



THE EBOLA VIRUS DISEASE OUTBREAK

THE RIVERS STATE EXPERIENCE

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BACKGROUND

- Ebola Virus Disease (EVD) is a haemorrhagic fever, which made its first land fall in Africa in Sudan and the Democratic Republic of Congo in 1976 and took a toll of 431 lives.
- Several outbreaks have since taken place in Cote d'Ivoire, Gabon, Uganda, South Africa and recently in the West African countries of Guinea, Sierra Leone, Liberia and Nigeria, with devastating effects.

Previous Outbreaks

Year	Country	Ebolavirus species	Cases	Deaths	Case fatality	
2012	Democratic Republic of Congo	Bundibugyo		57	29	51%
2012	Uganda	Sudan		7	4	57%
2012	Uganda	Sudan		24	17	71%
2011	Uganda	Sudan		1	1	100%
2008	Democratic Republic of Congo	Zaire		32	14	44%
2007	Uganda	Bundibugyo		149	37	25%
2007	Democratic Republic of Congo	Zaire		264	187	71%
2005	Congo	Zaire		12	10	83%
2004	Sudan	Sudan		17	7	41%
2003 (Nov-Dec)	Congo	Zaire		35	29	83%
2003 (Jan-Apr)	Congo	Zaire		143	128	90%
2001-2002	Congo	Zaire		59	44	75%
2001-2002	Gabon	Zaire		65	53	82%
2000	Uganda	Sudan		425	224	53%

Previous Outbreaks contd.

Year	Country	Ebolavirus species	Cases	Deaths	Case fatality	
1996	South Africa (ex-Gabon)	Zaire		1	1	100%
1996 (Jul-Dec)	Gabon	Zaire		60	45	75%
1996 (Jan-Apr)	Gabon	Zaire		31	21	68%
1995	Democratic Republic of Congo	Zaire		315	254	81%
1994	Cote d'Ivoire	Tai Forest		1	0	0%
1994	Gabon	Zaire		52	31	60%
1979	Sudan	Sudan		34	22	65%
1977	Democratic Republic of Congo	Zaire		1	1	100%
1976	Sudan	Sudan		284	151	53%
1976	Democratic Republic of Congo	Zaire		318	280	88%

THE WEST AFRICAN OUTBREAK

- According to the WHO, the current outbreak in West Africa, (first cases notified in March 2014), is the largest and most complex Ebola outbreak since the Ebola virus was first discovered in 1976. There have been more cases and deaths in this outbreak than all others combined. It has also spread between countries starting in Guinea then spreading across land borders to Sierra Leone and Liberia, by air (1 traveller only) to Nigeria, and by land (1 traveller) to Senegal.
- As at 02 November 2014, the figures are as follows:

Country	Cases	Number	Deaths	Rate
Guinea	Confirmed	1,457	837	57.4%
	Probable	207	204	98.5%
	Suspected	70	0	0
	All	1,731	1,041	60.1%
Liberia	Confirmed	2,451	*	*
	Probable	1,627	*	*
	Suspected	2,447	*	*
	All	6,525	2,697	41.3%
Sierra Leone	Confirmed	4,057	893	22.0%
	Probable	76	35	46.1%
	Suspected	623	142	16.6%
	All	4,759	1,070	22.5%
Nigeria	Confirmed	19	7	36.8%
	Probable	1	1	100%
	Suspected	-	-	-
	All	20	8	40.0%



THE NIGERIAN EXPERIENCE

- The Nigerian experience commenced when the American Liberian Diplomat, Patrick Sawyer, visited Lagos from Liberia on 20 July 2014, with a febrile illness and checked into the First Consultants Hospital.
- After two days in the hospital he was diagnosed with EVD. This was not before he had had contact with several persons, mainly hospital staff and those who attended to him both privately and officially.
- On the diagnosis, an alarm was immediately set off resulting in the activation of all the paraphernalia of containment of the outbreak, including the setting up of the Ebola Emergency Operations Centre (EOC) in Lagos.
- The outcome, we know and the experiences have been well publicised.

THE RIVERS STATE EXPERIENCE

- Immediately EVD arrived Lagos, the Honourable Commissioner for Health, Dr Tamunoyoriari Sampson Parker, put the Director of Public Health Services (DPH) and the Ministry of Health on notice that the next likely place of landfall would be Port Harcourt, Rivers State, and therefore preparations should be commenced.

Preparations

- The preparations started with inviting various stakeholders, medical and non-medical, public and private, for regular weekly meetings, chaired by the Permanent Secretary, in the absence of the Honourable Commissioner (who had travelled to the USA for official business), with the DPH as the coordinator.
- A Rapid Response Team was set up with Ebola Help Telephone Lines established at various LGAs
- While these were going on, there was information that one of the contacts of Mr Sawyer, Mr KO, visited Port Harcourt for undisclosed reasons.
- We tried in vain to locate him, going through the Office of the Minister of Health and the Project Director, NCDC, without success until further information had it that he was back in Lagos and was fine.

Preparations contd.

- Preparations continued with production and airing of radio jingles, production of IEC materials, identification and modification of an isolation and treatment centre, procurement of Personal Protective Equipment (PPEs), training of personnel by the Elizabeth G. Griffin Research Foundation of USA in conjunction with Hospitals for Humanity also of USA, call for and collation of volunteers, setting up of a work plan, arrangement of logistics including land and marine ambulances, transportation, accommodation and feeding, etc
- Earlier, a budget had been made and an initial sum of ₦392 million approved and released by His Excellency, Rt. Hon. Chibuike Rotimi Amaechi.

Preparations contd.

- On 26 August 2014 we learnt that Mr KO had done a blood test in Lagos and that antibodies to EVD were found therein, and that he had now owned up that he was in Port Harcourt, where he visited Dr IE, who treated him in a hotel in Rumuokoro.
- On tracing Dr IE, we discovered he had died a few days earlier, but the doctor who attended to him kept some of his blood samples, which turned out on investigation to be positive for EVD.
- That started our push into the war proper for the containment of EVD in Rivers State.

Preparation contd.

- The Lagos team, made mainly of the Contact Tracing group, made up mainly of NFELTP, arrived on 26 August 2014 and started work promptly, the NCDC National Ebola Emergency Operations Centre (EOC) followed almost immediately and set up initially at the Juanita Hotel, where meetings were held with the Rivers State team and the combined team met with the Governor.
- A few days later the Governor provided the State ICT Centre for use as the EOC.
- His Excellency also evacuated and provided one 24-room Government Guest House for Quarantine purposes and made a further financial provision of ₦806 million.
- The international partners made up of the WHO, UNICEF, USAID, US CDC, MSF came in to help;
- Personnel from the Lagos State Government also brought in their experience to bear;
- The Organised private sector made up of Shell, Total, Chevron, Schlumberger, also joined the fray in providing plenty of help.
- Of course there was a huge number of volunteers ready to perform various duties.

Operations

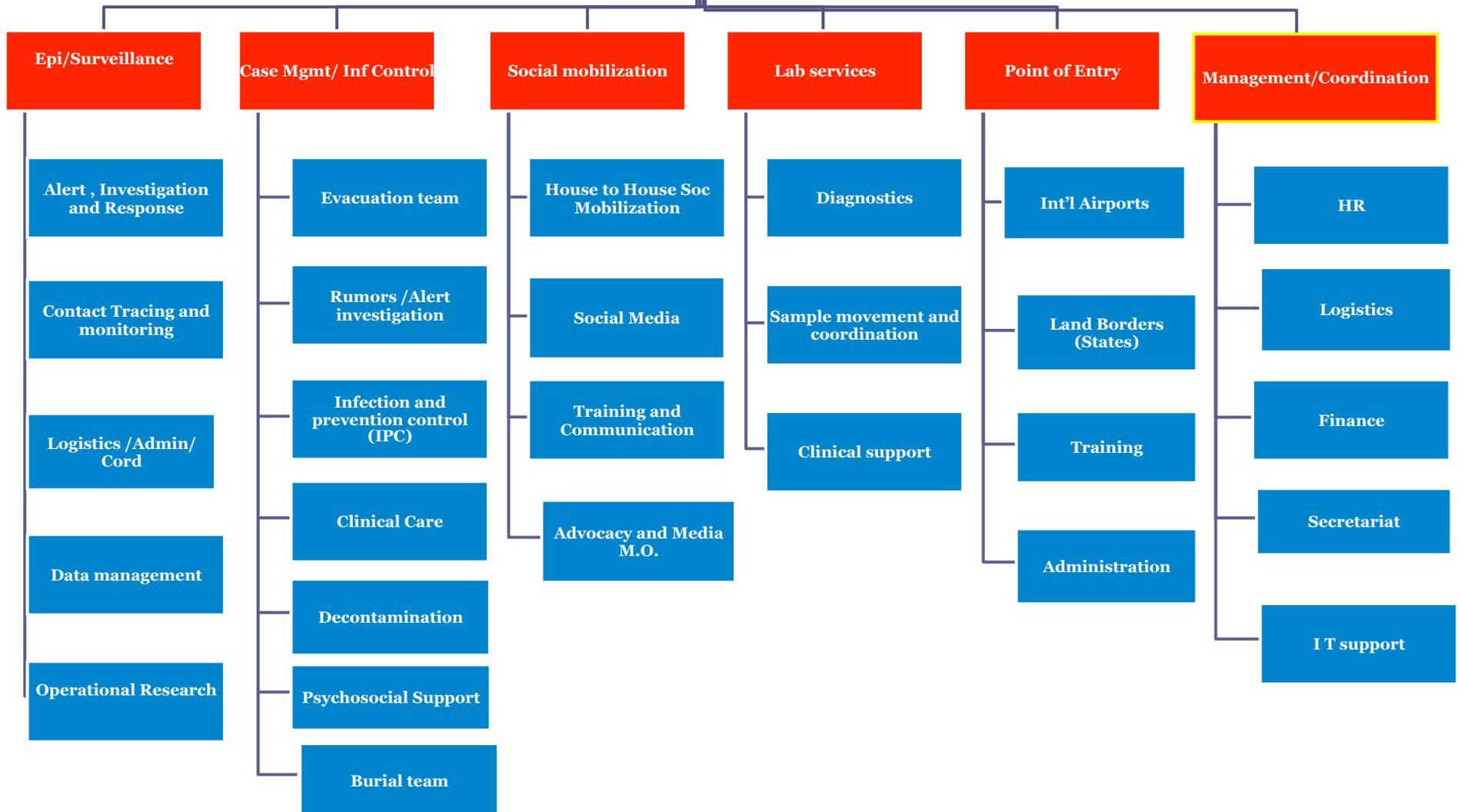
- With the arrival of the Contact Tracing team on 26 August 2014, operations started in earnest.
- Operations were streamlined by setting up a team structure under the supervision of the EOC headed by the Incident Manager, Dr Faisal Shuaib.
- These included Management, Coordination and Human Resources, Epidemiological Surveillance and Contact Tracing, Case Management, Evacuation and Decontamination, Laboratory Services, Point of Entry, Community and Social Mobilisation and Training, under which were various sub-groups all of which performed specific duties and assignments
- The MSF group, who have vast experience in the management of EBV, took charge of the Isolation and Treatment Centre, giving further training to volunteers, modifying the centre and leading the operations there.
- Evacuation and Decontamination team was supervised by WHO with generous contributions from MSF in modifying the ambulances.

Operations contd.

Incident Manager

2 Deputy IM

Media external relations



Operations contd.

- The first case, Mrs KE, became symptomatic on 27 August and had to be evacuated to Lagos, because of non-completion of modifications of the Isolation and Treatment Centre.
- On 30 August, the second case, FO was picked up and taken to the Isolation and Treatment Centre and on 31 August, the third case, CE became symptomatic and was evacuated to the Centre as well.
- Eight other symptomatic contacts, who eventually turned out negative for EVD, were also evacuated to the Centre.
- All the positive evacuations were followed by decontamination of their premises, belongings and areas they must have contacted .
- The UPTH Mortuary, where the body of Dr IE was deposited, was decontaminated and supervised burials of all corpses handled at the same time with Dr IE's were undertaken.
- With the resumption of schools running water dispensers, soap and thermoscans were provided for all schools.

Outcome

- With the various operational procedures carried out, the following outcomes were obtained:
- STRATEGY:
 - This group, made up of the IM and his Deputies, Team Leads and Key International Partners, coordinated the overall activities of the operations
 - Had daily strategy meetings, where issues were discussed, plans made and solutions proffered
 - Conducted daily EOC meetings, where reports were taken, analysed, criticised and directives given.
 - The group met with visitors to the EOC, donors and the media

Outcome contd.

- **MANAGEMENT & COORDINATION:**
 - This team coordinated the daily activities of the various teams, looking after human resources, logistics, finance, secretariat and IT support.
 - It took care of their requests, collated their personnel needs, helped with procurements, finances and payments, worked out the logistics of transportation and movements and kept the records of activities and handled the correspondences.
 - It generally oiled the operations of the outbreak containment.
 - On the whole, this team organised the setting up of the EEOC, contracting the services of E-Health; coordinated movement of over 80 vehicles and handling of about 700 volunteers and other staff and their financing.

Outcome contd.

- **CASE MANAGEMENT:**
 - Centre easily adapted to accommodate 34 patients
 - Staff: 13 Doctors, 25 Nurses, 25 Environmental Health Officers, 4 Social Workers, 18 Attendants, 1 Pharmacist
 - Managed 8 suspected cases (all discharged), 2 confirmed cases (1 died)
 - Under Case Management there is the Psychosocial Support Team that has 2 Psychiatrists, 2 Clinical Psychologists, 1 Psychologist from MSF, 1 Counsellor from UNICEF, and 6 Social Workers
- **Evacuation, Decontamination & Burials**
 - 4 Ambulances (3 dedicated to patient evacuation and 1 for corpses)
 - 2 Marine Ambulances prepared for riverine evacuations.
 - Burial team succeeded in burying two confirmed cases and 10 contaminated cases.

Outcome contd.

- **LABORATORY SERVICES**
 - The EU established in a mobile laboratory at the University of Port Harcourt Teaching Hospital (UPTH) with staff from Irrua Specialist Hospital.
 - This lab had full real time PCR capability with 2 WHO Consultants on site, who provided training for local staff
 - It processed a total of 20 samples for the EVD response in Rivers State.

Outcome contd

- **EPIDEMIOLOGY AND SURVEILLANCE:**
 - The Epidemiology and surveillance team collected, collated, analysed and interpreted the EVD related data from the population to detect the disease and to evaluate the effectiveness of control and preventive measures, and communicating these to all who need to know.
 - Contact tracing was an integral component of active surveillance during the Ebola virus disease (EVD) outbreak.

Outcome contd.

- EPIDEMIOLOGY AND SURVEILLANCE CONTD.
 - Initial response included detailed investigation of index case
 - Coordination/ strategy development
 - Contact identification registration and follow up
 - Development and finalization of standard operating procedures and training/sensitization materials
 - Rumour logging and investigations
 - Data management/analysis including mapping and use of ODK/ smart phone contact monitoring
 - Advocacy for response needs – staffing , transportation etc.
 - Active surveillance of EVD
 - Identification and management of difficult and hard to reach contacts
 - On the whole over 120 contact tracers/surveillance personnel were used during the period and 526 contacts apart from the confirmed cases were followed up for 21 days each.

Outcome contd.

- POINTS OF ENTRY:
 - There was a need to secure the entry points at the nation's international borders.
 - The point of entry team is one of the key units that functions with a team lead and report to the incident manager the activities outlined to protect the Nation from being infected further and also ensuring that other parts of the nation and other nations are not equally infected.
 - Advocacy visit to ports,(Air and sea) and meeting with staff and Airline Operators
 - Identification and designation of primary, secondary screening points and holding area at all air and sea ports
 - Sensitization /Training of all port (air and sea) health personnel using SOP from Lagos POE team
 - Commencement of screening at the Air and Sea ports

Outcome contd.

- **COMMUNITY & SOCIAL MOBILISATION:**
 - The social mobilization team continues to apply a myriad of strategies to reach populations in the urban and rural areas in the state. The major strategies in use include the Interpersonal Communication, Social Mobilization (sensitization meetings and rallies/outreaches) and communication/public education.
 - Mass Media (Electronic & Print) Health Education and Sensitization
 - House to House Mobilization, Sensitization & Hygiene Skill Education
 - Social Mobilization and Sensitization Activities
 - Social Media Mass Health Education and Sensitization
 - Information, Education and Communication(IEC) Material Development and Circulation.

Outcome contd.

- TRAINING:
 - This was a component of Social Mobilisation and Communications.
 - This group conducted trainings for various groups of medical and health care workers including morticians in the private and public sectors, workers in the organised private sector and school teachers. These included train-the-trainers trainings.
 - On the whole, they conducted 23 trainings during the outbreak period, excluding 13 involving over 1,000 health workers carried out by the Elizabeth G. Griffin Research Foundation and Hospitals for Humanity during the preparatory stage.

CHALLENGES

- Attitude of Doctors and Health Workers
- Non-availability of Level 4 Laboratory
- Burials;
 - Federal Government banned movement of corpses into the country, except with a waiver from the Ministry of Health
 - 10 corpses had to be buried by the EEOC for fear of Contamination by the late Doctor's corpse
 - State Boundaries
 - Ebola free papers for mortuaries and travellers
- Local Customs
- Stigmatization

CONTRIBUTIONS & COLLABORATIONS

We cannot conclude this presentation without acknowledging visible and invisible contributions and collaborations of the following:

- The Governor and Government of the Rivers State
- The Government of the Federal Republic of Nigeria, which gave a grant of ₦200 million and the Lagos State Government
- The Federal Ministry of Health and its agencies including NCDC, Port Health Services, Health Promotion Department, UPTH
- The International Development Partners including WHO, UNICEF, US CDC, MSF, Hospitals for Humanity, Elizabeth G. Griffin Research Foundation
- The Nigeria Field Epidemiology and Training Programme (NFELTP), NPHCDA, Association of Public Health Physicians of Nigeria (APHPN), Nigeria Red Cross
- The Organised Private Sector including Shell, Total, Mobil, Schlumberger,
- The Volunteers and other workers totalling over 700 personnel
- The Military, the Nigeria Police, FAAN
- The Media and various other agencies to many to mention

RECOMMENDATIONS

- Although WHO has declared Nigeria Ebola free, we cannot lower our guards and we should be ready for the next onslaught of the disease as the festive period draws close. Consequently we should:
 - Keep a close guard on our points of entry and watch our land borders
 - Keep our social mobilisation messages going with emphasis of personal hygiene, hand washing and vigilance
 - Continue Health Facilities Surveillance
 - Keep our facilities running with drills for the staff
 - Continue training and retraining of health workers
 - Provide Level 4 Laboratories
 - Most of all maintain eternal vigilance!

CONCLUSION

- Ebola Virus Disease has come to Nigeria and, by God's grace, has been conquered. We have won a battle but the war still rages on as long as West Africa and indeed the whole world does not get Ebola free.
- The credit goes to the Governments of Rivers, Lagos, Enugu states and the Federal Republic of Nigeria, which tackled this outbreak in utmost cooperation, without politics; the volunteers, who selflessly worked hard as if their lives depended on it; the contacts, who cooperated with their surveillance officers; the survivors, who make us all look good; the International Development Partners led by the WHO; the Organised Private Sector and several other Nigerians, all of who supported by their good wishes and prayers.
- All the success will come to nought if we let down our guards and are unable to prevent or contain a future out break.
- **THE BALL IS IN OUR COURT AS THE WHOLE WORLD IS WATCHING US.**



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THANK YOU!!!