

A post-outbreak assessment of exposure proximity and Ebola virus disease-related stigma among community members in Kono District, Sierra Leone: A cross-sectional study.

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BACKGROUND

Stigma affects the wellbeing of survivors of the 2013-2016 Ebola virus disease (EVD) epidemic in Sierra Leone. In studies of other diseases, increased contact with a stigmatized group can lead to reductions in stigma, but this has not been investigated in Ebola survivors.

METHODS

- Conducted a cross-sectional study in four EVD-affected rural communities of Sierra Leone from September 2016-July 2017.
- Explanatory variable: proximity to an EVD case during the outbreak based on contact with EVD case, relationship with an EVD case, and being quarantined.
- Primary outcome: stigma towards EVD survivors, measured by a 6-item index and broken into personal stigmatizing attitudes and perceived community stigma.
- Analysis: Poisson and negative binomial regression models to estimate the association between exposure proximity and EVD stigma.

RESULTS

- 538 participants ages 12-85
- 57% of participants had been quarantined
- Over 1/3 reported stigma towards survivors
- Contact with EVD case was significantly associated with lower likelihood of each type of stigma
- Being quarantined was significantly associated with higher likelihood of perceived community stigma

Stigma towards Ebola survivors in Sierra Leone is greater in community members who did not have contact with Ebola cases.

Association between proximity to EVD case and stigma outcomes (N=538)

	Overall stigma towards survivors		Personal stigmatizing attitudes		Perceived community stigma	
	Adjusted PR (95% CI)	p-value	Adjusted PR (95% CI)	p-value	Adjusted PR (95% CI)	p-value
Contact with EVD case	0.32 (0.18-0.55)	<0.001	0.44 (0.29-0.65)	<0.001	0.26 (0.13-0.54)	<0.001
Quarantine status	1.9 (1.2-2.8)	0.01	0.75 (0.45-1.3)	0.27	3.9 (1.5-10.1)	0.01
Relationship with EVD case	1.1 (0.67-1.8)	0.72	0.92 (0.64-1.3)	0.63	1.3 (0.64-2.7)	0.46



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DISCUSSION

We found an inverse association between contact with an EVD case and EVD-related stigma in Sierra Leone. This suggests intergroup contact theory applies to Ebola and offers potential opportunities for anti-stigma contact interventions. The greater perceived community stigma in those who were quarantined also provides potential for interventions focused on reducing the negative social impact of being quarantined. Study limitations include inclusion of rural communities only, time passing between the outbreak and enrollment, and the inability to rule-out reverse causation due to the cross-sectional design.

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