

iExaminer system: An effective teaching method to improve fundus examination skills



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Background

- All generalist physicians should be proficient in the fundus examination for detecting prevalent diseases - diabetic retinopathy, papilledema, retinal hemorrhage etc.^{1,2)}
- However, it is difficult to provide training in the necessary clinical skills for the fundus examination.^{3,4)}

Pan Optic® iExaminer system

- Allows clinicians to share the view with colleagues.
- Consists of three core components.



Objective

To investigate whether the **iExaminer teaching method** is superior to the **traditional teaching method** for training in fundus examination.



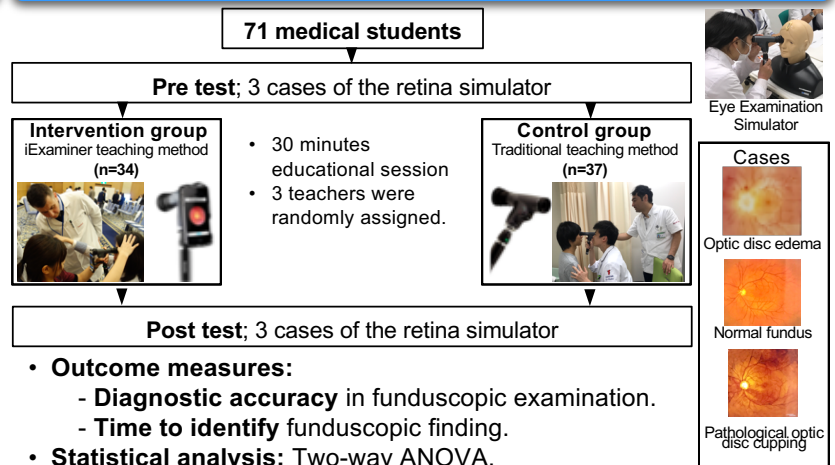
iExaminer teaching method
(with iExaminer system)

VS



Traditional teaching method
(without iExaminer system)

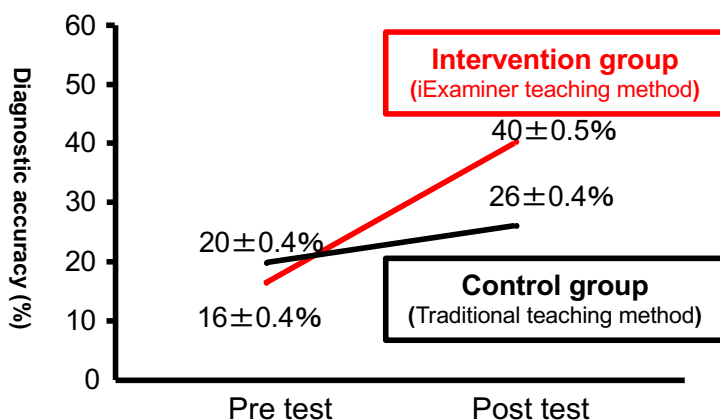
Methods



Results

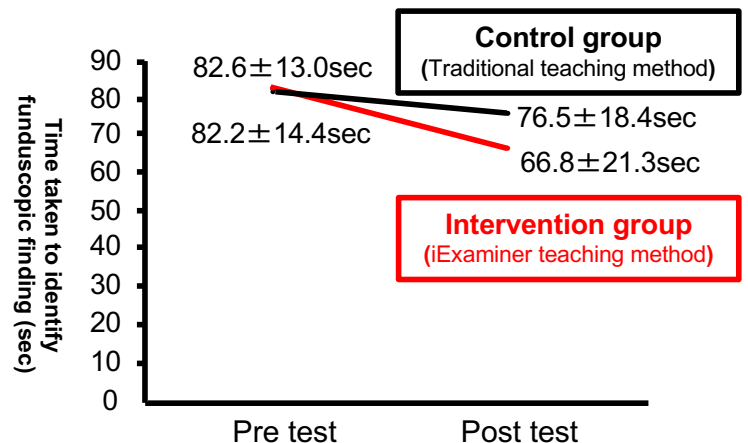
Diagnostic accuracy

F (1,193) = 6.18, p = 0.014



Time taken to identify funduscopy finding

F (1,193) = 10.73, p = 0.001



Discussion & Conclusion

- Funduscopy is inherently difficult to teach because there is no way to verify that the student has obtained a proper view of the fundus.⁵⁾
- Sharing the visual fields between students and the teacher enables them to be easy to learn.
- The iExaminer teaching method is superior to the traditional teaching method for training in fundus examination.

References

- 1) Acad Emerg Med. 2017; 24(5):587-594.
- 2) Ophthalmology. 2009; 116(7): 1235-1236.
- 3) Acad Med. 2009; 84(11): 1622-1630.
- 4) J Gen Intern Med. 2007; 22(12): 1725-1730.
- 5) Ophthalmology. 2010; 117(9):1863.