

Building resilient health systems: lessons from international, national and local emergency responses to the Ebola epidemic in Sierra Leone

Ebola Gbalo Research Group

Summary of findings, London March 2019

Njala team: Lawrence S Babawo, Tommy M Hanson,
Bashiru Koroma, Alfred Mokuwa, Esther Mokuwa, Paul
Richards, Ahmed Vand

LSHTM team: Dina Balabanova, Johanna Hanefeld,
Susannah H Mayhew, Melissa Parker



**NUJALA
UNIVERSITY**

P.M.B. Freetown, Sierra Leone

**LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE**



Objectives

1. To examine the **extent, nature, motivations and drivers of the policy response** to Ebola in Sierra Leone and their perceived effect;
2. To examine the level of **coordination, oversight and regulatory mechanisms** and their perceived effect on health systems;
3. To explore **what actions** were implemented **at the district, why and how**;
4. Determine the **local issues which shaped what happened** during the Ebola epidemic;
5. Develop **conclusions**, in the context of Sierra Leone, on what constitutes a **resilient health system** and how this may change in the face of an emergency;
6. Identify **lessons on how to respond to emergencies** without undermining existing health systems capacities and strengthening initiatives.



NJALA
UNIVERSITY

P.M.B. Freetown, Sierra Leone

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Mixed methods; multi-disciplinary research

- Review of key policy documents and guidelines at national and district levels.
- Key informant interviews at international, national, district and local levels.
- Ethnographic work including participant observation, unstructured interviews and informal group discussions.
- Interviews usually tape recorded and where necessary subsequently translated from Krio, Mende or Temne into English.
- Core themes were identified and analyzed inductively.



**NJALA
UNIVERSITY**

P.M.B. Freetown, Sierra Leone

**LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE**





**NJALA
UNIVERSITY**

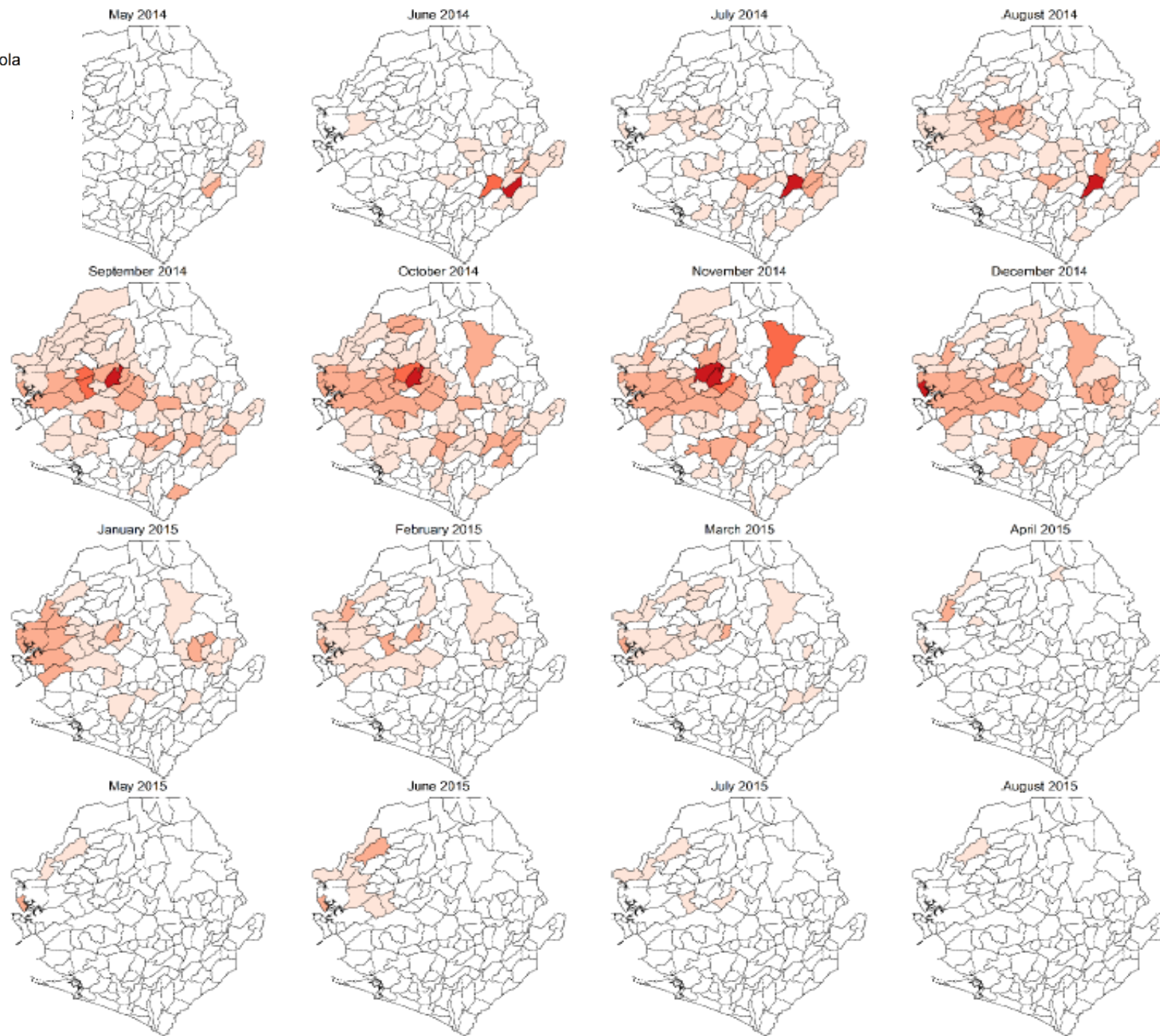
P.M.B. Freetown, Sierra Leone

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE



Confirmed Ebola

- (100,750]
- (50,100]
- (10,50]
- [1,10]
- No cases



Source:
Voors
based
on data
from
Fang et
al 2016

March-
April 2014
No official
data

25th May
Outbreak
declared in
Kailahun

20th June: MSF
Statement.
Ebola
Operations
Centre (EOC)
estab in
Freetown in
WHO office

July 2014:
Paramount Chief
bylaws in Mobai in
Kailahun; adopted
nationally Aug

30th July
National
state of
emergency

4th Aug: 750 SL
troops deployed to
set up quarantine
in Eastern districts

March/April:
HW contacts pass on
info from Kenema.

Bo DHMT on high alert;
monthly mtgs on IPC; no
resources to prepare Tx
centres.

May Dist
raises
L2mil

6th June: 1st
lab confirmed
case reported
in Bo

Early June:
Bo Dist Ebola
Task Force
(EOC)
established

Communities hostile
to Dist HW; EVD info
believing it to be
political manipulation

Moyamba: DHMT
handling Ebola

June: 1st & biggest
outbreak, Kakua
chiefdom

Nurse actions stop
spread outside
HC. 17 from Kalia
to Bo Hos ... then
returned. Bo City
Council alerted;
DSO investigates.

July: 2 major
outbreaks:
Kori; Kaiyamba

July: Baoma/
Tikonko
outbreaks

8th Aug:
Bylaws past
nationally

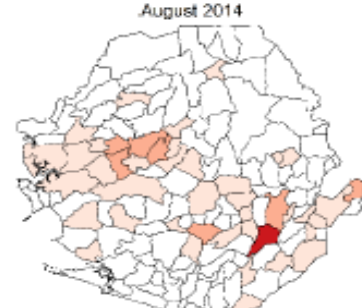
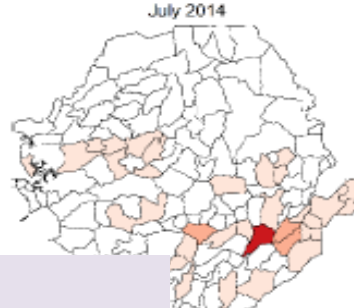
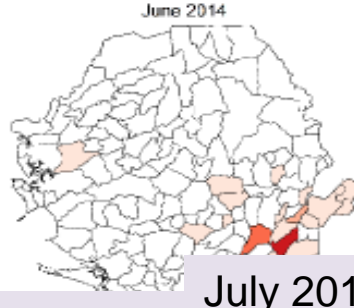
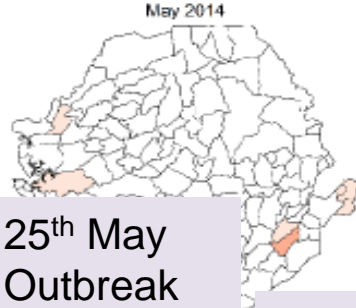
Increased District
response:
Kalia quarantined (42d);
1st lock-down: district-wide
Dist Hos as holding centre

Kalia: initial hostility, then
cooperation but military
quarantine = resentment

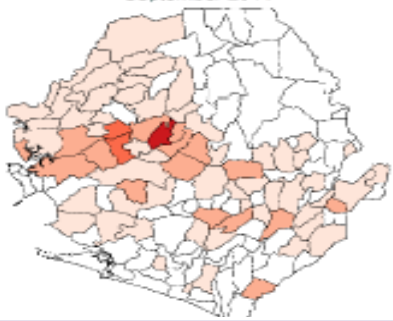
Early infections hidden and
home treated; widespread
denial & hostility to HWs

Task forces estab at
chiefdom level to
bury and quarantine

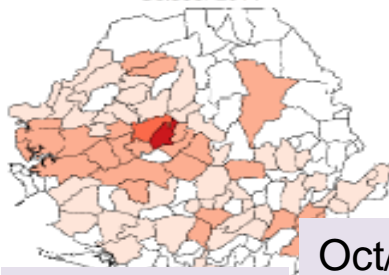
4th Aug: 1st case in Moy hos;
Holding centre established;
1st lockdown in Moyamba



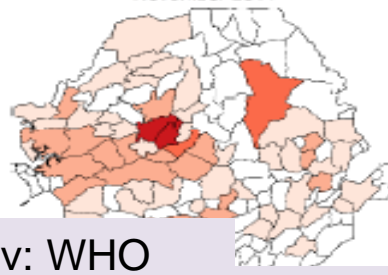
September 2014



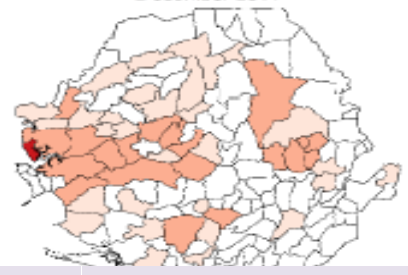
October 2014



November 2014



December 2014



UK military arrive

Quarantine extended; national lockdowns

Oct: plethora of SOPs; NERC & DERCS established

Oct/Nov: WHO and CDC-Rapid response and infection control Training Plan put in place

Oct-Dec: NERC training for DHMT & info for cmties through Chiefs

Nov-Dec: Rapid increase in donor/NGO input + in ETUs established

The ETC at Bandajuma, Bo

October 3rd: **Bumpeh Ngao outbreak**

Oct 17th: **Niawa Lenga outbreak** quickly quashed

Oct-Dec: int actors bring resources

Safe & **Dignified** Burial SOPs

HWs in cmties report fear of identification

HW & DSO actions & comms contain infection in several HCs

Bo District Ebola Task Force becomes a DERC who order a 2nd Bo lockdown

Nov-Jan: IRC, WV, Unicef training on PPE, signs/symptoms, prevention

19th Dec ETU estab

ETC closed 27th Dec?

3rd September 1st case admitted to Holding centre; hard to staff

Bumpeh Ngao: denial & hostility; contact tracer beaten

DERC 1st Nov

DERC "mini command" estab in Ribbi

Oct-Dec: various trainings by int actors

Sept 9th/18th: **outbreaks in Fakunya & lower Banta**; 24th Dist quarantined

PC bylaws & Chiefs play key role in response

Oct 11th: **Ribbi outbreak**; military quarantine (from FT)

Ribbi: military brutality creates serious tensions; cases hidden & self-treated

Hostility to HWs, denial and confusion in many chiefdoms

Interpretation

- Sub-District level (responding March/April 2014 on)
 - Variety of experiences incl hostility to formal responders; later in the epidemic, hostility is exacerbated in some areas by use of military, though in other areas military support for quarantine is requested by local leaders. In Ribbi (and elsewhere?) tensions between paramount chief, local chiefs and villages complicated the response.
 - Rapid learning about infection prevention and control by local leaders from past experience, personal observation and from formal response information.
- District level (responding March/April 2014 on)
 - DHMT and frontline staff responses pre-date national or international support
 - Word of mouth learning from frontline health workers and strong leadership in Bo enabled early coordination of actors and preparedness plans, including local fundraising, but insufficient to treat early outbreaks without external support
- National level
 - Early response in March-Oct 2014 (by MoHS and WHO) characterised by weak capacity, poor leadership, few resources;
 - Formal coordinated response through NERC Oct 2014 on improved coordination of finances and activities and devt of SOPs (but late in the day for Bo/Moyamba)
 - Competing donor/NGO interests hamper speedy coordination at all levels

What do we learn from analysis of response levels? (1)

- Village leaders and district authorities learned rapidly and successfully responded before the national/international guidelines or support reached them. BUT their experiences & learning were not taken into account at higher levels.
- Rapid learning was crucial to shaping outbreak progression and response in Bo and Moyamba, but lack of medical resources limited ability to hold and treat patients.
- ***Emergency responses require immediate connection and support to local responders and must reward them for their learning.***
- ***National/international responders must accept they do not always know best & must learn from experiences of frontline HWs.***
- ***Respectful and open-minded engagement and learning by all actors is essential to understand local conditions & appropriate responses.***
- ***Early preparedness through leadership and coordination at local/district levels is important and should be supported not replaced.***

What do we learn from analysis of response levels? (2)

- District level responses alone cannot tackle outbreaks like Ebola; without support and cooperation from village leaders responses will fail.
- ***Meaningful inclusion of local leaders in decisions about key aspects of treatment, care and burial is essential & national/ international actors must be prepared to compromise to accommodate local practices***
- District level responses, from development and use of communication material to building and running of holding and treatment centres, is hampered by slow flow of national/ international resources.
- ***Rapid deployment of resources to frontlines even without national frameworks in place is necessary.***
- ***Decentralisation of resources and decision making asap is essential.***
- Individual actions (through accident or intent) can spread or prevent new outbreaks;
- ***Need everyone, at all levels, to cooperate***
 - Closure and recovery support: still missing graves and information; no counselling, little support for survivors; no resources for follow-up.
- ***Epidemic doesn't end when cases stop; plans and resources for recovery are urgently needed ... Njala Museum & Archive is the national repository***

Thank you!



**NJALA
UNIVERSITY**

P.M.B. Freetown, Sierra Leone

LONDON
SCHOOL of
HYGIENE
& TROPICAL
MEDICINE

