Awareness of Disease: a comparison between Glaucoma, Systemic Arterial Hypertension, and Diabetes in a population-based study from South of Brazil.

ABSTRACT

Purpose: To compare the awareness of glaucoma, systemic arterial hypertension (SAH), and diabetes diagnosis.

Design: cross-sectional population-based study

Participants: 1636 subjects over 40 years of age from the South Region of Brazil (76.5% participation rate).

Methods: Subjects underwent a screening examination which included medical interview, blood pressure (BP) and capillary glucose measurements, slit-lamp exam, Goldmann tonometry, and fundoscopy. Glaucoma suspects underwent a complete ophthalmological examination. Glaucoma was diagnosed based on the presence of structural/functional damage, as proposed by the ISGEO classification. SAH was diagnosed in subjects with previous diagnosis in treatment for BP control, and new cases were diagnosed in subjects with a mean systolic BP ≥140mmHg and/or mean diastolic BP ≥90mmHg. Diabetes was diagnosed in subjects with previous diagnosis in treatment for glycemia control, and new cases were diagnosed in subjects with capillary glycemia levels >200mg/dl.

Main Outcome Measure: Rates of previous diagnosis of glaucoma, SAH, and diabetes.

Results: Glaucoma was diagnosed in 56 subjects (3.4%; 95%CI, 2.5-4.3), SAH in 960 subjects (58.7%; 95%CI 56.2-61.1), and diabetes in 178 subjects (10.9%; 95%CI 9.4-12.4). Six (10.7%) glaucoma cases were already aware of their diagnosis, while 700 (72.9%) SAH cases and 161 (90.4%) diabetes cases were already aware of their diseases ($p<.001$, chi-square test).

Conclusion: The awareness of glaucoma disease was considerably lower than SAH and diabetes. The low level of previous glaucoma diagnosis represents a public health problem that must be tackled in order to reduce the burden of glaucoma blindness in developing countries.