly at the question level from pre- to post-assessment with a McNemar's test ($P < .05$ significance level).

Cohen's d with correction for paired samples estimated the effect size of the education on number of correct responses ($< .20$ modest, $.20-.49$ small, $.59-.79$ moderate, $\geq .80$ large).

Self-assessed confidence was measured on a 5 point Likert scale, a paired samples t-test was conducted for significance of the confidence rating.

How to Read the Linked Learner Assessment

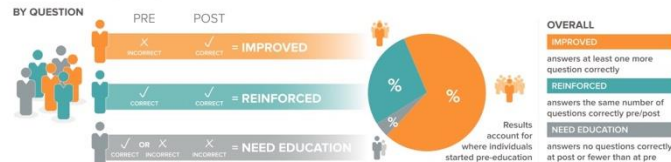
OUTCOMES COMPLETERS

Each individual completed BOTH the pre and post-education questions – SAME individuals pre and post-education



LINKED LEARNER

Each individual tracked pre and post-education – Learners serve as their own controls



Programme

- 30-minute peer-to-peer, case-based discussion with synchronized slides
- Faculty: Eric H Souied, Pearse A Keane
- Learning Objectives: To increase knowledge regarding classification and assessment of geographic atrophy secondary to AMD

Metrics

- > 8000 MD learners
- Analysis: $n = 232$ Ophthalmologists
- Launch Jan 19, 2023; data through to Apr 11, 2023

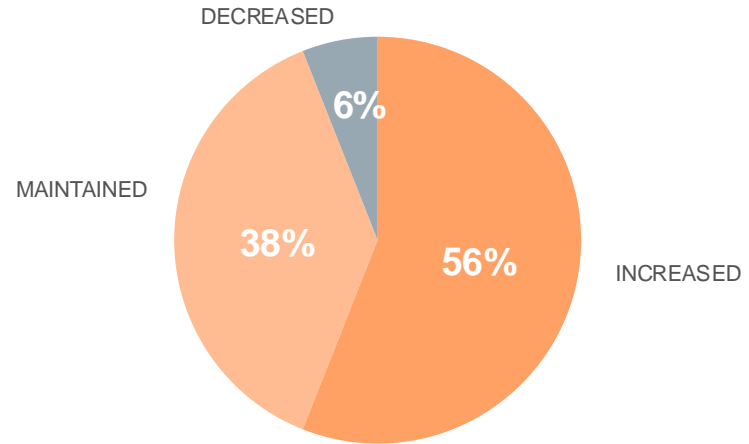
Results: Highly Significant, Large Educational Impact on Knowledge and Improved Confidence for Most Learners

Ophthalmologists (n = 232)

AVERAGE % OF CORRECT RESPONSES: KNOWLEDGE



LINKED LEARNER RESULTS IN CONFIDENCE*



COHEN'S d

0.84

EFFECT SIZE
< .20
.20 - .49
.5 - .79
≥ .80

EDUCATIONAL IMPACT
MODEST
SMALL
MODERATE
LARGE

OVERALL P VALUE
SIGNIFICANCE ($P < .05$)

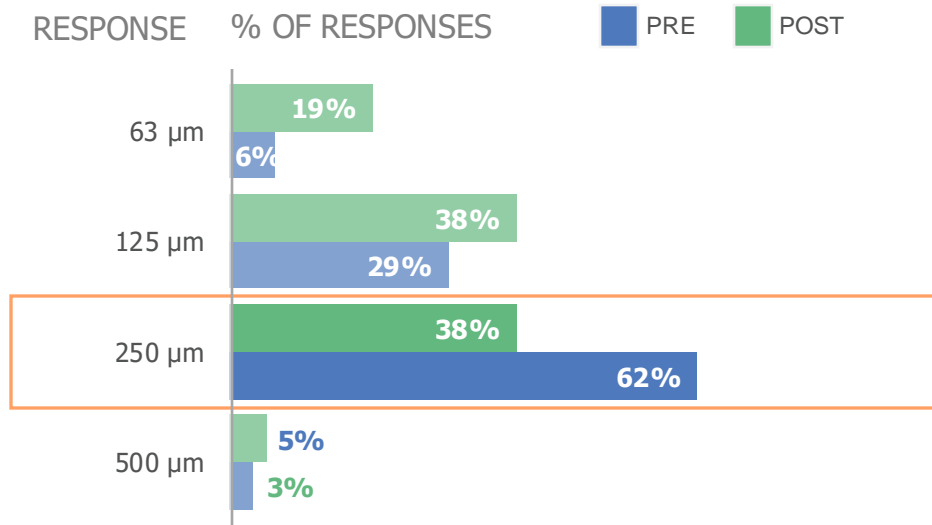
$P < .001$

* Confidence choosing imaging modalities when diagnosing and monitoring geographic atrophy secondary to AMD

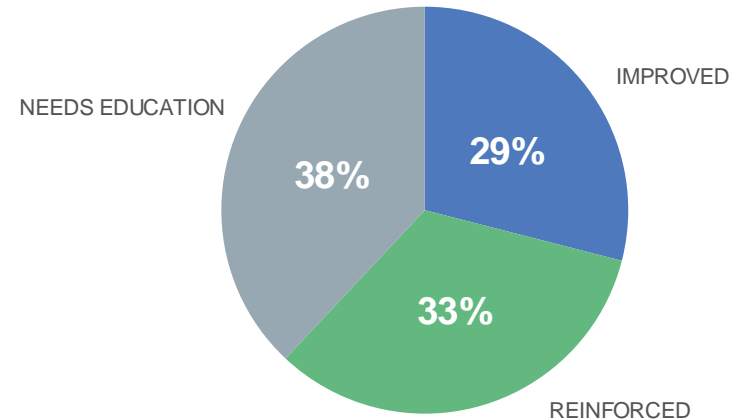
Results: Highly Significant Improved Knowledge on AMD CAM Classification Criteria

Ophthalmologists (n = 232)

Question: According to the Classification of Atrophy Meeting (CAM) criteria, what is the minimum size of choroidal hypertransmission and retinal pigment epithelium (RPE) loss evident on optical coherence tomography (OCT) for a lesion to be classified as cRORA (complete RPE and outer retinal atrophy)? (Correct answer: 250 μm)



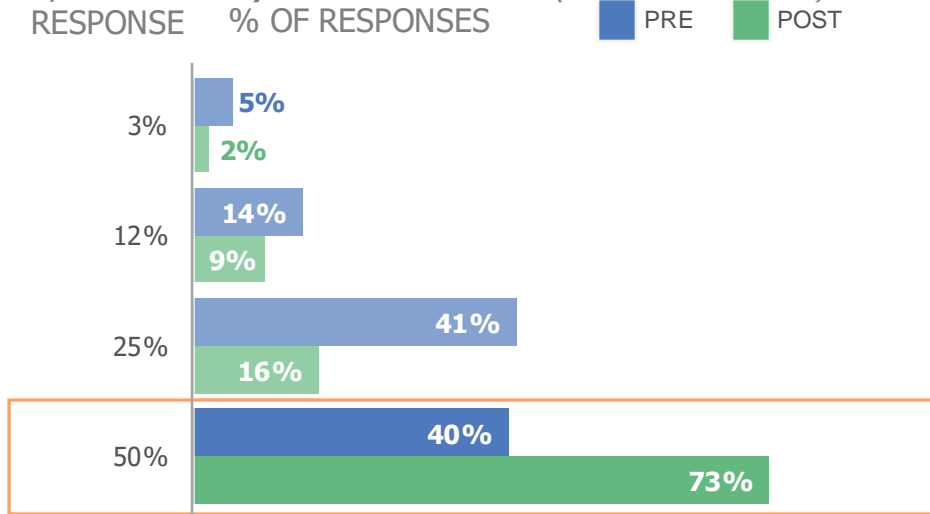
LINKED LEARNING RESULTS



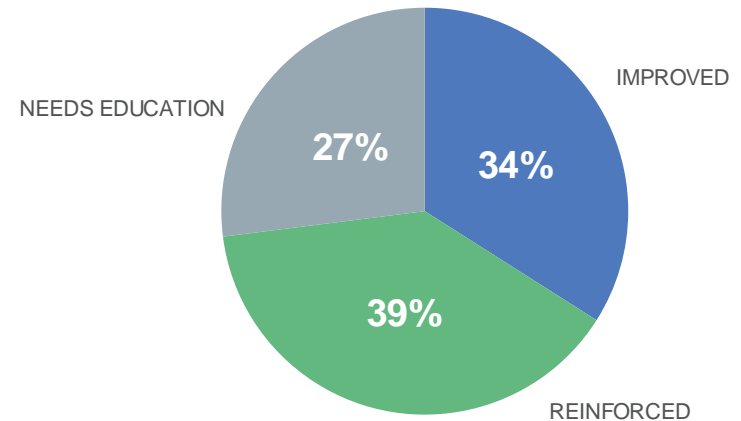
Results: Highly Significant Knowledge Gains Regarding AREDS-Based AMD Progression Risk

Ophthalmologists (n = 232)

Question: When deciding the frequency of follow-up when features of age-related macular degeneration (AMD) are detected, the Age-Related Eye Disease Study (AREDS) scoring system can be useful, as each score (from 0 to 4) indicates a 5-year risk of progression to late AMD (either neovascular or atrophic). With an AREDS score of 4, what is the 5-year risk of late AMD? (Correct answer: 50%)



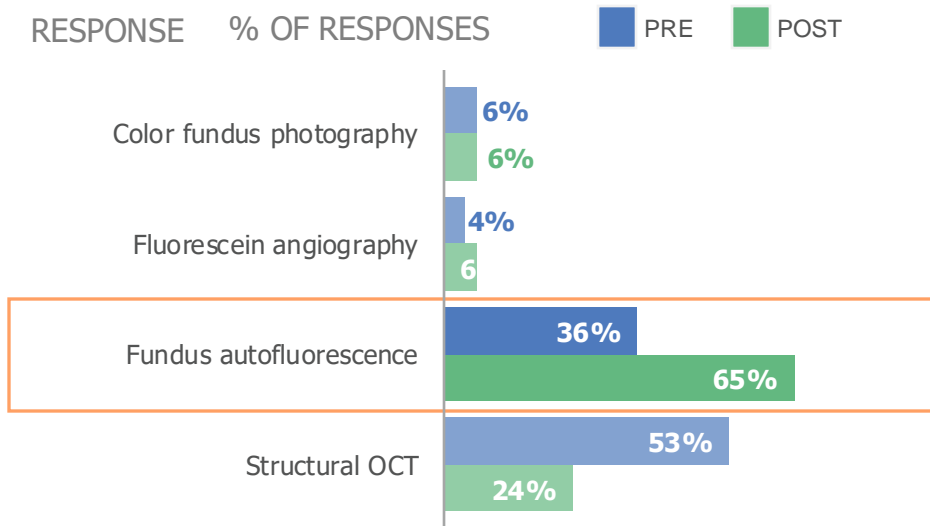
LINKED LEARNING RESULTS



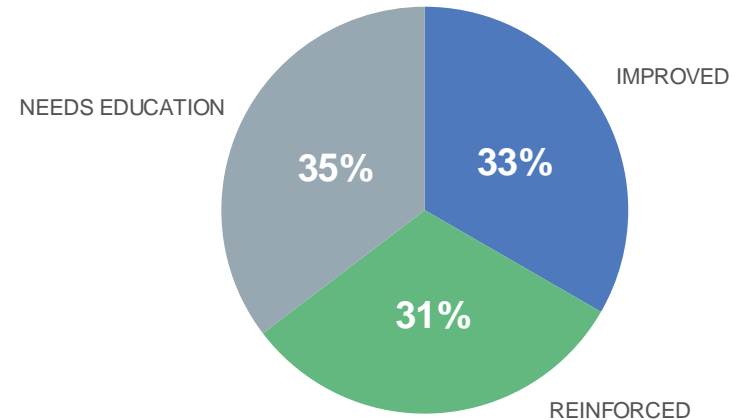
Results: Highly Significant Increased Knowledge on Choosing Imaging Modality in AMD Monitoring

Ophthalmologists (n = 232)

Question: What imaging modality is now the gold standard for monitoring progression of confirmed atrophic lesions in AMD? (Correct answer: Fundus autofluorescence)



LINKED LEARNING RESULTS

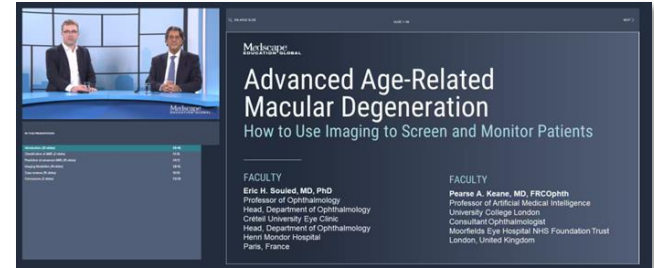


Conclusions

The outcome study for this medical education programme on classification and assessment of geographic atrophy secondary to AMD demonstrated

Online medical education is a fast and effective method

- to educate on classification of advanced AMD
- increase understanding of how to assess individual AMD progression risk
- improve knowledge on using imaging techniques for assessing advanced AMD
- Can **boost confidence**
 - choosing imaging modalities when diagnosing and monitoring geographic atrophy secondary to AMD
 - embarking on emerging AI tools, like automated image analysis for OCT
- The educational activity was of **high relevance** to ophthalmologists in preparing their clinical practice for patient selection for emerging therapeutics
- **Further education** is warranted, in particular once guidelines for diagnosing and monitoring non-exudative AMD will be published



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