

BRIEFING PAPER

June 2017

Put social science at the heart of public health research



The challenges facing the world are complex, diverse and interconnected. Globalisation, population growth and high migration mean the global community is increasingly linked and interdependent, and, in a world on the move, diseases spread more rapidly. These interconnections make it more vital than ever to diversify the knowledge and experience mustered to tackle disease: as well as biological and environmental sciences, knowledge about human behaviour and risky practices is crucial. SACIDS – the Southern African Centre for Infectious Disease Surveillance – is leading disease research in Africa that puts social sciences at the heart of its work and One Health approach. This work is vital to public health, wellbeing and economic success in Africa, and the organisation calls upon governments across the continent to engage and support it.



Introduction: dangers of neglecting the human factor

When disease outbreaks occur, the usual response is to send in emergency health response teams and epidemiologists. This response tends to overlook knowledge that is crucial to understanding and controlling disease: the social sciences.

The Ebola crisis of 2014-2016 provided new evidence of why it is so important to consider human behaviour when studying disease and attempting to control outbreaks. In the early stages of the crisis, little attention was paid to how human behaviour and attitudes shaped people's response to the disease and so how it spread.

Certain local practices exacerbated the spread of the disease: funeral rites often involved touching the deceased, enabling disease to spread; many people were reluctant to abandon these practices when instructed to by health teams.

Yet the epidemiologists and emergency teams working on the epidemic were not trained to notice or investigate these details.

As time went on, it became clearer that responding to the disease called for engaging better with local ideas and practices and understanding how these might shape people's response to the disease.¹ This would require a combination of local knowledge and trained social scientists.

This is just one example of a disease outbreak

where failing to take into account human behaviour and local attitudes can pose huge problems when trying to control a disease outbreak or prevent future outbreaks.

There are many more: outbreaks of zoonotic disease in Maasai communities, for example, are often affected by cultural practices like consuming semi-cooked meat or drinking unpasteurised milk.

Putting social sciences at the centre of research and emergency response

Unless researchers and emergency response teams understand how human behaviour affects disease outbreaks and the spread of illnesses, our understanding of disease and our effectiveness in controlling it will be severely hampered.

Social sciences are vital to making disease control and prevention more robust and effective.

Yet many countries, organisations and emergency health teams still neglect this vital area.

The Southern African Centre for Infectious Disease Surveillance (SACIDS) is committed to One Health, an approach that brings together different disciplines and sectors, including social science, to improve the detection, identification, control and prevention of disease.

It now calls upon governments and research organisations to engage properly with the need to support and integrate social sciences in disease research and response

¹ <u>Managing health crises after Ebola</u> (SciDev.Net, 29 April 2015)



programmes.

Since 2008, SACIDS research projects have brought together social scientists and medical experts to work hand-in-hand on analysing disease and devising solutions to control it.

"SACIDs has been [...] bringing in a more subtle appreciation of social and behavioural medicine and of the relative health status of Africa and African people and animals and its true disease and health challenges."

– Richard Kock, Professor of Wildlife Health and Emerging Diseases, Royal Veterinary College, UK

Creating knowledge exchange with the Maasai

SACIDS has done extensive work with the Maasai of northern Tanzania and Kenya. The unique culture of the Maasai includes practices and behaviour that affects the spread of disease. For example, the Maasai tend to treat their cattle with western medicine but themselves with traditional



medicines, like eating certain roots to induce vomiting. They frequently drink unpasteurised milk and eat semi-cooked meat, both sites of potential transmission.

SACIDS research shows that the concept of zoonotic disease that moves between animals and humans is another idea the Maasai can struggle with. Cows are held in such high regard that if medical experts place all blame for a disease outbreak on the cattle, then the Maasai can reject this idea. If experts frame the problem as affecting both livestock and humans, this idea is more acceptable to them.

Unless you employ social scientists and engage local knowledge properly, medical teams often won't come into contact with, let alone understand, such ideas. And this then affects the effectiveness of research and control programmes.

A more subtle, sensitive approach to local ideas and how they affect disease outbreaks and prevention is vital.

Working with the Maasai and listening to their views properly also helps researchers build a clearer idea about public health, disease and climate in East Africa. The Maasai are able to draw on centuries of indigenous experience and knowledge: much of this is invaluable knowledge that researchers should listen to and learn from.





Recommendations

Governments need to do far more to invest in social sciences and support One Health research that brings natural and social sciences together to tackle problems. For many years, African universities have reined in the focus on social sciences, preferring to fund hard science and engineering. If African countries are to tackle their own problems effectively, they must do more to fund social science and systems that enable knowledge exchange between local people and researchers.

5 recommendations for governments:

- Take social sciences seriously. They are not 'soft' subjects to be easily ignored. As the Ebola crisis reaffirmed, knowledge of human behaviour and how it shapes response to disease is vital to controlling and preventing disease, and to many other issues
- Invest in social sciences at tertiary level. Tertiary education and research has been neglected for too long in many African countries. Stronger research will equip African countries with the knowledge to improve public health, wellbeing and economic security
- Support initiatives on One Health, both existing and new initiatives
- Ensure government and regional science and innovation strategies include social science as well as hard sciences
- Support programmes that work with local communities to ensure their voices, views and knowledge is heard and integrated into research and response. These could include supporting focus groups and or engaging with citizen science

Notes to editors:

- <u>SACIDS</u> (the Southern African Centre for Infectious Disease Surveillance) is a virtual centre with a physical base at the Sokoine University of Agriculture in Tanzania. It was established in 2008.
- Funders: Wellcome Trust Grant WT-087546/Z/08/D and IDRC Grant 107030-001
- All photographs © Ivan Gonzalez
- Written by Imogen Mathers from imogenmathers.com
- For more information, please contact Yunus Karsan on <u>yunus.karsan@sacids.org</u>