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Teleophthalmology and use of phelcom eyer technology for screening glaucoma suspects in Campo Grande, MS

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ABSTRACT
Glaucoma is the second leading cause of blindness in the world's population and the most important cause of irreversible blindness in the world. Individuals not diagnosed with glaucoma may have their quality of life impaired. There is evidence in the literature that the more advanced the glaucoma, the worse the sequelae, which can compromise patients' daily activities such as reading, driving, walking, judging distances, and seeing objects approaching from the side.

Keywords: Glaucoma, Phelcom eyer, Telemedicine.

1 INTRODUCTION

Glaucoma is the second leading cause of blindness in the world's population and the most important cause of irreversible blindness in the world. Individuals not diagnosed with glaucoma may have their quality of life impaired. There is evidence in the literature that the more advanced the glaucoma, the worse the sequelae, which can compromise patients' daily activities such as reading, driving, walking, judging distances, and seeing objects approaching from the side. The psychological effects such as fear of blindness and social withdrawal of glaucoma in the individual are also not negligible and tend to increase with the progression of the disease. The objective of this study was to screen asymptomatic patientswithout a diagnosis of glaucoma who had the pathological condition and consequently were still untreated. To achieve the objective, a screening of patients attending a primary health care unit who met criteria for suspected glaucoma, such as age, family history, diabetes, and other risk factors, was screened. The screening was performed through fundus photographs with the Phelcom eyer. This device was recently launched on the market and has the characteristic of being portable and easy to handle by any health professional, with great ease of acquisition of high resolution photographs. In addition to the ease of handling, the speed and ease of sending the images to the specialist confer a great advantage in screening, which can make their acquisition by the public health system attractive for this purpose. These photographs were sent through digital means to the specialist who diagnosed the suspects and, once diagnosed, referred for treatment. The activity developed screened 350 patients and had a number of 23 patients diagnosed and referred for treatment. It is concluded that the activity had a great impact on society, as it diagnosed and referred patients who

would otherwise continue with glaucoma without knowledge and treatment, which would probably lead them to irreversible loss of their vision. In addition, during the examination, all patients became aware of the disease and the importance of recurrent evaluations for glaucoma screening. The device proved to be viable for use in primary care units to screen for various conditions that affect the retina of patients.

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