

but we believe that the global estimate of 8.2 million blind persons due to uncorrected refractive error by Resnikoff et al. is an overestimate, largely due to the inclusion of an implausibly high estimate for India. While on the one hand we should not overlook blindness due to uncorrected refractive error as it can be addressed relatively easily, on the other hand we should be careful not to swing the pendulum in the other direction by overestimating it. Related to this issue, we have also published a proposal for revision of the definitions of blindness and visual impairment in the International Statistical Classification of Diseases that would take into account the inclusion of refractive error as a cause of blindness and visual impairment.⁴ ■

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References

1. Resnikoff S, Pascolini D, Mariotti SP, Pokharel GP. Global magnitude of visual impairment caused by uncorrected refractive errors in 2004. *Bull World Health Organ* 2008;86:63-70. PMID:18235892 doi:10.2471/BLT.07.041210
2. Dandona L, Dandona R. What is the global burden of visual impairment? *BMC Med* 2006;4:6 <http://www.biomedcentral.com/1741-7015/4/6/>. PMID:16539747 doi:10.1186/1741-7015-4-6
3. Murthy GV, Gupta SK, Bachani D, Jose R, John N. Current estimates of blindness in India. *Br J Ophthalmol* 2005;89:257-60. PMID:15722298 doi:10.1136/bjo.2004.056937
4. Dandona L, Dandona R. Revision of visual impairment definitions in the International Statistical Classification of Diseases. *BMC Med* 2006;4:7 <http://www.biomedcentral.com/1741-7015/4/7/>. PMID:16539739 doi:10.1186/1741-7015-4-7

Author reply to: *Estimation of global visual impairment due to uncorrected refractive error*

In response to the letter by L Dandona & R Dandona,¹ we would like to point

out that the study to which they refer (*BMC Medicine* 2006;4:6) – certainly a useful study in its own right – was not included in the references of our own paper as it informed neither the approach we took to our analysis nor the geographical scope of our work. Our study included data sources for all age groups from 68 surveys in 31 countries, chosen with epidemiological criteria different from those used by L Dandona & R Dandona, who derived their global estimates from nine surveys in eight countries. Our work presents an age-specific algorithm developed for missing data.

May we also point out a misinterpretation of our findings in this letter with regard to India. According to the estimated presenting and best-corrected blindness (visual acuity < 6/60) for people aged 50 years and older in 15 Indian states reported by Murthy et al.,² the reduction of visual impairment after correction is 42% and not one-fifth. The authors themselves point this out by saying that “the blindness load could be nearly halved by correction”.

We agree with L Dandona & R Dandona's emphasis on the need for new definitions. This issue has been extensively discussed since a consultation on refractive errors held by WHO in 2000. The International Council of Ophthalmology adopted a resolution in 2002, followed in 2003 by a WHO consultation on the development of standards for characterization of visual loss and visual functioning, which led to significant changes in definitions and categorizations.³ These have been subsequently integrated into the revision of the 10th International Classification of Diseases. ■

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References

1. Dandona L, Dandona R. Estimation of global visual impairment due to uncorrected refractive error. *Bull World Health Organ* 2008;86:656. doi:10.2471/BLT.08.053652
2. Murthy GV, Gupta SK, Bachani D, Jose R, John N. Current estimates of blindness in India. *Br J Ophthalmol* 2005;89:257-60. PMID:15722298 doi:10.1136/bjo.2004.056937

3. Prevention of blindness and deafness. *Consultation on development of standards for characterization of vision loss and visual functioning*. Geneva: WHO;2003 (WHO/PBL/03.91).

Country ownership and vertical programmes in health, health information and health research

In the March 2008 issue, the *Bulletin of the World Health Organization* published two related items on the complex issue of ownership of health information in international health programmes and on the “vertical versus horizontal” nature of the health programmes responsible for generating this information.^{1,2}

The first is an editorial by Sanjoy Bhattacharya of the Wellcome Trust, which highlights (once again) the divide between protagonists of vertical and horizontal health programmes, and makes a call for “adaptive verticality” to optimize the potential of international health programmes to integrate with primary health care systems in low-income countries and strengthen these in the process.¹ The second is a news item: an interview with Sally Stansfield of the Health Metrics Network in which she calls for country-ownership of health information and for “vertical” health programmes to integrate with and strengthen national health information systems. These she argues should become the source of information for improved public-health decision-making and, at the same time, for information needed by donors and by specific (“vertical”) health programmes.²

The problems raised by Bhattacharya and Stansfield are not confined to the health sector nor to health information. On the contrary, the issue of ownership of data and the practice of vertical programming is, in many ways, far worse in the domain of health research. In most low- and middle-income countries, foreign-funded initiatives determine national health research agendas, even in countries in which governments contribute substantially to supporting national health

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