International Network for Government Science Advice

INGSA WORKSHOP MATERIALS

PANDERIA:

Pandemics, panics and international borders

Writing team: Kristiann Allen, Peter Gluckman and James Wilsdon

DOCTOR READS A PATIENT'S CHART

PANDERIA:

Pandemics, panics and international borders

Note: materials in this case are fictional and should not be taken to represent real-life people, places or events.

A new highly infectious disease, labelled African Forest Respiratory Encephalitis (AFRE), is spreading across Western and Central Africa. So far it has claimed 6,500 lives of which 4,000 have been in the country of Panderia. AFRE is thought originally to have been transmitted to people from the now-endangered red-backed forest baboon, and is now spreading through human-to-human transmission. This transmission is happening most likely through droplet spread, as the disease starts with a respiratory infection. Within 24 hours it becomes encephalitis, which is often fatal or which can leave individuals with neurological damage. On social media, #KickoutAFRE is now a rallying cry. People in Africa and outside have created Facebook groups as tools for public awareness and advocacy, posting infographics on AFRE prevention and sharing information. The Centers for Disease Control (CDC) and the World Health Organization (WHO) work with these groups to disseminate as much accurate information as possible.

Background and context

Average fatality rates from AFRE are around 50%, but can vary from 25% to 90%. The mortality rate is higher in women than in men, especially pregnant women. Community engagement is important to controlling outbreaks, through a package of interventions: case management, use of face masks, surveillance and contact tracing, a good laboratory service, safe burial practices and social mobilisation. Early supportive care with rehydration has been shown to improve survival. There is as yet no licensed treatment to neutralise the virus but two candidate vaccines are under development thanks to rapid deployment of international funds and expediting the ethical review processes for human trials.

Efforts to tackle AFRE also have to contend with the power of social media. Claims of cures and panic-inducing conspiracy theories have often followed sudden outbreaks of diseases generally. The conversations about AFRE are no exception. Facebook, Instagram and Twitter are prominent in African cities, but inaccurate information is worse than no information at all. For every social media post pushing accurate information, there seems to be another one about all manner of supposed cures, or rumours that poisoned water, not AFRE, are causing people to die. The social media conversation has become chaotic, with politicians, experts, NGOs and community leaders all trying to be heard. Confusion and rumour have made it harder for health care workers and government officials to combat the outbreak. In Hamudu, a Panderian regional capital, medical staff were chased away by local residents who feared that their infected relatives would be taken away for treatment, but would never return.

The dilemma

The Chief Medical Officer of Panderia is working hard to disseminate accurate information. She acknowledges that: “Lots of people are really scared and not getting proper information about what happens in the treatment centres. They see people going into the hospitals and coming out in body

bags." Some are turning to traditional healers in a bid to combat the disease through prayers and exorcisms, rather than medical science. Also, unscrupulous merchants are selling "AFRE vaccines" at extortionate rates. These supposed vaccines are made from limes and onions.

Five days ago, a rumour began to circulate on social media that drinking hot water with considerable amounts of added salt could prevent AFRE. Already, excessive salt consumption in the summer heat has led to 38 deaths and 140 hospitalisations in and around the most affected regions of Panderia.
"In situations like these you have two choices", said the Chief Medical Officer in a widely publicised interview. "You can refute the rumours one at a time or you can try and affect the overall information environment by providing information about the scientific evidence repeatedly."

She has taken to hosting chats on Twitter, but is also focusing on the more traditional media. Her network of experts, supported by various international agencies, have appeared on local Panderian radio stations, distributed posters and done outreach on AFRE prevention, transmission, and signs and symptoms. Alongside this team, the mayor of Hamudu has now appointed a "rumor manager" to dispel myths about fake cures that are spreading through the city.

The role of scientific advice

You are the chief scientific advisor of Proxeria, a small neighbouring country. It is believed, that the pandemic has not yet reached Proxeria owing to the largely mountainous and forested border between the two countries. Historical tribal differences between the two countries have largely discouraged inter-migration. However a group of more than 40 migrants from Panderia have managed to enter Proxeria at an illegal border crossing. Thirteen of these new arrivals have been found at the central bus station, but others have already secured accommodation with personal connections in the country.

Seven of the Panderian migrants at the bus station now have respiratory symptoms. Mass panic is breaking out and a new hashtag is trending in Proxeria: #KickoutPanderians. You and the Proxerian chief medical officer are called to an emergency meeting of Proxeria's Cabinet. What are the considerations that you will have to take into account in the discussion?

GROUP EXERCISES

Exercise 1: Group discussion

What issues does the Science Advisor need to consider in preparing response?

- Communication of complex science
    - What are the top messages to Cabinet? How should complexity and uncertainty be communicated?
    - How might messages and communications techniques evolve over the course of the pandemic?
    - What is the role for social sciences in this case? How can insights from social sciences support appropriate communications?
    - How can social media be used to best effect.

- Role of the Chief Scientific Advisor in emergencies
    - How does the urgency of the situation affect the impact and reception of science advice?
    - What are the elements of knowledge brokerage that come into play and how are these affected by the urgent context?
        - What we know
        - What we do not know
        - Risks of action or inaction
        - Alternate approaches
        - Trade-offs

- Cross border considerations
    - How might the international nature of the issue affect the role of the Chief Scientific advisor in this case?
    - What other sectors and stakeholders should be engaged? What is the role of the Science advisor in such engagement?

- Other considerations?

Exercise 2: Role-playing

Listed in no particular order, the following perspectives (participants may identify others) have been outlined for use in a role playing exercise. Participants are divided into groups and encouraged to both consider the perspective of various actors as listed, but also what the science advisor or advisory body might do in each situation.

Perspective 1: Proxeria's Chief Scientific Advisor

- What perspectives and considerations should be reflected in any advice given to? How would you structure your advice?
- To what extent would you reach across the national border and engage with Panderian officials?

- To what extent would you engage with social and traditional media? What are your key messages?
- Are there limits to the science advice (e.g. policy considerations about the legal status of the Panderian's in your country)?

Perspective 2: Government (Panderia and Proxeria)

- Panderian officials, already overwhelmed by the public health emergency in their own country have been contacted to repatriate the illegal Panderians who have crossed the border. How would they handle the request from the neighbouring government? What are the considerations for officials on both sides of the border? What scientific knowledge need might come into play (e.g.: incubation period of the disease, quarantine procedures, respective health management strategies and lessons to share etc).

Perspective 3: International Health community

- You are the UN Resident Representative in Panderia and have been in touch with your counterpart in Proxeria. You are both liaising regularly with your respective government interlocutors. How would you integrate local science advice into your planning of the UN response in the two countries? What are your primary knowledge needs from the Science Advisor (e.g. social science insights, demographic trends and population patterns?)
- How would the science advisor best engage with UN partners?

Other perspectives?

PHOTO CREDITS

COVER: Doctor reads a patient's chart. Credit: Kendra Helmer, USAID, public domain. http://www.public-domain-image.com.

International Network for Government Science Advice

ABOUT INGSA

INGSA provides a forum for policy makers, practitioners, academies, and academics to share experience, build capacity and develop theoretical and practical approaches to the use of scientific evidence in informing policy at all levels of government.

INGSA's primary focus is on the place of science in public policy formation, rather than advice on the structure and governance of public science and innovation systems. It operates through:

- Exchanging lessons, evidence and new concepts through conferences, workshops and a website;
- Collaborating with other organisations where there are common or overlapping interests;
- Assisting the development of advisory systems through capacity-building workshops;
- Producing articles and discussion papers based on comparative research into the science and art of scientific advice.

Anyone with an interest in sharing professional experience, building capacity and developing theoretical and practical approaches to government science advice is welcome to join INGSA.

By signing up to the INGSA Network you will receive updates about our news and events and learn of opportunities to get involved in collaborative projects.

Go to http://www.ingsa.org for more information.

INGSA has been supported by:
The Wellcome Trust ● New Zealand Ministry of Foreign Affairs and Trade ● Royal Society London

ICSU
International Council for Science

INGSA operates under the auspices of ICSU. The INGSA secretariat is currently hosted by
The Office of the Prime Minister's Chief Science Advisor, New Zealand
PO Box 108-117, Symonds Street, Auckland 1150, New Zealand.
Tel: +64 9 923 9270; Web: www.ingsa.org; Twitter: @INGSciAdvice