

## Reducing avoidable blindness and visual impairment in the Region of the Americas

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According to World Health Organization (WHO) estimates, in 2010 more than 26 million people in the Region of the Americas suffered from visual impairment, and 3.2 million were blind (1). Nearly 80% of these cases could have been prevented or treated through interventions that have proven effective in reducing blindness and visual impairment prevalence in the Region (2), including blindness prevention programs and surgical interventions (3, 4). Cataract remains the leading cause of blindness in the Americas (5, 6) and is eminently treatable, while refractive error is the leading cause of visual impairment (5). Other major causes of blindness include glaucoma, diabetic retinopathy, and age-related macular degeneration (5, 6). Older age is associated with visual loss. A recent study reported that for every 100 people in Latin American and Caribbean countries aged 50 years and older there are 10 with moderate or severe visual impairment and two who are blind (2).

In 2012, more than 100 million people aged 60 years and older lived in the Region of the Americas, and current estimates are that this population will double by 2020 (7). Population ageing will be associated with higher rates of blindness and visual impairment.

Between 1990 and 2010, the age-standardized prevalence of blindness and visual impairment decreased in the Region (2) and there was a shift in the proportions of attributable causes. Reduced rates of visual loss due to cataract are directly attributable to higher uptakes in cataract surgery (3, 4). However, there continue to be disparities in eye health with the highest levels of blindness and visual impairment among poor people in rural areas, and where health systems and services are suboptimal with limited access (8, 9). Subnational surveys in people 50 years and older have reported higher prevalence rates of blindness in rural communities of Peru and Guatemala (4% and 3.6%, respectively) (10, 11), which are more than twice the rates reported in urban communities of Argentina, Chile, Mexico and Brazil (8, 12–14). Cataract surgical coverage (CSC) for blind people was higher in the cited urban areas ranging from 74% in Buenos Aires to 89% in Campinas (8, 12–14), compared to 24% and 38% in Piura and Tumbes, and Chimaltenango, respectively (10, 11).

National surveys in people 50 years and older allowed for calculation of averages for national epidemiologic situations and the identification of trends and progress in program implementation. In Paraguay, 3.1% of the population was blind in 1999 (15) but this prevalence was substantially reduced by 2011 (to 1.0%) (16) through the implementation of cataract surgery programs over the last decade, which increased CSC for blind people from 44% (in 1999) to 90% (in 2011) (16). In Havana, Cuba, prevalence of blindness in people 50 years and older was 1.9% (2004) (8), despite the country's good-quality health care services and CSC of 74% (9). This finding is partly explained by the large proportion of the population aged 50 years and older (32%)—among the highest such prevalence in the Region. The age structure of a country's population has a major effect on the number of cataract surgeries required to control blindness and visual impairment and is thus an essential element to consider when planning cataract surgical services (17).

In October 2014, to build upon the achievements in service delivery and reduction of blindness and to address the challenges described, health ministers from the Americas attending PAHO's 53rd Directing Council meeting approved

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the Plan of Action for the Prevention of Blindness and Visual Impairment for 2014–2019 (“the Plan”). The five-year plan outlined concrete steps to continue improving the eye health of the entire population of countries in the Region and reduce current inequities in the coverage of eye care systems and services (18). With consistent execution of the Plan at the national level, countries in the Region are expected to achieve tangible progress toward these goals, particularly among vulnerable groups, by the year 2020.

Collecting and applying the evidence is the first step toward increasing coverage of eye health services; minimizing barriers; and reducing the eye health-related disease burden, dependency and disparity. Monitoring epidemiological trends in eye disease, evaluating eye care services, and reporting the results help provide evidence of each country’s progress in implementing the Plan and guide service and resource allocation (19).

The *Pan American Journal of Public Health* Series on Eye Health reports recent data on eye health obtained in the Region. The series includes a research article describing the methodology used in national surveys conducted among people 50 years and older between 2011 and 2013; a report on each of the national studies that have been completed in six countries in the Region (Argentina, El Salvador, Honduras, Panama, Peru, and Uruguay); and a final summary of the data analysis, including a comparison of the results across the six studies and against studies published previously. The information presented in the series will provide baseline data on the status of eye health in the six countries.

It is advisable for all countries in the Region to document their epidemiologic situation to help guide eye health policy, establish national baselines, and illustrate the progress and impact of program implementation. This Series on Eye Health will contribute to the gathering and dissemination of information relevant to these goals.

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