



Published in final edited form as:

Soc Sci Med. 2017 December ; 195: 77–82. doi:10.1016/j.socscimed.2017.11.018.

The Symbolic Violence of ‘Outbreak’: A Mixed Methods, Quasi-Experimental Impact Evaluation of Social Protection on Ebola Survivor Wellbeing

Eugene T. Richardson, MD, PhD^{a,b,c}, J. Daniel Kelly, MD, MPH^{b,d}, Osman Sesay^{b,c}, Michael D. Drasher, BA^b, Ishaan K. Desai, AB^a, Raphael Frankfurter, AB^d, Paul E. Farmer, MD, PhD^{a,b,c}, and Mohamed Bailor Barrie, MBChB, MMSc^{a,b}

^aDepartment of Global Health and Social Medicine, Harvard Medical School, Boston, USA

^bPartners In Health, Sierra Leone

^cDivision of Global Health Equity, Brigham and Women’s Hospital, Boston, USA

^dUCSF School of Medicine, San Francisco, USA

Abstract

Despite over 28,000 reported cases of Ebola virus disease (EVD) in the 2013–16 outbreak in West Africa, we are only beginning to trace the complex biosocial processes that have promoted its spread. Important questions remain, including the effects on survivors of clinical sequelae, loss of family and livelihood, and other psychological and social trauma.

Another poorly understood question is what effect social protection and job creation programs have had on survivors’ wellbeing. Several clinical and social protection programs have been developed to respond to the needs of EVD survivors; however, little in the way of impact evaluation has taken place.

We enrolled 200 randomly selected EVD survivors from Port Loko, Kenema, and Kailahun districts in Sierra Leone and stratified them based on the amount of instrumental social protection received post-discharge from an Ebola treatment unit. We then conducted a survey and in-depth interviews to assess participants’ wellbeing and food security.

Social protection categories II-IV (moderate to extensive) were each significantly associated with ~15–22% higher wellbeing scores compared to minimal social protection ($p < 0.001$). Only social protection category IV (extensive) was significantly associated with being food secure (adjusted odds ratio 6.11; 95% confidence interval, 2.85–13.10) when compared to minimal social protection.

Correspondence: Eugene T. Richardson, MD, PhD, Department of Global Health and Social Medicine, Harvard Medical School, 641 Huntington Ave, Boston, MA 02115, erichardson@bwh.harvard.edu.

Competing interests

None declared.

Publisher's Disclaimer: This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Qualitative themes included having a sense of purpose during the crisis (work and fellowship helped survivors cope); using cash transfers to invest in business; the value of literacy and life-skills classes; loss of breadwinners (survivors with jobs were able to take over that role); and combating the consequences of stigma.

We conclude that, for EVD survivors, short-term social protection during the vulnerable period post-discharge can pay dividends two years later. Based on the empiric evidence presented, we discuss how terms such as “outbreak” and “epidemic” do symbolic violence by creating the illusion that social suffering ends when transmission of a pathogen ceases.

Keywords

Ebola; social protection; symbolic violence; survivor; outbreak; apomaafa; amgits

Main Text

“One of Said’s decisive contributions was to show, in opposition to the Marxist doxa of the period, that the colonial project was not reducible to a simple military-economic system, but was underpinned by a discursive infrastructure, a symbolic economy, a whole apparatus of knowledge the violence of which was as much epistemic as it was physical.”

-Achille Mbembe, *What is Postcolonial Thinking* (2008)

Background

The 2013–16 Ebola virus disease (EVD) pandemic was the longest and largest on record (World Health Organization, 2016), yet we are only beginning to parse the complex biosocial processes that eventuated in its surge across West Africa (Benton and Dionne, 2015; Brown and Kelly, 2014; Richardson et al., 2016a). Important questions remain, including the effects of clinical sequelae, loss of family and livelihood, and other psychosocial burdens on EVD survivors.

On account of the tragic loss suffered by tens of thousands of West Africans, a number of international non-governmental organizations (INGOs), in partnership with Ministries of Health and foreign donors, created clinics and social protection programs which delivered medical and material support to EVD survivors and their families, as well as children orphaned by the disease. Small sums are currently being invested in such programs—including *symbolic* resources in how “survivor” is actually defined (Richardson et al., 2016b)—yet little in the way of impact evaluation has taken place. Such evidence is important to understand the experience of survivors as well as to guide funding decisions for survivor programs.

Social protection has been defined as the provision of safety nets to individuals and households during periods when they cannot engage in gainful employment or obtain enough income to secure their livelihoods—due to unemployment, sickness, chronic ill health, disability, old age, or care responsibilities (United Nations Research Institute for

Social Development, 2010). A growing body of evidence demonstrates that social protection alleviates poverty, reduces inequality and promotes social stability, improves government's capacity to respond to shocks, and improves wellbeing and health outcomes (The World Bank, 2012).

While several recent studies have documented the clinical sequelae of EVD in the West African outbreak, few have examined the social and economic challenges experienced by its survivors, or the optimal interventions to address them. Survivor programs have varied widely within and across the three most affected countries. According to interviews with survivors discharged from Liberia's largest Ebola treatment unit, for example, many survivors lost jobs and housing, were separated from breadwinning family members, and were excluded from markets in which they could buy and sell products (Rabelo et al., 2016). Similar economic concerns have been documented in Guinea: a study of 121 Ebola survivors in urban parts of that country found most in poorer socioeconomic conditions, work situations, and workplace relationships following their acute illness than before it (Delamou et al., 2017). Many survivors across West Africa also lost material possessions, often destroyed in the course of infection-control efforts (Lee-Kwan et al., 2014), and have faced difficulties paying children's school fees, starting new businesses, and maintaining existing ones (Karafillakis et al., 2016). In a survey of 28 survivors from five districts of Sierra Leone, most experienced job loss and lacked the means to care for their families; almost all of these survivors contended that their government ought to "help them by providing jobs, microcredit or training so they could develop necessary skills for employment" and emphasized their "need for financial help and their desire to receive money, scholarships and other incentives," along with "the provision of food and supplies as well as housing" (Karafillakis et al., 2016).

With reports of widespread discrimination against Ebola survivors, much also has been made of the need to mitigate 'stigma,' better reintegrate survivors into their communities, and address survivors' guilt. In Liberia, for example, the Firestone Natural Rubber Company established a reintegration program in which the company's medical personnel held meetings with survivors' communities to allay concerns regarding the risks of Ebola transmission, organized community-wide celebrations to welcome survivors home, and visited survivors weekly for three months following discharge (Arwady et al., 2014). Counseling and other forms of psychosocial support have also been proposed as interventions to help survivors better cope with feelings of marginalization, isolation, guilt, distress, and shame (Mohammed et al., 2015; Rabelo et al., 2016), as have media engagement and public messaging to more broadly convey survivors' stories and build acceptance (Karafillakis et al., 2016). Throughout West Africa, Ebola survivors and their supporters have created survivor networks, such as the Sierra Leone Association of Ebola Survivors (SLAES), to promote group healing and peer support, while advocating against stigma and drawing government and public attention to the unmet needs of thousands of survivors (Acland, 2016; SLAES, 2017; World Health Organization, 2015).

In the following study, we evaluate the impact of instrumental social protection (including monetary stipends, food rations, educational support, and/or jobs) on the wellbeing of EVD survivors, approximately two years after they were initially infected. By choosing study

participants at random, and thus potentially controlling for non-material forms of social support which are more difficult to quantify (Cohen and Wills, 1985), we hypothesized that EVD survivors who received high levels of instrumental social protection would have significantly higher indicators of wellbeing and food security two years post-discharge compared to those who had access to minimal aid.

Methods

Ethics statement

The study protocol was approved by the Sierra Leone Ethics and Scientific Review Committee and the Partners Human Research Committee (Protocol ID: 2016P001766). Individuals provided written informed consent or placed a thumbprint after hearing a consent script read in the Krio, Temne, or Mende languages. Subjects received 25,000 Leones (~\$5 US) for transportation.

Selection and recruitment of study participants

After obtaining district survivor lists from the respective District Ebola Response Centers, we enrolled 200 randomly selected EVD survivors from three of the hardest-hit districts in Sierra Leone—Port Loko, Kenema, and Kailahun (World Health Organization, 2016)—based on a random numbers list generated in the R programming language. Recruited participants were screened based on the “amount and type of social protection received” and were subsequently enrolled if we had not yet reached 50 participants for their assigned category (minimal, moderate, substantial, extensive). Although participants were not randomized prospectively by the various survivor programs that administered social protection, the differing amounts of resources meted out by these programs allow for a quasi-experiment which potentially controls for unmeasured confounders including the mechanisms for delivering support (White and Sabarwal, 2014).

Survey and in-depth interviews

We asked participants their demographic information as well as the amount of instrumental social protection they received since they were initially infected with Ebola virus. Instrumental social protection was ranked into a four-tier variable:

- I. Minimal (single food ration or single monetary stipend);
- II. Moderate (multiple food rations OR educational support or job/stipend < 3 months);
- III. Substantial (multiple food rations or educational support AND job/stipend < 3 months OR job/stipend for 3-6 months);
- IV. Extensive (job/stipend > 6 months)

We evaluated wellbeing by a 20-question Likert survey adapted from the World Health Organization quality of life instrument, WHOQOL-HIVBREF (a standard, global instrument available in Krio) (World Health Organization, 2002), and food security with the Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access (Coates et al.,

2007). Lastly, we conducted in-depth interviews with 40 participants, 10 from each social protection category.

We summed the Likert responses to all 20 survey questions and treated the outcome as a continuous variable on a 20–100 scale (there were no missing data), whereby higher scores indicated better function and wellbeing. We then used this value as the dependent variable in a linear regression model to assess the impact of the amount of instrumental social protection received. We used a logistic regression model with food secure/insecure as the dependent variable to assess the impact of the amount of social protection received. To account for the clustering effect of the district variable, we fit models using the generalized estimating equation (GEE) approach (Liang and Zeger, 1986). Covariates with a p-value < 0.2 in bivariate analysis were included in adjusted multivariate models. Covariance structure for each model was chosen by selecting those with the minimum quasi-likelihood under the independence model criterion (QIC) (Pan, 2001). Data were analyzed using STATA/IC 12.1 (STATA Corporation, College Station, TX).

We randomly chose 10 participants per social protection category to participate in an approximately 1–2 hour in-depth interview (IDI), where we explored his/her experience as an Ebola survivor (total = 40 IDIs). Three interviewers (ETR, MBB, OS) took detailed notes during each interview and discussed their notes immediately post-interview to determine themes. The themes that they agreed upon unanimously were recorded, and, during data analysis, they searched for both similarity and variance in the resulting themes by social protection category.

Lastly, we combined a genealogical approach with critical social theory to interpret the study data. In particular, we proceeded from the Bourdieusian notion that that actors “mis-recognize” the role that symbolic forms play in the maintenance of power structures (Swartz, 1997).

Results

Quantitative

Table 1 shows socio-demographic characteristics categorized by the amount of social protection received. The only significant difference between study participants was that individuals who received jobs for longer than six months were more likely to have a tertiary education ($p < 0.001$).

Sex, age, education, marital status, and the number of relatives lost to EVD were not associated ($p < 0.2$) with wellbeing in the bivariate GEE analysis. Social protection categories II-IV (moderate to extensive) were each significantly associated with 15–22% higher wellbeing scores compared to minimal social protection ($p < 0.001$) (Table 2).

Education and marital status were associated ($p < 0.2$) with food security in the bivariate GEE analysis and were included in the multivariate model. Only social protection category IV (extensive) was significantly associated with being food secure (adjusted odds ratio 6.11; 95% confidence interval, 2.85–13.10) compared to minimal social protection (Table 3).

Qualitative (Quotes and paraphrases translated from Krio, Temne, and Mende)

Several themes were persistent across our interviews. First, survivors who received jobs or monetary support used the additional income in novel and creative ways. For example, some invested the money in their petty trade such that they were earning more after recovering from EVD compared to before. Others used the monthly stipends as capital to start their own small businesses. Second, survivors who chose to attend literacy and vocational classes (which included banking and business skills training) noted benefits they would not have been able to purchase. For example, several participants discussed their path to partial literacy through courses organized according to Paulo Freire's literacy teaching methodology. Third, almost all survivors who received jobs (categories III and IV) spoke of a sense of purpose and fellowship that helped them cope with their losses. Some remarked how survivors they had met through SLAES took the place of relatives they had lost. Fourth, many survivors discussed in detail the exponential devastation caused by the loss of a breadwinner; however, those who received jobs and longer-term cash transfers were able to take over this role. One survivor remarked, "My father passing from Ebola could have left our entire family starving—my new job at the ETU saved us from that." Fifth, survivors who had higher levels of social protection (categories III and IV) narrated their experiences with 'stigma' as less traumatic than those who received minimal support. One middle-aged female noted she was shunned after being discharged a survivor. "It didn't hurt as much when I wasn't hungry, and after a year we were friendly again anyway," she shared. Lastly, those we interviewed made it clear that suffering in Sierra Leone did not begin with Ebola, nor had specific clinical and social sequelae related to EVD ended despite multiple declarations that West Africa was "Ebola-free" (MacDougall, 2016).

Discussion

This study makes use of the quasi-experimental conditions created by aid delivery during heightened transmission of Ebola virus in Sierra Leone to investigate the role of instrumental social protection in survivors' wellbeing. Our results demonstrate that, for EVD survivors, short-term instrumental social protection during the vulnerable period post-discharge can pay positive dividends with respect to wellbeing and food security two years later. These results are potentially generalizable to survivors of the 2017 landslides in Sierra Leone, where cash transfers are being provided directly to affected households by the United Kingdom's Department for International Development (United Nations Sierra Leone, 2017).

The study findings also support our claim that the word "outbreak" (which comes from the Old English *utbræcan* - "to break out") (Oxford English Dictionary, 2017) does symbolic violence (Bourdieu and Passeron, 1977) by creating the illusion that social suffering (Kleinman et al., 1997) ends when transmission of a pathogen ceases. As an example, millions of dollars earmarked for the Ebola response dried up when West Africa was declared free of transmission (Davis, 2016). Could it be that the categories we use to describe natural phenomena determine our responses to them (Richardson and Polyakova, 2012)? That is, is the finality of the word *outbreak* enough to blunt our appreciation that the suffering related to Ebola endures? The EVD survivors we interviewed are testament to the

fact that suffering certainly continues—in the form of clinical sequelae, lost livelihoods and loved ones, broken communities, food insecurity, and ‘stigma.’

There is potential resource-mobilization benefit to the proclamation, *Outbreak!*: however, by bracketing an arbitrary fragment of social suffering in geo-microbiological terms, the word raises funds of considerably less value than the depredations of resources it obscures. That is, by distilling the virological consequences of centuries of human and natural resource extraction into a circumscribed event of public health concern, uncritical use of the term depoliticizes our understanding of the phenomenon (Escobar, 2011; Ferguson and Lohmann, 1994) and stymies transformative challenges to status-quo transnational relations of inequality by reinforcing technical solutions for all crises (Agrawal, 1996).

Like outbreak, the word “epidemic” (from the Greek *epi* [on] plus *demos* [people]) creates fictitious boundaries in our minds; however, it obscures even more by positing ahistorical *locationality* to the spread of pathogens. In other words, it elides the global forces that shape every localized occurrence of infectious disease (Richardson et al., 2016a). We thus prefer the term “apomaafa” (from the Greek *apo* [derived from; related to] plus the Kiswahili *maafa* [disaster; calamity; terrible occurrence (Ani, 1994)—but also denoting the African Holocaust: the ongoing effects of atrocities inflicted on African people through the Atlantic slave trade (Morrison, 1987), and continued through exploitative colonialism (Césaire, 1972), symbolic violence (Fanon, 2005; Said, 1979; Swartz, 1997), purposeful underdevelopment (Akyeampong et al., 2014; Amin, 1973; Rodney, 1972), structural adjustment (Kim et al., 2002), resource extraction and tax evasion (Campaign, 2017), and enabled civil war (Abdullah, 2000)] as it provides a hybrid (Bakhtin, 1981), postcolonial (Mbembe, 2001) symboling for infectious disease analyses in sub-Saharan Africa with regard to time and place. By displacing the coding apparatus (Spivak, 1990) of epidemiology, it transforms facile claims of association by accounting for the often-violent historical and structural determinants of communicable disease occurrences (Farmer, 1996; Richardson et al., 2016c; Singer, 2015).

In this way, we see how a word like epidemic and the containment-by-isolation fetish it inspires are not adequate to describe, nor address, the continuing Ebola-related suffering described by our study participants. Would the U.S. government have pulled funding for post-Ebola health systems strengthening (Cancedda et al., 2016; Davis, 2016) had they cognized what happened as an Ebola apomaafa (i.e., something still ongoing) rather than as an epidemic (where transmission had ceased)?

Also inutile is the term ‘stigma.’ Our handling of the term in inverted commas indicates our ambivalence towards its conventional usage. Erving Goffman traced the term to the ancient Greek practice of marking the skin of slaves and criminals to denote them as ‘undesirable’ persons (Goffman, 1963). We find that international NGOs and associated academics similarly approach ‘stigma’ as a characteristic or attribute that is undesirable and separates an individual or a group from others, resulting in ‘avoidance, dehumanization, social rejection, labelling, and stereotyping’ (Tenkorang, 2017). In other words, ‘stigma’ is conceptualized as an intersubjective process of discrimination and hostility between Africans, one that needs to be combatted through social science and advocacy.

Yet, like outbreak and epidemic, the word obscures more than it reveals: If one recognizes that the real ‘stigma’ at play is the centuries of virulent racism from the global north [i.e., the Western consciousness of blackness (Mbembe, 2017)], then the term is exposed for the domination it leaves uncriticized. That is, by omitting analytically the deeming of an entire continent as ‘undesirable’, the word does discursive violence. We thus propose the term ‘amgits’—literally and post-structurally as a form of strategic reversibility (Foucault, 1991)—to remind us that conventional use of the word ‘stigma’ represents a backwards, counterproductive approach to combatting the actual roots of the prejudice. Going a step further, one could posit ‘stigma’ as a false-consciousness of [the Marxist view (Eyerman, 1981)] or a less useful vocabulary for [the pragmatist view (Rorty, 1989)] the structural forces that result in the human-cum-pathology an actor is maligning.

In addition to symbolic reparations, our study’s findings lend support for an additional method of combatting the consequences of amgits: the provision of social protection (or instrumental micro-reparations). During and after the West Africa Ebola outbreak, as conventionally defined, some international NGOs employed survivors, offering them formal opportunities to contribute to outbreak-response activities and health-systems-strengthening efforts (Hayden, 2014), from contact tracing and community-based health initiatives to various caregiving roles within and outside of health care facilities. EVD survivors across the three most affected countries expressed significant interest in such opportunities and considered themselves vital contributors to efforts to improve their national health systems and the situation of EVD patients and survivors (Lee-Kwan et al., 2014). A group interviewed in Sierra Leone, for example, stated that “supporting themselves with this work would help restore their own dignity” (Delamou et al., 2017; Karafillakis et al., 2016; Lee-Kwan et al., 2014), and those surveyed in another study in Sierra Leone found that job opportunities could help “financially and emotionally sustain them as they adjust to being a survivor” (Karafillakis et al., 2016). It was therefore not surprising to find in our study that survivors who received moderate to extensive instrumental social support reported less stigma, or better overcame it, than those who did not. Instrumental social support may therefore provide a mechanism to not only boost survivors’ financial security, but also nurture personal, emotional, and psychological wellbeing.

In this study, our uncritical adoption of how “survivors” are designated is similarly problematic. The use of Ebola virus polymerase chain reaction positivity to bracket a community of suffering neglects other forms of suffering also related to the Maafa. What is the risk of reconstructing identities from what we know will be a transient biofad? Sierra Leone civil war amputees were caught up in a similar global show-and-tell (Berghs, 2007) and are now bereft of the resources such biological citizenship (Petryna, 2003) once provided. This leads us to question, does the transient attention focused on EVD survivors attenuate demands for reparations by obscuring the fact that many can claim surviving the Maafa? Many of the “non-infected” we interviewed as part of other projects expressed this very sentiment: “We are all survivors.”

Furthermore, what are the ramifications of the World Health Organization’s description of the Ebola apomaafa as a Public Health Emergency of International Concern (PHEIC) (World Health Organization, 2014)? Sierra Leone has had one of the highest maternal mortality

rates in the world for many years (Amnesty International, 2009), without sounding similar alarms in Geneva. How is it that the agency tasked with the health of the world reserves its most powerful symboling (and the consequent resource outlays) for the swaths of death and suffering that have potential for spillover into high-income countries [Zika presents another example (Adams and Nutt, 2016)]? By framing the way the world thinks about a particular phenomenon in terms that cater to dominant country interests (Marx and Engels, 1998), such symboling performs violence by relegating other forms of suffering—suffering no less linked to the African Holocaust—to a Public Health Nullity of Local Concern (PHNLC).

In conclusion, the combination of critical theory from the South (Comaroff and Comaroff, 2012) with mixed-methods empirical research can challenge the impoverished discursive infrastructure of contemporary public health (Farmer, 2001; Good, 1994; Jones, 2011), in effect, transforming health policy by transforming its representations (Bourdieu, 1981). While other authors have analyzed the role of local discursive power in perpetuating underdevelopment in Sierra Leone (Ferme, 1998; Hoffman, 2011), our study explores more distal pathogenic symboling, wrought in the Global North. The evidence-based re-descriptions (Cornwall and Eade, 2010; Richardson et al., 2017; Rorty, 1999; Sachs, 2009) of epidemiological discourse presented in this paper vitiate the crisis-caravan approach to global health (Packard, 2016; Polman, 2010), foreground subaltern demands for health systems strengthening, and provide a point of departure for a mobilization of symbolic reparations.

Acknowledgments

Funding

This work was conducted with the support of a KL2/Catalyst Medical Research Investigator Training award (an appointed KL2 award) from Harvard Catalyst | The Harvard Clinical and Translational Science Center (National Center for Research Resources and the National Center for Advancing Translational Sciences, National Institutes of Health Awards KL2 TR001100 and UL1 TR001102). The content is solely the responsibility of the authors and does not necessarily represent the official views of Harvard Catalyst, Harvard University and its affiliated academic healthcare centers, or the National Institutes of Health.

References

- Abdullah, I., editor. *Between democracy and terror: The Sierra Leone civil war*. Codesria; Dakar: 2000.
- Acland, O. *The Guardian*. 2016. Ebola leaves a painful legacy for survivors in Sierra Leone.
- Adams, P., Nutt, C. *The New York Times*. 2016. A Zika Vaccine, but for Whom?.
- Agrawal A. Poststructuralist approaches to development: Some critical reflections. *Peace & Change*. 1996; 21:464–477.
- Akyeampong, E. Bates, RH. Nunn, N., Robinson, JA., editors. *Africa's Development in Historical Perspective*, *Africa's Development in Historical Perspective*. Cambridge University Press; Cambridge: 2014.
- Amin, S. *Neo-Colonialism in West Africa*. Monthly Review Press; New York: 1973.
- Amnesty International. *Out of Reach: The Cost of Maternal Health in Sierra Leone*. London: 2009.
- Ani, M. *Let the Circle Be Unbroken: The Implications of African Spirituality in the Diaspora*. Red Sea Press; Trenton: 1994.
- Arwady M, Garcia E, Wollor B, Mabande L, Reaves E, Montgomery J. Reintegration of ebola survivors into their communities - Firestone District, Liberia, 2014. *MMWR Morb Mortal Wkly Rep*. 2014; 63:1207–9. [PubMed: 25522091]
- Bakhtin, M. *The Dialogic Imagination: Four Essays*. University of Texas Press; Austin: 1981.

- Benton A, Dionne KY. International Political Economy and the 2014 West African Ebola Outbreak. *African Studies Review*. 2015; 58:223–236. DOI: 10.1017/asr.2015.11
- Berghs M. Disability as Embodied Memory? Questions of Identity for the Amputees of Sierra Leone. *Wagadu*. 2007; 4:78–92.
- Bourdieu P. La représentation politique [Éléments pour une théorie du champ politique]. *Actes de la recherche en sciences sociales*. 1981; 36:3–24.
- Bourdieu, P., Passeron, J-C. *Reproduction in Education, Society and Culture*. Sage; London: 1977.
- Brown H, Kelly AH. Material Proximities and Hotspots: Toward an Anthropology of Viral Hemorrhagic Fevers. *Medical Anthropology Quarterly*. 2014; 28:280–303. DOI: 10.1111/maq.12092 [PubMed: 24752909]
- Campaign, JD. *Honest accounts: How the world profits from Africa’s wealth*. London: 2017.
- Cancedda C, Davis SM, Dierberg KL, Lascher J, Kelly JD, Barrie MB, Koroma AP, George P, Marsh R, Sumbuya MS. Strengthening Health Systems While Responding to a Health Crisis: Lessons Learned by a Nongovernmental Organization During the Ebola Virus Disease Epidemic in Sierra Leone. *Journal of Infectious Diseases*. 2016; 214:S153–S163. [PubMed: 27688219]
- Césaire, A. *Discourse on Colonialism*. Monthly Review Press; New York: 1972.
- Coates, J., Swindale, A., Bilinsky, P. *Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide*. Vol. 3. Washington, D.C: 2007.
- Cohen S, Wills TA. Stress, social support, and the buffering hypothesis. *Psychological Bulletin*. 1985; 98:310–357. [PubMed: 3901065]
- Comaroff, J., Comaroff, JL. *Theory from the South: Or, How Euro-America is Evolving Toward Africa*. Paradigm; Boulder: 2012.
- Cornwall, A., Eade, D., editors. *Deconstructing Development Discourse. Buzzwords and Practical Action Publishing*; Warwickshire: 2010.
- Davis, JH. *The New York Times*. 2016. With Congress Deadlocked, White House Diverts Funds to Fight Zika.
- Delamou A, Camara BS, Kolie JP, Guemou AD, Haba NY, Marquez S, Beavogui AH, Delvaux T, van Griensven J. Profile and reintegration experience of Ebola survivors in Guinea: a cross-sectional study. *Tropical Medicine & International Health*. 2017; 22:254–260. DOI: 10.1111/tmi.12825 [PubMed: 27935657]
- Escobar, A. *Encountering Development: The Making and Unmaking of the Third World*. Princeton University Press; Princeton: 2011.
- Eyerman R. False Consciousness and Ideology in Marxist Theory. *Acta Sociologica*. 1981; 24:43–56.
- Fanon, F. *The Wretched of the Earth*. Grove Press; New York: 2005.
- Farmer, P. *Infections and Inequalities: The Modern Plagues*. University of California Press; Berkeley: 2001.
- Farmer P. Social inequalities and emerging infectious diseases. *Emerg Infect Dis*. 1996; 2:259–269. DOI: 10.3201/eid0204.960402 [PubMed: 8969243]
- Ferguson J, Lohmann L. The Anti-Politics Machine: “Development” and Bureaucratic Power in Lesotho. *The Ecologist*. 1994; 24:176–181.
- Ferme M. The Violence of Numbers : Consensus, Competition, and the Negotiation of Disputes in Sierra Leone. *Cahiers d’études africaines*. 1998; 38:550–580.
- Foucault, M. *The Foucault Effect: Studies in Governmentality*. University of Chicago Press; Chicago: 1991.
- Goffman, E. *Stigma: Notes on the Management of Spoiled Identity*. Prentice-Hall; Upper Saddle River: 1963.
- Good, B. *Medicine, Rationality and Experience: An Anthropological Perspective*. Cambridge University Press; Cambridge: 1994.
- Hayden, EC. *Nature*. 2014. Ebola survivors fight prejudice.
- Hoffman, D. *The War Machines: Young Men and Violence in Sierra Leone and Liberia*. Duke University Press; Durham: 2011.
- Jones J. Ebola, Emerging: The Limitations of Culturalist Discourses in Epidemiology. *Journal of Global Health*. 2011; 1:1–6.

- Karafilakis E, Jalloh MF, Nuriddin A, Larson HJ, Whitworth J, Lees S, Hageman KM, Sengeh P, Jalloh MB, Bunnell R, Carroll DD, Morgan O. "Once there is life, there is hope" Ebola survivors' experiences, behaviours and attitudes in Sierra Leone, 2015. *BMJ Global Health*. 2016; 1:e000108.
- Kim, JY, Millen, JV, Irwin, A., Gershman, J., editors. *Dying For Growth: Global Inequality and the Health of the Poor*. Common Courage Press; Monroe: 2002.
- Kleinman, A, Das, V., Lock, M., editors. *Social Suffering*. University of California Press; Berkeley: 1997.
- Lee-Kwan S, DeLuca N, Adams M, Dalling M, Drevlow E, Gassama G, Davies T. Support services for survivors of ebola virus disease - Sierra Leone, 2014. *MMWR Morb Mortal Wkly Rep*. 2014; 63:1205–6. [PubMed: 25522090]
- Liang KY, Zeger S. Longitudinal data analysis using generalized linear models. *Biometrika*. 1986; 73:13–22.
- MacDougall, C. *Newsweek*. 2016. World Health Organization Says Ebola Is Over in Sierra Leone - For Now.
- Marx, K., Engels, F. *The German Ideology*. Prometheus Books; Amherst: 1998.
- Mbembe, A. *Critique of Black Reason*. Duke University Press; Durham: 2017.
- Mbembe, A. *On the Postcolony*. University of California Press; Berkeley: 2001.
- Mohammed A, Sheikh TL, Gidado S, Poggensee G, Nguku P, Olayinka A, Ohuabunwo C, Waziri N, Shuaib F, Adeyemi J, Uzoma O, Ahmed A, Doherty F, Nyanti SB, Nzuki CK, Nasidi A, Oyemakinde A, Oguntimehin O, Abdus-salam IA, Obiako RO. An evaluation of psychological distress and social support of survivors and contacts of Ebola virus disease infection and their relatives in Lagos, Nigeria: a cross sectional study – 2014. *BMC Public Health*. 2015; 15:824.doi: 10.1186/s12889-015-2167-6 [PubMed: 26307047]
- Morrison, T. *Beloved*. Alfred A. Knopf; New York: 1987.
- Oxford English Dictionary. "outbreak, v.," OED Online. Oxford University Press; 2017.
- Packard, RM. *A History of Global Health: Interventions into the Lives of Other Peoples*. Johns Hopkins University Press; Baltimore: 2016. Conclusion: Responding to Ebola.
- Pan W. Akaike's information criterion in generalized estimating equations. *Biometrics*. 2001; 57:120–125. [PubMed: 11252586]
- Petryna, A. *Life Exposed: Biological Citizens after Chernobyl*. Princeton University Press; Princeton: 2003.
- Polman, L. *The Crisis Caravan: What's Wrong with Humanitarian Aid*. Picador; London: 2010.
- Rabelo I, Lee V, Fallah MP, Massaquoi M, Evlampidou I, Crestani R, Decroo T, Van den Bergh R, Severy N. Psychological Distress among Ebola Survivors Discharged from an Ebola Treatment Unit in Monrovia, Liberia – A Qualitative Study. *Frontiers in Public Health*. 2016; 4:142.doi: 10.3389/fpubh.2016.00142 [PubMed: 27458576]
- Richardson ET, Barrie MB, Kelly JD, Dibba Y, Koedoyoma S, Farmer PE. Biosocial approaches to the 2013–16 Ebola pandemic. *Health and Human Rights*. 2016a; 18:167–79.
- Richardson ET, Barrie MB, Nutt CT, Kelly JD, Frankfurter R, Fallah MP, Farmer PE. The Ebola suspect's dilemma. *The Lancet Global Health*. 2017; 5:e254–e256. DOI: 10.1016/S2214-109X(17)30041-4 [PubMed: 28193386]
- Richardson ET, Kelly JD, Barrie MB, Mesman AW, Karku S, Quiwa K, Marsh RH, Koedoyoma S, Daboh F, Barron KP, Grady M, Tucker E, Dierberg KL, Rutherford GW, Barry M, Jones JH, Murray MB, Farmer PE. Minimally Symptomatic Infection in an Ebola "Hotspot": A Cross-Sectional Serosurvey. *PLOS Neglected Tropical Diseases*. 2016b; 10:e0005087. [PubMed: 27846221]
- Richardson ET, Morrow CD, Ho T, Fürst N, Cohelia R, Tram KH, Farmer PE, Wood R. Forced removals embodied as tuberculosis. *Social Science and Medicine*. 2016c; 161:13–18. [PubMed: 27239703]
- Richardson ET, Polyakova A. The illusion of scientific objectivity and the death of the investigator. *European Journal of Clinical Investigation*. 2012; 42:213–5. [PubMed: 21752023]
- Rodney, W. *How Europe Underdeveloped Africa*. Bogle-L'Ouverture; London: 1972.
- Rorty, R. *Philosophy and Social Hope*. Penguin Books; London: 1999.

- Rorty, R. Contingency, Irony, and Solidarity. Cambridge University Press; Cambridge: 1989.
- Sachs, W., editor. The Development Dictionary: A Guide to Knowledge as Power. Zed Books; London: 2009.
- Said, EW. Orientalism. Vintage; New York: 1979.
- Singer, M. Anthropology of Infectious Disease. Left Coast Press; Walnut Creek: 2015.
- SLAES. [accessed 7.15.17] Sierra Leone Association of Ebola Survivors [WWW Document]. 2017. URL <https://www.slaes.org/>
- Spivak, G. Poststructuralism, Marginality, Postcoloniality and Value. In: Collier, P., Geyer-Ryan, H., editors. Literary Theory Today. Polity Press; London: 1990.
- Swartz, D. Culture and Power: The Sociology of Pierre Bourdieu. University of Chicago Press; Chicago: 1997.
- Tenkorang EY. Ebola-related stigma in Ghana: Individual and community level determinants. Social Science & Medicine. 2017; 182:142–149. doi:<https://doi.org/10.1016/j.socscimed.2017.03.060>. [PubMed: 28446368]
- The World Bank. Managing Risk, Promoting Growth: Developing Systems for Social Protection in Africa. Washington, D.C: 2012.
- United Nations Research Institute for Social Development. Combating Poverty and Inequality: Structural Change, Social Policy and Politics. Geneva: 2010.
- United Nations Sierra Leone. Cash Transfers: A Lifeline for Families Touched by Sierra Leone's Deadly Mudslide [WWW Document]. 2017. URL <https://sl.one.un.org/2017/10/12/cash-transfers-a-lifeline-for-families-touched-by-sierra-leones-deadly-mudslide/>
- White, H., Sabarwal, S. Quasi-Experimental Design and Methods, Methodological Briefs: Impact Evaluation 8. UNICEF Office of Research; Florence: 2014.
- World Health Organization. Ebola Situation Report - 30 March 2016 [WWW Document]. 2016. URL <http://apps.who.int/ebola/ebola-situation-reports>
- World Health Organization. Sierra Leone's Rescue Team: Ebola survivors supporting each other [WWW Document]. 2015. URL <http://www.who.int/features/2015/ebola-rescue-team/en/>
- World Health Organization. [accessed 6.22.17] Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa [WWW Document]. 2014. URL <http://www.who.int/mediacentre/news/statements/2014/ebola-20140808/en/>
- World Health Organization. WHOQOL-HIVBREF. Geneva: 2002.

Highlights

- A critical theory of the symbolic violence of public health discourse is proposed.
- For Ebola survivors, short-term social protection can pay dividends two years later.
- Symbolic reparations are a crucial component of global health equity.

Table 1

Socio-demographic characteristics by social protection category (N=200).

Covariates	Social Protection Categories			
	Minimal (I) n=50	Moderate (II) n=50	Substantial (III) n=50	Extensive (IV) n=50
Sex				
Female	33 (66%)	33 (66%)	30 (60%)	22 (44%)*
Male	17 (34%)	17 (34%)	20 (40%)	28 (56%)*
Age				
18–40	35 (70%)	42 (84%)	33 (66%)	39 (78%)
>40	15 (30%)	8 (16%)	17 (34%)	11 (22%)
Education				
None	28 (56%)	21 (42%)	32 (64%)	6 (12%)*
Primary	4 (8%)	8 (16%)	4 (8%)	7 (14%)
Secondary	14 (28%)	16 (32%)	14 (28%)	17 (34%)
Tertiary	4 (8%)	5 (10%)	0 (0%)	20 (40%)*
Marital status				
Single	14 (28%)	20 (40%)	12 (24%)	13 (26%)
In union	16 (32%)	20 (40%)	20 (40%)	26 (52%)
Widowed	20 (40%)	10 (20%)	18 (36%)	11 (22%)
Religion				
Muslim	41 (82%)	36 (72%)	45 (90%)	41 (82%)
Christian	9 (18%)	14 (28%)	5 (10%)	9 (18%)
# of relatives who died from EVD				
< 5	25 (50%)	23 (46%)	19 (38%)	23 (46%)
5	25 (50%)	27 (54%)	31 (62%)	27 (54%)

Table 2

Summary of general estimating equation (linear) regression statistics predicting wellbeing (quality of life) scores by social protection category. Reference: Social protection category=I (minimal). SE=standard error. CI=confidence interval.

Variable	Coefficient	95% CI	p-value
Social Protection Category			
II	10.94	7.61–14.28	<0.001
III	12.15	8.20–16.11	<0.001
IV	14.50	10.88–18.12	<0.001

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

Table 3

Summary of general estimating equation (logistic) regression statistics predicting dichotomous food security/insecurity by social protection category, education, and marital status. Reference: Social protection category=I (minimal); Education=none; Marital status=single. SE=standard error. CI=confidence interval.

Variable	Odds Ratio	95% CI	p-value
Social protection category			
II	1.28	0.59–2.78	0.540
III	1.39	0.65–2.98	0.393
IV	6.11	2.85–13.10	<0.001
Education			
Primary	0.62	0.24–1.56	0.305
Secondary	1.47	0.79–2.73	0.219
Tertiary	0.70	0.31–1.57	0.39
Marital status			
In union	0.65	0.36–1.16	0.141
Widowed	0.68	0.35–1.33	0.261