





## Sequelae of Ebola Virus Disease, Kenema District, Sierra Leone

To the Editor-Qureshi and colleagues describe problems faced by survivors of Ebola virus disease (EVD) in Guinea [1]. With >27 500 cases of EVD recorded during the ongoing outbreak in West Africa and a variably reported case fatality of approximately 50%, there are likely >13 000 EVD survivors in the region in need of care. To mount the appropriate range of medical and social services, the District Health Management Team, with support from several partners, conducted a rapid survey in Kenema District, one of the hardest hit areas of Sierra Leone. A convenience sample of 81 EVD survivors was surveyed (n = 51 females, n = 30males) with a median age of 29 years (range: 10-74). All participants reported health and/or social problems since suffering EVD (Figure 1), and 96% reported rejection by their community after hospital discharge, with the majority still too scared to return. There were no significant differences between the sexes or between age groups, although symptoms were generally less frequent in adolescents.

Our survey offers the first glimpse into the challenges facing EVD survivors in Sierra Leone, who reported frequent physical and psychosocial sequelae up to at least 4 months after resolution of acute disease. The data were collected from a small nonrandomized convenience sample at a single cross-sectional time point, precluding us from definitely attributing the noted sequelae to EVD. However, our findings are generally consistent with those of Qureshi et al in Guinea, as well as with the only 2 published controlled studies on post-EVD sequelae [2, 3] and other anecdotal reports [4-6]. The survey results were used to quickly establish a clinic for EVD survivors in Kenema, at which >200 survivors have been seen in >250 visits to date. The most common complaints are musculoskeletal pain, visual problems, abdominal and epigastric

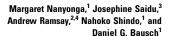
pain, insomnia, amenorrhea, anxiety, headache, excessive fatigue, and hiccups. Fortunately, many survivors report improvement in their condition over the past months.

It appears clear that the needs of EVD survivors in Kenema and throughout the affected areas in West Africa are great. Service provision for this vulnerable group must be prioritized and must address not only medical needs but also the psychosocial and economic hardships that survivors are experiencing. The recently formed Kenema District Ebola Survivors Union will be an important partner in these services. Lastly, more systematic research on EVD survivors is needed to better understand the true frequencies and underlying pathogenesis of the various problems they face to inform best clinical and social management.

## Notes

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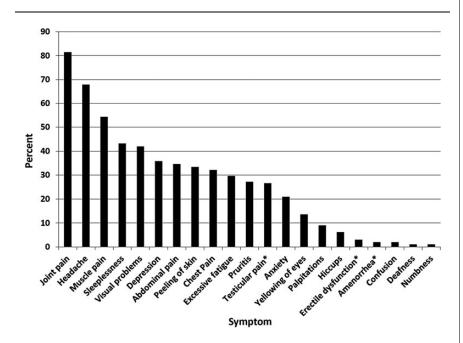
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**Figure 1.** Self-reported symptoms in 81 survivors of Ebola virus disease, Kenema District, Sierra Leone, October, 2014. \*Percentage calculated using only denominator of relevant sex.

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