

## Visual Disability in Ebola Survivors

Dear Editor,

We commend Jagadesh et al [1] for their important contribution highlighting the levels of disability amongst Ebola survivors in Sierra Leone following the 2013-16 Ebola epidemic. Quantifiable measures of disability especially in relation to psychological and social impacts on survivors and their families following the epidemic are challenging to quantify and neglected in Sierra Leone.

Visual disability following the Ebola epidemic is one aspect which is amenable to quantifiable assessment with defined definitions of visual impairment. In Jagadesh et al [1] Ebola survivors (n=27) describe major limitations in vision and a higher odds of self-reported blurred vision (aOR=7.6; CI 2.0-27.9) in comparison to their close contacts (n=54) using the Washington Group Disability Extended Questionnaire (WG S-F). Our recent study [2] recalled survivors (n=82) from the 34 Military Hospital Survivors clinic who had previously reported ocular symptoms, in addition to Ebola survivors who self-presented to the eye clinic with a median time from Ebola treatment unit discharge over one year (411 days (IQR 368-470 days)). We reported their best eye visual acuity was normal (uncorrected Snellen visual acuity <6/7.5) in 74.7% (97.5% CI 62.1-84.9) of survivors in this cohort. Moderate or worse visual acuity (uncorrected Snellen visual acuity >6/24) in their best eye was only found in 2.6% (97.5% CI 0-7.8).

In the discussion, it is stated that “long-term cataract replacement is frequently indicated”. In our cohort, we found only 7.3% (97.5% CI 2.3-16.5) of survivors (who had previously reported ocular symptoms) had evidence of white cataract, all of which were unilateral, with vision preserved in the contralateral eye. 80% of eyes with cataract secondary to Ebola uveitis also had evidence of hypotony. In these cases, surgery is likely to be complex, with a poor visual prognosis, and may increase the risk of phthisis bulbi. Therefore, cataract surgery may not always be indicated.

It is worth considering visual disability amongst Ebola survivors within the wider context of visual disability in Sierra Leone. The latest Rapid Assessment of Avoidable Blindness (RAAB) survey in Sierra Leone, conducted in 2010 reported a rate of blindness of 1% [3], 50 times greater than that of the UK [4] and potentially reversible in the 39% of blindness secondary to cataracts [3]. With only five Ophthalmology consultants in Sierra Leone serving a population of 7.3 million, [5] interventions towards improving eye care for Ebola survivors should not overlook the need and opportunity to strengthen the eye care sector as a whole which may be limited by ring-fenced Ebola survivor specific international funding.

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