USING AN E-LEARNING TEACHING COURSE TO ENHANCE SCREENERS KNOWLEDGE OF DIABETIC RETINOPATHY IN THE DIABETIC EYE SCREENING PROGRAMME

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INTRODUCTION:

- The diabetic eye screening programme detects diabetic retinopathy(DR) before patients become symptomatic and can reduce the risk of vision loss by 50%.
- Screeners are often from non-clinical backgrounds and have limited knowledge on diabetes and diabetic retinopathy.

OBJECTIVE:

The aim of our quality improvement (QI) project is to incorporate an e-learning teaching course to enhance screeners knowledge of diabetic retinopathy and allow staff to engage more actively with their patients through education and highlight the importance of attending screening appointments.

METHODS:

- Screeners at Lancashire Diabetic Eye Screening Programme were contacted and 19 agreed to participate in our prospective study.
- Their knowledge of diabetic retinopathy was assessed with a pre-questionnaire.
- Firstly, clinical scenarios and classifying DR on fundus images measured their knowledge objectively.Participants then subjectively rated their confidence regarding definitions, classifications, pathogenesis and management of diabetic retinopathy on a Likert scale(1-10).
- An e-learning teaching course of 10 videos made by the author on diabetic retinopathy was distributed to all screeners. A post-questionnaire was conducted to compare results.

RESULTS:

- Post-teaching,**100% of screeners objectively demonstrated improvement** in their knowledge of DR.
- Overall, the perceived **confidence** of participants knowledge of DR **increased from 29% to 49%.**
- **71%** thought the videos had improved their knowledge of DR.
- **86%** thought the videos would help them engage better with diabetic patients.
- **100%** would recommend the videos to other healthcare professionals.

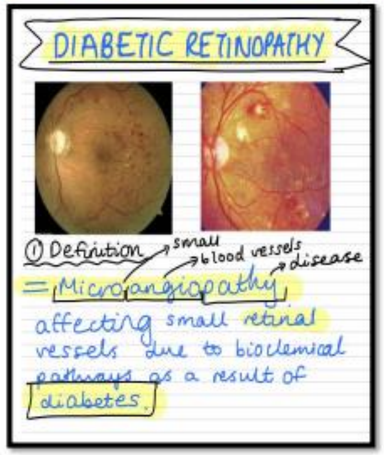


FIGURE 1: E-learning video images on definition of diabetic retinopathy

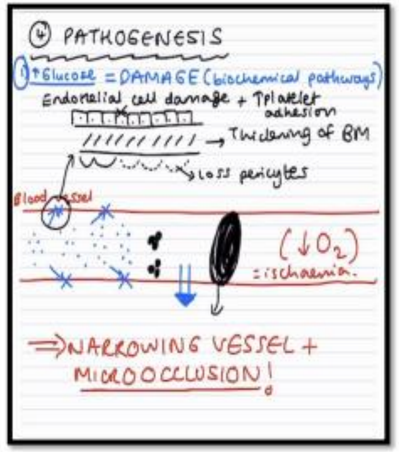


FIGURE 2: E-learning video images on pathogenesis of diabetic retinopathy

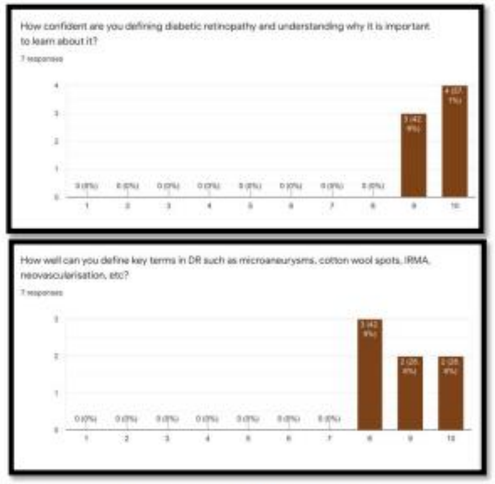


FIGURE 3A and 3B: Post questionnaire Feedback

RECOMMENDATIONS:

- Incorporating an e-learning course on diabetic retinopathy has objectively improved screeners knowledge of diabetic retinopathy.
- Their subjective confidence of DR has doubled post-teaching.
- By engaging staff with their patients we hope to improve adherence to annual screening appointments and enhance visual outcomes for diabetic patients through earlier referral to secondary care services.