Transcript

CHATHAM HOUSE
The Royal Institute of International Affairs

Ebola: The Global Response

Michael Edelstein

Consultant Research Fellow, Centre on Global Health Security, Chatham House

Brian McCloskey

Director of Global Health, Public Health England

Andre Heller Perache

Head of Programmes, Médecins Sans Frontières UK

Professor David L Heymann CBE

Head and Senior Fellow, Centre on Global Health Security, Chatham House

Chair: Professor David R Harper CBE

Senior Consulting Fellow, Centre on Global Health Security, Chatham House

29 October 2014

10 St James's Square, London SW1Y 4LE T +44 (0)20 7957 5700 F +44 (0)20 7957 5710
www.chathamhouse.org
Patron: Her Majesty The Queen Chairman: Stuart Popham QC Director: Dr Robin Niblett Charity Registration Number: 208223

David Harper

Welcome to you all. Thank you for making time in your busy schedules to join us for this members event. It's great to see so many of you here.

I think it's very timely: we're going to talk about the Ebola outbreak in West Africa. You'll see from the newspapers this morning here in the UK that a number of actions are being taken. This is an unprecedented situation that we face. It really is one of those situations where the global community needs to pull together. I'm sure over the next hour we're going to hear a lot more about that.

I'm David Harper and I'm a senior consulting fellow here at Chatham House. It really is a privilege to be joined by such a distinguished panel. We have David Heymann, who is the head of the Centre on Global Health Security here at Chatham House. He's also chair of the advisory board of Public Health England and formerly was an assistant director general at the World Health Organization. He was involved in the very first Ebola outbreak investigation back in the mid-1970s and really is acknowledged, as our other colleagues here, as an international expert on Ebola.

Then to my left we have Dr Brian McCloskey, who is a director at Public Health England. Brian and I have worked together for many years, through many different emergencies. Brian is currently on secondment to the team that has been set up, headed by David Nabarro, the UN system coordinator on Ebola. Brian just earlier this month moved to Geneva. Today he's going to talk more about the national aspects of the Ebola outbreak but of course will be here for the questions session.

Then to my right, my colleague from Médecins Sans Frontières, Andre Heller Perache, who is director of programmes. Andre has been closely involved in, particularly, the advocacy issues around the Ebola outbreak and of course a much wider area of MSF's business, so will be very happy to pick up questions there.

Then to my far right we have Dr Michael Edelstein, who is a consultant here at the Centre on Global Health Security in Chatham House. He works also with Public Health England and has a number of different hats on, but particularly relevant to today's event, Michael was in Liberia working on the Ebola outbreak in the late summer, and so has come back from one of the hot areas of the outbreak and will be able to say something about that.

I've got some housekeeping arrangements that I'm told are very important. Firstly, the event is being held on the record. There is no Chatham House Rule for this particular event. You can comment via Twitter using #CHEvents.

I'm going to ask Brian to start off, from the national perspective. Then Andre to talk about the MSF perspective. Michael will then come through and David Heymann will finish off from the global perspective and look forward to the future. So firstly, Brian, could I hand over to you.

Brian McCloskey

Thank you, David. Thank you all for coming. Just before I went to Geneva for the previous three months, I had also been in charge of the UK public health response for Ebola, as the incident director for Public Health England. So I want to talk about the UK response in two parts really. One is about the UK response

on behalf of the UK, and one is the UK response that's been delivered in West Africa. Just a couple of thoughts on each of those and some issues which I think come up, which are quite important.

If we start with what the UK is doing internationally for West Africa, because in some ways that is actually, paradoxically, the slightly easier one to talk about: I think it's fair to say that the UK has shown fairly substantial international leadership in terms of getting a grip on the need to respond to the West African crisis, among Western countries. It has stood up fairly substantially. Its investment is now some £200 million. It has recognized the importance of tackling Ebola at source in West Africa, partly because it is clearly a public health issue that needs sorting but also recognizing that it is a much wider issue in terms of the global impact it will have, both in global health security and the global economy, if this is not controlled properly at source.

So the UK has invested a considerable amount of time and energy in working out what is the best approach it can take, working obviously with the Department for International Development, with the World Health Organization and others. But the focus has been, first of all, on ensuring that we as the UK support the capacity in West Africa, focusing a lot on Sierra Leone for historical reasons – the capacity to look after people who become ill.

So the first point of the UK's response is the development of an Ebola treatment centre in Kerry Town, which is just outside Freetown in Sierra Leone. That has two important focuses. One is that it is a treatment centre for Ebola generally, for the country, but the second is that part of that unit is dedicated to treatment of healthcare workers who become infected with Ebola while they're working in West Africa. That's an important part of boosting the confidence of the international community that it's safe to volunteer, and I'll come back to that. The next stage of that will be developing four or five more treatment centres in different parts of Sierra Leone, with a final capacity, supported by the UK, of something over 700 beds in total.

They are also now investing in a training programme, working with the Ministry of Defence, the World Health Organization, Save the Children and others, to increase the training capacity for Ebola workers in-country by some ten-fold, to allow for the scale of the numbers that we know are necessary to meet the needs of tackling this problem in Sierra Leone. So a major effort in terms of training.

The next element will be moving on to a different model of Ebola control which is not really tried before, with community care centres, which is about how, in the current context, when we clearly cannot develop sufficient treatment beds for the scale of the problem, what's the best way in which we can limit the spread of Ebola in-country? So the community care model is about how do we separate people who might have Ebola from those who don't as quickly as possible, and make sure that as far as we can do it, the transmission chain is cut down. That's not a model that's been widely or ever really tried before. There are concerns that in fact by bringing people into community centres you could make the problem worse rather than better, by increasing spread. There is therefore some nervousness about how that model will work, and Médecins Sans Frontières are part of that discussion. Therefore the first part of the introduction of that is going to be an evaluation of the first ten centres, with WHO and CDC-Atlanta, to see what the impact is. Because the moment there is some nervousness that it could make it worse, but we think it can be the only way in which we can quickly get to grips with reducing the epidemic in-country.

The issue that comes out which I think is worth discussing has been seen quite a lot in the media recently: what are our obligations, globally, to those who volunteer to go and work? You'll have seen lots of discussion recently about what's happening in New York and New Jersey, in terms of quarantining people coming back. Lots of discussion about what we do to support people.

There are three elements that the world has to look at accepting responsibility for. One is increasing the capacity to treat people who get Ebola – international workers who get Ebola in-country. That is part of the UK approach with Kerry Town. The second is then how do we get people out of the country for treatment, through medevac or repatriation. That has been quite a difficult issue to work through. The UK has invested very substantially in increasing its capacity to do that but it has to be a shared responsibility, so those countries that invest in medevac don't end up receiving all the patients back. That's a discussion that's been going on and continues to go on.

Then the last element, which is up for discussion I think, is the New York/New Jersey issue: how do you treat the workers coming back and look after them, as opposed to stigmatizing them. You may have seen a statement from UN Secretary General Ban Ki-Moon the day before yesterday, very strongly saying these are exceptional people who volunteer to work and they should be supported, not stigmatized. We have a global obligation to look after them.

So a couple of minutes on the UK response for the UK. We started off way back in the summer with a very clear public health strategy, that what we had to put in place to protect the UK was first and foremost a system by which we would recognize any potential imported case of Ebola in the UK and respond to it quickly. We have those systems now in place. We have additional means of finding people. We have our standard public health systems in place to identify the first possible imported cases. We've done extensive work with the NHS in terms of getting ready for how those patients will be managed and treated safely and securely in the NHS. Some of you will have seen a couple weeks ago, we had a fairly major national exercise that tested all those systems.

The main defence for us really is about exit screening from the country, but you'll know that we're also doing more work at airports in-country at the moment. That leads on to one of the other issues which I think is important to discuss: the extent to which we can separate public health and politics, not just for the UK – it's not just a UK issue. This has been seen very clearly across Australia most recently, in terms of their move to ban visas for people from West Africa. Again, the way in which the Americans have responded, and other countries.

So it is very clearly the responsibility of government to make decisions about public safety. It is perfectly proper for governments to consider a range of issues in doing that, and it would be naïve to think that public health evidence is the only thing they will use. There are a range of other considerations which they should use. But the question then is about how do we get the right balance, giving the public reassurance that everything that can be done is being done, without going to the point where we're probably doing more than is good and potentially doing harm. How you find that right balance is, for me, quite a delicate issue. It hasn't yet been seen across the world; we have seen debates about it in America and Australia, across Europe. But how we find that balance between the right public health messages and the right political messages – because once you start compromising on the public health message, then I think you start to erode the public's confidence in the means by which we're protecting them. Thank you.

David Harper

Thank you, Brian. We'll go through all of the panellists and then we'll open up to the floor for questions and discussion. Andre?

Andre Heller Perache

Thank you very much. I'd just like to start off by thanking Chatham House for inviting MSF to speak a bit about its experience and about its work here. I'd also like to say how humbled I am by the expertise that we have on the panel and how delighted we are to be here right now.

I'll be doing a talk today about a few main points, a general introduction toward the scale-up that MSF has undergone in the region. We're sort of known as the front-line organization that has straddled various areas that the outbreak has touched at this point. We continue to do so as it's changed up until now, and we'll get into a bit of the dynamics there. I'll talk just in general about the overview of the figures that we have as an organization as well. I think in the media today we see a lot of things going around and we'll try to just ground a bit of these things in operational reality, in terms of what that means in numbers for us. Then also talk a bit about this unusual and unprecedented call that MSF made as an organization towards governments of the world, towards the United Nations and member states, talking about intervention with governmental assets directly, in an aid environment in the field – and point out some of the unusual characteristics about an outbreak of Ebola and why it would be that we would make such an unusual call as an organization.

So just to go back a bit into the dynamics of how MSF's response has scaled up over time, it originally started in March. Gueckedou was the first area we were working in when the outbreak was first announced officially. Almost immediately thereafter in Conakry as well. This is the 23rd and 25th of March. Going forward, the next area that we started working in was actually in Kailahun, in Sierra Leone, and eventually in Liberia and then expanding our operations in Sierra Leone as well.

Basically at this point we're running about 600 available beds for Ebola treatment that are currently open. That doesn't mean that these are all filled right now. We have about 350 patients currently, probably about 280 or so of which have been confirmed cases that are then receiving treatment on top of that.

The number of staff that we have in general is about 3,000 between the three states. So 3,000 local individuals. We maintain a presence of about 300 international employees at a given time. The international employees that we're working with are on rotations of about four weeks for people who will actually be working inside the high-risk areas, inside of treatment centres. So we have to cycle through quite some people. I think it means we've done about 750 people who have gone in and out of the region at this point. So coming back to some of the obligations and politics of people going to make a contribution personally and then some of the stigmatization and whatnot in returning – it's been quite a challenge for us recently. I think everyone's aware of the case in New York and then a case of quarantine in New Jersey. That being said, we have about 13 individuals from the UK working for us right now in the three states as well.

For MSF, we have been working on Ebola outbreaks for decades at this point. So those who are part of the small community of expertise on the disease, such as yourself, have seen us around in the field, in various locations in the world, operating from the main pillars of containment of such an outbreak: treatment and isolation, safe burial and/or cremation for those who die of the disease, contact tracing, surveillance, health messaging, and access to treatment centres in general. This outbreak has followed the same general pattern that we've tried to do in any kind of a normal, more rural outbreak, like the one that happened in the Congo, which I think David will speak about later. But in this case we really, truly got overwhelmed. So our ability to conduct all of the activities surrounding this was compromised by the sheer volume of cases that we wound up facing, in need of additional operational and tactical support on

the ground, actually running additional facilities alongside MSF and the ministries of health and a few other actors who are running some centres as well.

Effectively, the month of June is when we made the announcement that the outbreak was truly an epidemic and that it was a real crisis, a humanitarian crisis beyond just an instance of some complicated disease in a lost corner of one country. It had become transnational at this point and it was completely overwhelming our human resources. In the past, a large Ebola treatment centre would have 40 beds in it. At this point we were in the hundreds of beds. So the scale of this intervention was well beyond anything that we had experienced before. Eventually our centre in Monrovia has been outfitted to be able to take on 400 beds, which we've never seen anything like this before in the past, that we had to completely reinvent our model of how to run such an operation.

That being said, this wasn't recognized initially by the rest of the world. As time went on, our call was eventually duplicated and then agreed with by other officials. By the month of August it had been recognized as a matter of international concern by the World Health Organization as well.

That being said, the response was still difficult on the ground, in the sense that responding to Ebola tactically and operationally as an organization is quite an unusual kind of activity to perform, even for outbreak management or from aid work in general. For me, my background is more as a generalist in aid work. I tend to work in conflict areas. What we see in the field doing aid work, whether it's medical or other kinds of aid work, is a bit more of a sloppy operation where there's a bunch of different kinds of activity happening alongside one another. Over time, to greater or lesser degrees of success, with different kinds of margins of error that are permissible or noticeable (or not) in different fields of work – for example, if you're conducting a triage in a healthcare facility and somebody gets a diagnosis wrong, they can always go back and see the doctor the next day. If it turns out not to be malaria but something else, they can return. If a few people are missed in a food distribution, effectively they can share some food with others and make sure they get their registration sorted out.

When an agency comes to intervene for Ebola and running a treatment facility, the margin of error goes down to just about zero. In terms of what that actually means for workers on the ground, if something goes wrong, if procedures aren't followed perfectly, if supplies aren't available in sufficient quantity, if supplies are of the wrong quality – in terms of the staffing numbers and fatigue and vigilance of individuals involved in the management of a facility, everything has to be run as tightly as possible. If you're operating outside of that almost negligible margin of error, the impact is devastating for workers who are within the facility. Also the unsafe management of a facility can act to create more cross-contamination, effectively amplifying an epidemic as opposed to turning it around.

It's these unusual characteristics of Ebola treatment centre management and the different kinds of work involved in managing the epidemic that make it so difficult for a deployment to activate, which generally tend to rely on local competencies, transfer of information and knowledge, adding some additional material inputs and financial inputs and then everyone giving a best effort towards it working out in the end. In this one, if everything isn't orchestrated perfectly, the consequences are devastating.

This is what brought us towards our call toward governments and towards militaries – even militaries, if they had teams that were deployable to manage biological or nuclear kinds of catastrophes in the world – that they would come and intervene directly, to take responsibility themselves, to run it from A to Z, to really turn this thing around. This is the first time that MSF as an organization has ever made such a call. It's quite an unusual moment for us.

In terms of our messaging and advocacy at this point, we're really waiting to see what will happen with this escalating deployment that the UK is involved with, the US, many other countries in the world – Cuba, South Africa, Uganda. Everybody is contributing in different forms. We'll try to guarantee our activities as they are right now and maintain as best we can, and watch and see, in hope that as the benchmarks go on in time – 30, 60 and 90 days – that we'll start seeing a turnaround on this.

I think I've rambled on a little bit too long and will cut myself off there. Thank you.

Michael Edelstein

What I'd like to focus on is what happens beyond the outbreak, and how we can capitalize on the outbreak response to build a public health capacity in the affected countries. The current crisis that is occurring in West Africa is a crisis that would put the strongest public health systems at test, and the countries which are affected have some of the weakest public health systems. These are public health infrastructures that have suffered decades of underfunding, of poor governance, of corruption – all in the context of a post-conflict situation, particularly in Sierra Leone and in Liberia. Just to give you an idea, comparing the United States with Liberia, for example: Liberia has 170 times less doctors per capita and 35 times less nurses per capita than the US. When we think of public health capacity, it's not just the number of doctors, nurses and beds, it's also the logistics underpinning the system and the ability to run such a system. That's a very weak point in those countries as well.

What I would like to do is to give you a bit of context and share with you my personal experience of the situation when I arrived in the region I was assigned to in Liberia. I arrived in a county of about half a million people where there was essentially no functioning hospital, where there was no capacity to find and detect Ebola cases, and if they were found there was no way to confirm whether or not they were actually Ebola cases, because there was no laboratory available. In terms of logistics, one of the difficulties is not just about securing resources, it's also about allocating resources. In that county, there was no protective equipment for healthcare workers in any of the centres but there were 60,000 pairs of gloves stored in a central warehouse. This is a situation that was recurrent. Andre also mentioned safe burials. On my first day in Liberia, I saw people carrying the body of an Ebola patient in a wheelbarrow on one of the main roads.

I just want to contrast this with what is happening two months down the line in that particular county. Again, this is a regional experience. Now in that county there is one functioning Ebola treatment centre. There are several community care facilities planned. The main hospital is fully functional again. Hundreds of healthcare workers have been trained, both clinically and in infection control. There is a functional laboratory and there is a system in place to be able to detect Ebola cases, to find their contacts, to monitor the contacts and to treat them and isolate them as well, because of the treatment centre.

The main message I want to convey is this is a situation, in terms of healthcare capacity in that region, it's probably better now than it's ever been, in terms of healthcare workforce and in terms of facility. It's important to start thinking not just about controlling the outbreak, because the outbreak will come under control eventually, but also how we can use what we've built throughout the crisis to better the healthcare in these places and to not only control this outbreak but also to prevent similar situations from occurring again in that area, and to use that example in other areas as well.

David Heymann

As Andre and Michael have both said, there was an outbreak – and we know how to deal with these outbreaks – there was an outbreak in DRC. It began in August of this year. This was an outbreak separate from the outbreaks in West Africa and it occurred when a woman from a village went to a live game market, bought an animal, brought it home, butchered it and somehow infected herself from that animal, with the blood of that animal. She then infected her child and other family members, and the outbreak spread into a hospital, where there were infections in health workers, and then the outbreak spread even further out into the communities.

But this outbreak was stopped within a period of three months because DRC, even though they have health systems equally poor to other parts of Africa, was responsive to the outbreak. Immediately, a team headed by Dr Jean-Jacques Muyembe, who was the initial investigator of the first outbreak in 1976 – immediately he and his team were there, with MSF and others, and stopped the outbreak. Outbreaks can be stopped in rural areas much easier than in urban areas because in rural areas there is better organization of communities. There are village elders, there are village chiefs who have the respect of the people. If they understand the outbreak, they can help others understand how to prevent transmission. Then there are groups such as the local NGOs, the Red Cross, Red Crescent and others, who come in and provide transport systems for dead bodies in respect, and also for patients.

So it's very possible to stop outbreaks. As Andre said, there are three major strategies. Isolation of patients – first of all, identification, rapidly. Identification and management of those patients and their needs, and making sure that health workers are protected. The second is tracing contacts, all those people who had contact with a patient from the time they developed symptoms. Finding them, making sure that they monitor their temperatures, and if they develop a temperature, diagnosing. If it's Ebola, they must be isolated and managed in a facility. The third is understanding by the community and safe transport for patients, respectful transport for dead bodies, and community involvement and protection.

Those three strategies have worked in all previous outbreaks, and there have been over 25 of them in rural areas. It would have probably worked in Guinea had they been applied early on and robustly, but they weren't, and as a result that outbreak spread to urban areas. You could argue that other outbreaks were rural, they couldn't spread into urban areas – in fact, two of those outbreaks did. An outbreak from Gabon spread to Johannesburg with a doctor who went there, but it didn't cause an outbreak, and an outbreak in Kikwit, in DRC, went into the capital city of Kinshasa, with 9 million people, but the government again stopped it immediately with help from international partners.

So there is a way of stopping these if there's a robust response at the start. We now are dealing with an outbreak and those three strategies will continue to be effective in stopping the outbreak, but there needs to be now innovation – and there is innovation. For example, we heard Andre talk about community treatment centres, and Brian as well, about the importance of community centres, of getting some new interventions available so that maybe interventions can be done at the community level. At the same time, Sierra Leone locked down for three days; there was a lot of criticism internationally but they agree – at the end of that, they said that they had reached 70 per cent of households with the right messages on Ebola. So there is innovation going on and that innovation has to continue as well in contact tracing, because contact tracing is the way that this outbreak will stop, along with understanding of how to prevent it.

There are some vaccines, there are drugs and there are other treatments that have been developed. Some are available now, some will be available in the future. The catch-22 is that these have to be studied when

the Ebola virus is circulating. You can't study a drug or a vaccine or a treatment for effectiveness if indeed there is not a circulation of this disease in humans. So it's very important, and WHO has helped move that agenda forward, that these be tried.

I can just give you an idea of what four things in my mind are the most important to try. The first is making sure that we use all possible means of keeping patients alive, keeping them hydrated as well as we can, because their bodies can take over and their immune systems can in the end defeat this virus in most instances. That's something that can be done orally, that can be done intravenously. I know MSF, which is a major responder of all outbreaks in clinical management, is working on these areas.

Second is to try to use antibodies that have been prepared and developed in convalescents, in people who have survived. These are available. If these were shown to be effective in treating people who have Ebola now, it could decrease mortality as well, if those antibodies did neutralize the virus in the people who have Ebola infection. This has been tried. I myself stayed on for two and a half months after the first outbreak, collecting blood from survivors to extract the antibody; that was stored throughout Africa but by the time the next major outbreak occurred, it was no longer useful. So these are other things that need to be done.

Finally, we need to study the vaccines and the drugs. So all of these need to be studied and one does not trump the other. We need to keep our eyes on the outbreak. We need that outbreak to be stopped. But we also need to remember that these treatments and other products need to be tried.

Finally, what to do after the outbreak. There's an international treaty called the International Health Regulations. These were developed in 1969 but they were revised after the SARS outbreak which occurred in 2003. Those regulations require all countries in the world to develop eight core capacities in public health, ranging from epidemiology (the investigation of diseases) to laboratory support, to risk communication – a whole series of issues that are deemed important to detect and respond to outbreaks when and where they occur.

The world neglected this framework. The core capacity strengthening was to be completed by the end of this year. International development agencies didn't buy into that framework, did not bilaterally help countries strengthen these capacities, and countries were left to do a self-assessment to report to WHO whether they had actually developed these. So we saw a world in which there was a treaty, there was a framework within which to work. The only country that really began to work on that was here in the UK, where there was a pairing system set up within the Commonwealth so that laboratory pairing could occur to strengthen public health laboratories.

But this is a neglected treaty which now we must require our countries to continue to implement afterwards. One hundred and ninety-four countries agreed to this treaty back in 2005, began implementation in 2007, and it's been neglected.

So there are ways forward. There are ways at present. I think we all have to be optimistic. With the right strategies and the right leadership at the national level and at the global level, this outbreak will be defeated. Thank you.

David Harper

Thank you, David. That's a very good way to conclude the panel presentations. Now it's over to you all for your comments and questions.