

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo PIBIC

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Service (sector)

Epidemiology

Nº CEP

0095/04

PREVALENCE OF NEAR VISION IMPAIRMENT IN LOW-INCOME OLDER ADULTS IN BRAZIL: THE SÃO PAULO EYE STUDY

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Objective: To determine the prevalence of near vision impairment and blindness in older adults in a low-income urban area of São Paulo, Brazil.

Design: Population-based, cross-sectional study.

Participants: A total of 3678 examined persons 50 years of age or older.

Methods: A random selection of census sectors (clusters) was used to identify the study sample in Ermelino Matarazzo, Vila Jacui and São Miguel districts in the east zone of São Paulo city. Eligible persons in the 22 selected clusters were enumerated through a door-to-door household survey and invited to an examination site for visual acuity testing and eye examination from July 2004 to December 2005.

Main outcome measures: Presenting and best corrected near visual acuity.

Results: A total of 4224 eligible persons in 2870 households were enumerated, and 3678 (87.1%) were examined. The prevalence of normal near vision (visual acuity $\geq 20/32$ in both eyes) was 72.3% (95% confidence interval [CI]: 70.4%-74.2%) with presenting visual acuity and 85.6% (95% CI: 84.0%-87.2%) after refractive correction. The prevalence of normal/near-normal vision ($\geq 20/63$ in both eyes) was 92.0% (95% CI: 88.3%-95.6%) with presenting acuity and 92.1% (95% CI: 89.6%-94.6%) with best correction. The prevalence of presenting near bilateral blindness ($< 20/200$) was 1.73% (95% CI: 1.18%-2.28%) and after refractive correction was 1.43% (95% CI: 0.87-1.98%).

Conclusions: Although the overall prevalence of near visual impairment was low, it could be avoided by simple refraction in a large proportion of those with visual impairment/blindness in this urban low-income adult Brazilian population. These results highlight the need to target near vision impairment as well as distance visual impairment to the aging population. Refractive services with provision of glasses would considerably improve the near vision of older adults with reflections in their quality of life.