Artificial intelligence is ready to participate in patient`s care, but are patients ready?

I.Elaraoud, N.Narendran

Wolverhampton Eye Infirmary, United Kingdom

Introduction

(AMD) is the leading cause of vision loss and blindness in developed, accounting for 8·7% of all blindness worldwide Its prevalence is likely to increase with an anticipation that 288 million people will have AMD by 2040 as a consequence of exponential population ageing[1]. Over the last decade artificial intelligence (AI) has become integral to activities that used to be exclusive to humans. Ophthalmology is at the forefront of integrating AI in its practice with deep mind already assessing and interpreting OCT scans. Challenges have not only been limited to accuracy rates but also to patients expectations. We would like to share the first ophthalmology based survey to assess patients expectation when dealing with AI.

Method

A questionnaire based survey of patients attending ophthalmology appointment for AMD at the Wolverhampton Eye Infirmary. Patients were handed a short questionnaire to fill during their visit. The questionnaire consisted of 9 questions, questions 1-3 were related to general demographics, the number of years they have been receiving treatment, questions 4-9 were about patients awareness of the term artificial intelligence and their willingness to engage with it, for questions 4-9 respondents were given a choice of answering yes or no, but were able to make further comments in spaces provided.

Results

205 patients, 135(66%) females and 70(34%) males with an average age 79.9 years completed the survey.

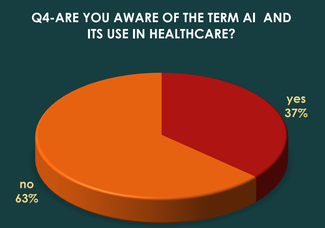
Only 75(36.5%) of patients were aware of the term artificial intelligence and its use in healthcare.

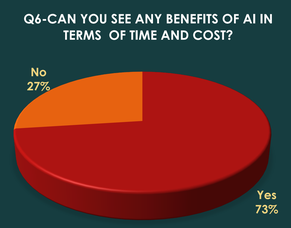
116(56.5%) thought there is a benefit of AI in terms of time and cost effectiveness.

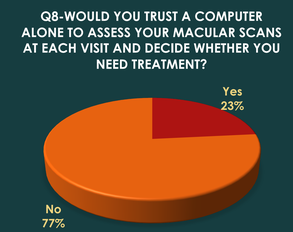
While 81(39.5%) of patients are willing to engage with AI, only 48(23.4%) would entrust AI to solely assess and manage their AMD and that increased to 76(37%) when they were told the computer would be as accurate and as reliable as a human and would make their visit quicker.

36(18%) of patients added in the comment section that they would prefer to see a professional and have a human touch as that reassures them.

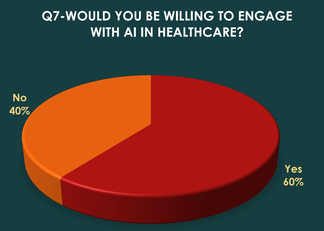
The charts give the details and the results of questions 4-9.

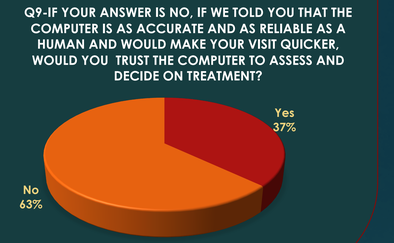












Conclusion

AI will most likely become an integral part of the healthcare in the future. In our survey although not many patients were aware of AI, those who were aware appreciate the cost and time effectiveness AI will bring to our eye clinics.

Certainly more work needs to be done to manage patient expectation, optimize patient engagement and ensure a seamless integration of ai and direct clinical care in the future.

Reference:1-Sources for Macular Degeneration: Facts & Figures [http://www.brightfocus.org/sources-macular-degeneration-facts-figures]. Accessed 28 Oct 2015.