Risk Factors for Eye Health in Roatán, Honduras

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Project Summary: Approximately 2,700 public and private school students aged 7-18 from Roatán, Honduras were screened for myopia with Snellen eye charts and surveyed about related risk factors. Additionally, approximately 100 adult clinic patients aged ≥30 were screened for glaucoma through measurement of intraocular pressure (IOP) with a tonometer and surveyed about related risk factors. Students with ≥20/40 visual acuity and adults with ≥22 mmHg IOP were referred to a clinic ophthalmologist.

PROJECT OBJECTIVES

• Perform vision screenings and provide glasses for children in local public and private schools
• Perform glaucoma screenings for adult patients in Clínica Esperanza
• Assess risk factors for myopia and glaucoma in Roatán community

CONCLUSIONS

• Students with ≥20/40 visual acuity tend to spend more time watching TV or a computer screen and less time reading books or doing homework
• Further research may investigate differences in myopia risk-related activities between public and private school students

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METHODOLOGY

• Performed Snellen eye chart screenings, administered surveys, and measured height and weight at 20 local public and private schools for ~2,700 students aged 7-18 in grades 3-12
• Survey questions addressed demographics, family eye history, and risk factors including daily hours spent reading, watching TV, and playing outdoors in sunlight
• Performed IOP screenings with Reichert Tono-Pen XL and administered surveys for ~100 adult clinic patients aged 30+
• Survey questions addressed demographics, family eye history, and risk factors including age (60+) and diabetic status

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