

President's Insights August 2024

We need data to improve eye care outcomes...

Without data, you're just another person with an opinion

- W Edwards Deming

The prevalence of refractive errors and visual impairment is a pressing public health issue that affects millions worldwide. Accurate data on these conditions is essential for national and educational authorities to formulate effective policies and allocate resources efficiently.

Globally, refractive errors are the leading cause of visual impairment, affecting about 2.2 billion people. The prevalence varies significantly across regions, with low- and middle-income countries experiencing much higher rates than high-income regions.

In the United States, visual impairment due to uncorrected refractive error is also a significant concern. A study using data from the National Health and Nutrition Examination Survey (NHANES) found that approximately 14 million individuals aged 12 years or older experience visual impairment, with 83% of these cases potentially correctable through refractive interventions. This statistic emphasizes the need for comprehensive data to inform public health strategies to improve access to eye care services.

The data on refractive errors and visual impairment is crucial for several reasons:

1. **Policy Formulation:** National health authorities can use prevalence data to create targeted public health initiatives to reduce visual impairment. These initiatives include funding for vision programs and public awareness campaigns about the importance of regular eye exams.
2. **Resource Allocation:** Understanding where the highest prevalence rates exist allows for strategic allocation of resources, ensuring that communities with the greatest needs receive adequate support.
3. **Educational Strategies:** For educational authorities, data on visual impairment can inform the development of interventions to support students with vision issues, such as providing necessary accommodations and resources to enhance learning.

VOSH/International plays an important role in addressing the global burden of refractive errors and visual impairment. We provide humanitarian eye care services in underserved areas, often where data on visual impairment is scarce. By conducting screenings and comprehensive exams and providing corrective lenses, we improve individual health outcomes and contribute to the broader understanding of the prevalence of these conditions.

However, to maximize our impact, VOSH/International needs to digitize the data we collect. Digitization allows for:

1. Rapid Analysis: Digital data can be analyzed quickly, enabling organizations to identify trends and urgent needs in real-time.

2. Improved Accuracy: Electronic data collection reduces human error associated with manual data entry, leading to more reliable statistics.

3. Enhanced Reporting: Well-organized digital databases facilitate data sharing with national health authorities and researchers, fostering collaboration and informed decision-making.

VOSH/International has initiated a project to digitize the data collected from our humanitarian clinics. This project will enhance our capacity to contribute valuable insights into the global landscape of refractive errors and visual impairment. Opt. Beatriz Gómez is leading a project at the Autonomous University of La Laguna (UAL) to digitize clinical data gathering. Dr. Emiliano Terán, from the Autonomous University of Sinaloa (UAS), also works independently on a similar project to gather and analyze clinical data.

By digitizing our data collection processes, we can ensure that the information is accurate, accessible, and actionable, ultimately leading to improved eye care services and better health outcomes for millions affected by refractive error and visual impairment.

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