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Abstract

This case study provides evidence in response to the research question: "How did males and females in the bottom of the socio-economic hierarchy i.e. rural poor, respond to the 2014/2015 Ebola outbreak in Sierra Leone?" This case study focuses on the following research sub-questions:

- Caretaking Responsibilities: What kind of additional burdens were placed on rural men and women who took on the responsibility for orphaned children?
- Income Earnings: How did market closures and restrictions on movements affect income earnings of males and females in the rural area?

Based on the analysis of the Ebola crisis on rural poor men and women income and caretaking responsibilities highlighted in this case study, we can state that most women bore the costs of caretaking responsibilities. However, both women and men of Sierra Leone bore serious socio-economic costs at the level of their productive labor (income in this case study).

The international community is presently dealing with the effect of the COVID-19 pandemic on marginalized communities, and the outcomes are still unknown. This brief case study helps to understand the gendered outcomes of previous public health epidemics in the context of social stratification. It is likely that many international humanitarian organizations will eventually aim at building economic and social resilience of impoverished communities with the focus on specific needs of different genders. An evidence from previous public health crises on the economy can help design the most efficient program interventions.

Keywords

COVID-19, Ebola, gender in crisis, women, care taking roles, social stratification, rural development, economic development, gender and development

JEL codes: B54, I14, I15, J46, J48, Z13

Introduction and Research Questions

Existing research on stratification economics helps us understand the Ebola crisis from the point of view of a subordinate class (Blumer 1958). Collective experiences of women during the Ebola crisis in Sierra Leone are different from men's experiences as well as coping strategies of the rural poor in the districts detached from the central power (southeastern area). Freetown, the capital of Sierra Leone is positioned in this study as the central power. Globally, gender remains a key determinant in global health but when it comes to public health emergencies, there is a complete gender blindness (Davies and Bennett 2016). There is an anecdotal evidence that more women died from Ebola because of the caretaking responsibilities for Ebola patients, dead and sick family members and Ebola orphans, but no formal data is available (Harman 2016).

This case study provides evidence in response to the research question: "How did males and females in the bottom of the socio-economic hierarchy i.e. rural poor, respond to the 2014/2015 Ebola outbreak in Sierra Leone?" This case study focuses on the following research sub-questions:

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Sierra Leone and Ebola Crisis

Sierra Leone is one of the richest countries in the world in natural resources (including notorious diamonds portrayed in the Hollywood movie Blood Diamond (2006), has access to the Atlantic Ocean, and, rich, fertile land. Price (2003) highlights the fact that exposure to colonialism is the "critical factor" explaining poverty in developing countries. Based on the United Nations Human Development Reports (HDR), Sierra Leone's Human Development Index (HDI) for 2017 was 0.419 (United Nations Development Program 2019), which puts the country in the low human development category and positions it at 184 out of 189 countries globally. It is less than the Sub-Saharan Africa average of 0.537 (United Nations Development Program 2019). Between 2012 and 2017 Sierra Leone's HDI increased from 0.407 in 2012 to 0.419 in 2017, a nominal increase of 2.9 percent) and the ranking declined from 183 in 2012 to 184 in 2017 (United Nations Development Program 2019).

Sierra Leone gained independence from British colonial rule in 1961 and has had a turbulent history of independence ever since. First, the civil war between 1991 and 2002 negatively impacted many gains of the previous independence years and led to the devastation in the economic life of the country including at least 70,000 people dead and 2.6 million people internally displaced (United Nations Development Program 2019). Sierra Leone progressed in its post-war efforts up to 2014, until the Ebola epidemic together with the collapse of the global price of iron ore, the country's leading export commodity, imposed a dual shock to the economy (United Nations Development Program 2019).

The gender disparity in Sierra Leone is manifested by the HDI value being 0.389 for females and 0.446 for males (United Nations Development Program 2019; NHDR, Sierra Leone, table 3.4), resulting in a Gender Development Index (GDI) value of 0.872 (United Nations Development Program 2019). This indicates that in Sierra Leone females could only have a partial

enjoyment of 87.2 % of what their male counterparts enjoy in health, education and standard of living. There is also a wide disparity in geographic distribution of poverty, which is most prevalent in southeastern part of Sierra Leone, which is a focus of this case study (International Monetary Fund, Government of Sierra Leone Poverty Reduction Strategy Paper, 2005).

In May of 2014, Sierra Leone confirmed its first cases of the Ebola Virus Disease (EVD). EVD is a severe, often fatal illness of the Filoviridea family. Fatality rates for previous outbreaks of EVD were as high as 90% (Pan American Health Organization/World Health Organization 2014)

Methodology

In my role as Principal Investigator for a study commissioned by the not-for-profit organization, World Vision Sierra Leone (WV SL), I led an evaluation team that collected gender disaggregated data and analysed the impact of the Ebola crisis on Savings Groups (SG) in World Vision Program areas. In 1991, an International Non-Governmental Organization, CARE, introduced the village savings and loans associations (VSLA) model in the West African country of Niger to poor communities who otherwise would be excluded from mainstream financial and credit services (Hamadziripi 2008). Since that time, SGs became a popular mechanism for financial and credit operations in remote areas of many developing countries. SGs are informal groups that are owned and managed by members (Mastercard Foundation 2014). The World Vision (WV) SG model, which is a focus of this case study, is based on the methodology of the VSLA. Based on this model, SGs provide basic financial services to communities and households who have limited access to financial institutions and struggle with irregular sources of income. SGs provide a simple savings model that allows members to access small loans for both personal, as well as income generating purposes. As of November 2015, WVSL had sup-

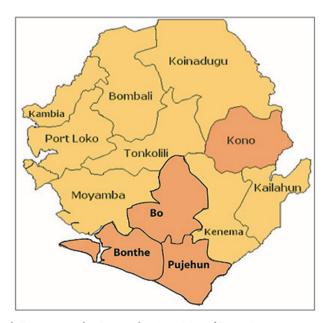


Figure 1. Research Districts on the Geographic Area Map of Sierra Leone

ported 567 SGs with a combined membership of 13,742 citizens, predominantly women, up to approximately 70% (WV SL SG Program reports 2014-2016).

Quantitative and qualitative data collected in four southeastern rural areas of Sierra Leone, i.e. Bo, Kono, Bonthe and Pujehun formed the basis of an analysis, that was unique in its focus on the gender variable in public health disaster from the perspective of economic stratification with the focus on the group inequality (Darity 2005).

This study utilized a mixed-method approach to combine the strengths of both quantitative and qualitative research methods. The tools developed for the mixed-method approach were Household Survey questionnaires, Key Informant Interviews (KII) guide and Focus Group Discussions (FGD) guide. The Household Survey was completed by 1589 SG members (195 from Pujehun District, 757 from Bo District, 405 from Bonthe District, and 230 from Kono District). One of the objectives of this complex study was to assess the impact SGs have had on the family dynamics, specifically, the roles of men and women in the household. The data collection tools included close-ended household decision-making questions that were measured using gender scales (USAID 2011) specifically for capturing data on gender norms, gender attitudes, women's empowerment, and other aspects of gender. Gender scales in this case study were utilized to analyze the impact of Ebola crisis on the household dynamics.

Findings

In this article, the first quantitative (descriptive) and qualitative results of the study are published.

Findings highlighted in this case study indicate that the Ebola outbreak had serious effects on both income and caretaking responsibilities of SG members. During the outbreak, the government of Sierra Leone established serious restrictions on public gatherings and movement of people between cities and villages, created military and police check points and quarantined infected areas. Furthermore, the government closed local markets that were in many cases the only source of income for rural inhabitants. Such government regulations had a detrimental impact on SG members' well-being because for the majority, agricultural and trade activities were the main source of incomes (Table 1).

Table 1. Main Source of Income of Respondents of Savings Groups of World Vision Program Districts, Southeastern rural areas of Sierra Leone, 2016, %

Source of Income	EVD Outbreak		
	Not Affected	Affected	
Agriculture	81	66	
Education	4	5	
Trade	14	25	
Small scale manufacturing	0.2	0.4	
Labor (daily wages)	0	1	
Home services industry	0.2	0.5	
Other	0.4	2	
Total	100	100	

Source: calculated by the author

71 % percent of respondents (both male and female) stated that agricultural activities were their main source of income and 25 % stated trade. Although, there were some differences in shares of people involved in agriculture and trade activities between the Ebola-affected and not-affected WV programme areas, these two sources of income played dominant role in both cases. Therefore, it should not be surprising to note that 97 % of respondents in the not affected by EVD program areas and 89 % of respondents in the EVD affected program areas stated that their incomes decreased (Table 2).

Table 2. The Ebola Virus Disease Effect on Earnings of Respondents of Savings Groups of World Vision Program Districts, Southeastern rural areas of Sierra Leone, 2016, %

Response	EVD Outbreak		
	Not Affected	Affected	
Income increased	0	2	
Income remained the same	2	6	
Income decreased	97	89	
I don't know	1	3	
Total	100	100	

Source: calculated by the author

Table 3 demonstrates that the disruption in everyday SG members' economic activities by imposed government regulations was severe. 73 % of the respondents from the affected areas and 50 % of the respondents from the not-affected program areas had to find new sources of income.

Table 3. Change in Income Sources due to the Ebola Virus Disease. Southeastern rural areas of Sierra Leone. 2016, %

Response	EVD Out	EVD Outbreak Not Affected Affected	
Response	Not Affected		
No	50	27	
Yes	50	73	
Total	100	100	

Source: calculated by the author and WV SL

Furthermore, for 20 % respondents these changes in income became permanent (Table 4).

Table 4. Change in Income Sources Remained Permanent. Southeastern rural areas of Sierra Leone. 2016, %

B	EVD Out	EVD Outbreak		
Response	Not Affected	Affected		
No	79	82		
Yes	21	18		
Total	100	100		

Source: calculated by the author

Both male and female respondents indicated in the survey that they had extra caretaking responsibilities during the EVD outbreak. Average 23 % respondents indicated that they had extra caretaking responsibilities.

Table 5. Caretaking Responsibilities during the Ebola Virus Disease Outbreak for Men and Women. Respondents of Savings Groups of World Vision Program Districts, Southeastern rural areas of Sierra Leone, 2016, %

Gender	No	Yes	Total
Male	78	22	100
Female	77	23	100
Average	77	23	100
Pearson chi2 = $0.45 \text{ Pr} = 0.501$			

Source: calculated by the author

Most of qualitative data point to the fact that continuous caretaking responsibilities post EVD outbreak posed a financial burden to SG members. A detailed analysis of caretaking responsibilities question revealed two main themes among all of respondents i.e. "taking in orphan children" and "caretaking added an additional financial burden". Table 6 is based on the gender scales analysis and points to the fact that both males and females considered child caring responsibilities being solely "mother's responsibility". This leads to the conclusion that women bore most of the caretaking burden for taking in extra children and orphans. One female respondent highlighted that she "took care of fatherless children" and indicated that she particularly helped with education during the post EVD outbreak phase. Another FDG respondent highlighted that "SG has helped us to have enough money in SG savings box to assist in children's education". Goodness of fit (Pearson Chi Square) and difference of means tests (t tests) were used in the analysis of questionnaire's responses.

Table 6. "Changing diapers, giving kids a bath, and feeding the kids solely the mother's responsibility". Male and female respondents of Savings Groups of World Vision Southeastern rural areas of Sierra Leone, 2015, %

Gender	No	Yes	Total
Male	21	79	100
Female	19	81	100
Average	20	80	100
Pearson chi2 = $1.13 \text{ Pr} = 0.287$			

Source: calculated by the author

In addition, SGs FGD members indicated that their joint money, i.e. social fund, has been used for burial services of (family) members, and to support vulnerable children whose parents died during the Ebola outbreak. One of the respondents of the FDG indicated that post EVD response "there were 4 children supported by the social fund i.e. 2 boys and 2 girls." Another FDG participant indicated that he has taken an orphan from deceased family member to stay with the family during the EVD crisis. He stated that "...his nephew is still staying and is an added responsibility which is creating some constraints in ...the commitment to the SG. The shares of this SG reduced from 5 to 2 because of this added responsibility."

Conclusion

In this case study, roughly 23% of respondents (regardless of location or gender) reported extra caretaking responsibilities during the EVD crisis. The analysis of the gender scales revealed that most women and men think that women should be responsible for child care activities. This leads us to the conclusion that according to cultural norms and attitudes regarding gender roles, women were the ones actually taking care of orphans during the crisis. Imposed government restrictions negatively affected members' abilities to earn their incomes as well as reduction in income due to travel and local market bans resulted in the limited ability of members to support their families, relatives and other community members. Moreover, the effects on income also caused a decrease in SG members' propensity to save. Based on the analysis of the EVD crisis on rural poor men and women incomes and caretaking responsibilities highlighted in this case study, we can state that most women bore costs of caretaking responsibilities. However, both women and men encountered serious socio-economic shocks at the level of their productive labor (income in this case study).

One of the unique anthropological studies with gendered variable in Sierra Leone during the Ebola crisis conducted by a former OXFAM staff member (Minor 2017) points to the fact that Sierra Leone national government policies during the EVD crisis (quarantine of sick patients, strict community by-laws banning markets and trade as well as public gathering) had also contributed to the stigmatization of people (mainly women) who had cared for Ebola victims. This is an added dimension of caretaking responsibilities that will be highlighted in consequent studies.

The international community is presently dealing with the effect of the COVID-19 pandemic on marginalized communities, and the outcomes are still unknown. This brief case study helps to understand the gendered outcomes of previous public health epidemics in the context of social stratification. It is likely that many international humanitarian organizations will eventually aim at building economic and social resilience of impoverished communities with the focus on specific needs of different genders. An evidence from previous public health crises on the economy can help design the most efficient program interventions.

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Reference list

- Blumer, H (1958) Race Prejudice as a Sense of Group Position, The Pacific Sociological Review, 1 (1):3-7, https://doi.org/10.2307/1388607 (accessed: 10.04.2020)
- Darity, W (2005) Stratification economics: The role of intergroup inequality, Journal of Economics and Finance 29 (2): 144-153, 10.1007/BF02761550 (accessed: 10.04.2020)
- Davies S, Bennett, B (2016) A Gendered Human Rights Analysis of Ebola and Zika: Locating Gender in Global Health Emergencies, International Affairs 92 (5):1041–1060, https://doi.org/10.1111/1468-2346.12704 (accessed: 10.04.2020)
- Hamadziripi, A (2008) Reaching the Hard to Reach: Comparative Study of Member-Owned Financial Institutions in Remote Rural Areas. Case Study. Village Savings and Loans Associations in Niger: Mata Masu Dubara Model of Remote Outreach Coady International Institute with funding from Ford Foundation, Canada. https://coady.stfx.ca/wp-content/uploads/pdfs/ford/docs/Coady_Niger_Final.pdf
- Harman, S (2016) Ebola, Gender and Conspicuously Invisible Women in Global Health Governance, Third World Quarterly 37 (3): 524-541, https://doi.org/10.1080/01436597.2015.1108827
- International Monetary Fund (2005) Sierra Leone: Poverty Reduction Strategy Paper, IMF Country Report No. 05/191, https://www.imf.org/external/pubs/ft/scr/2005/cr05191.pdf
- Mastercard Foundation (2014) Research Brief: Practices and Possibilities in Savings Groups, https://mastercardfdn.org/wp-content/uploads/2018/06/Savings-Brief2-Accessible.pdf (accessed: 1.03.2020)
- Minor O (2017) Ebola and Accusation: Gender Dimensions of Stigma in Sierra Leone's Ebola Response, Anthropology in Action 24 (2): 25-35, 10.3167/aia.2017.240204
- Pan American Health Organization, World Health Organization (2014), Background Paper for 2014 Regional Committees Update on 2014 Ebola Outbreak, https://iris.paho.org/handle/10665.2/28257
- Price, G (2003) Economic Growth in a Cross-section of Nonindustrial Countries: Does Colonial Heritage Matter for Africa? Review of Development Economics 7(3):478-495, RePEc:bla:rde-vec:v:7:y:2003:i:3:p:478-495ЭТАП
- United Nations Development Program (2019), National Human Development Report, Building Resilience for Sustainable Development, undp_sle_NHDR 2019.pdf (accessed: 1.03.2020)
- USAID (2011), Compendium of Gender Scales, http://gender.careinternationalwikis.org/_media/c-change_gender_scales_compendium.pdf
- World Vision Sierra Leone and Harry Cummings and Associates (2015) World Vision Savings Group Performance in the Phase of Ebola. A Case Study of Struggle and Resilience in Sierra Leone, presented at Canadian Evaluation Society Annual Conference, 2015
- World Vision Sierra Leone Savings Groups Program Management Reports, 2014-2015

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