

Richard Horton on the need for a knowledge revolution in health

*The text below is a summary of a live interview with [Richard Horton, the editor of *the Lancet*](#). Horton was interviewed live, following [his address](#) at the [2018 Norwegian Global Health Conference](#), "Health system strengthening: Health for all revisited" hosted by the University of Oslo, 10-11 April, 2018.

Podcast: [Listen to Richard Horton](#).

Q1 What knowledge (type of knowledge and topics/subjects covered) do we need to prepare us for the current and future challenges in Global Health?

A knowledge revolution in health.

We need to pay enormous tribute to biomedical sciences for creating the fundamental knowledge base that drives modern health care. It is one of the most incredible achievements of human kind.

There is no other species on our planet that invests as much in health as the human species. It is a crucial legacy. However, it may be that what we are now seeing a kind of "law of diminishing returns" in terms of investments in biomedicine.

We need to begin to think much more broadly about the knowledge we require so that we not just improve but sustain the gains that we have made in health. We need to re-think what we mean by "knowledge". We need a knowledge revolution in health.

More disciplines, more inter-disciplinarity

I really mean two things. Firstly, we need to broaden the subjects that we incorporate into what we mean by health sciences. I am particularly concerned with the fact that we do not take into consideration a broader political context. To me, it has been demonstrated historically that the political, economic and social dimensions of health are very important. I feel that we are forgetting those lessons. For example, the 19th Century sanitary movement in Britain provided a real stimulus for health beyond what was going on in laboratories. The balance has changed today, and we need to re-think the role of politics and economics in health.

Secondly, we need to think beyond disciplines as silos. We need to think about the inter-disciplinarity of how these other dimensions work with the existing health sciences. We really "talk a good talk" about inter-disciplinarity in scholarship, but we do not practice it. In fact, if you look at funding bodies today, you will see them highlighting inter-disciplinarity, but each decision they make is very, very silo-driven.

For me, these two areas, bringing in more disciplines and having them work together, are critical for creating the knowledge base for the future.

(time code 2:30) Q2 How do we use the current knowledge available (all the Lancet commissions, systematic reviews and high impact literature, etc) to synergise, align and corroborate to improve our systems, governance and 'one health' (i.e. human, animal and environment health)?

I think that the way that we use knowledge today has arrived at a stage where it has become "science for science's sake". We produce scientific knowledge more for the benefit of the scientist or the scientific institution than for society. I think we have to think about how we use knowledge in a better way.

Accountability

There is a very powerful, underexploited dimension of science. I would summarise it in a single word: accountability. Accountability means holding people's promises and commitments to account. If you think about this in health terms, many stake-holders make promises: governments, professional associations, civil society, the private sector. One can ask, are they delivering on all these promises?

If we think about what accountability is, I think it involves three things. Firstly, you have to be able to measure whether somebody has actually done what he or she said they were going to do. That measurement is essentially a scientific process. If a government has committed to improving maternal and child health, have they? If the private sector has committed to changing its products to reduce salt in the diet, or to take out sugar-sweetened beverages, have they? These are scientific questions, which are measurable. Science involves the monitoring and measuring at the beginning of the process of accountability.

The second element of accountability to consider is review. In other words, bringing people together in a transparent, participatory way to look at the evidence that has been created around a particular issue, to talk about what it means. It is more than scientists creating the evidence and walking away; it is scientists creating evidence and taking it to government, taking it to the other actors in society and forcing them to discuss what that evidence actually means. In other words, if the government is committed to improving something in health and society, what does their record show? Let us sit down and discuss it.

Monitoring, review, action.

The third element involves "what do I do about it"? It includes an action, a remedy, a solution. If you think about the process of accountability, there are three dimensions: monitoring, review, and action.

Science is absolutely critical to this process. The commissions we have done, for example, summarising the evidence that has been created by the scientific community. Our purpose has been to create a foundation of knowledge; to hold the actors in society accountable for what they have said and what they plan to do. It involves thinking about science, not as a technical enterprise, but as a political enterprise – but political with a small "p".

(time code 6:03) Q3 The current focus of investment for different high-income countries can seem somewhat uni-directional - i.e. Germany and UK is focused on neglected tropical diseases, Germany and Norway is investing in CEPI and global health preparedness/EIDs, US - infectious diseases, Gates is, of course, focused on technological solutions. Can you comment on how these may be leveraged on to improve health in the most efficient and beneficial way for the global community?

In a perfect world, you would have a global fund for everything. You would have one financing facility where every government, every private sector organisation, every donor foundation – whatever it was ... You would put all this money into one financing pot.

Then, this amazing group of technical experts would decide how the money would be spent across the entire planet. This, however, is never going to happen.

In some ways, it should not happen, because the tremendous advantage of having different countries, different entities, focusing on different things is you get enormous plurality and diversity. A disadvantage, however, is that some things are missed out. We need to be vigilant to keep prodding and pointing at issues that are being marginalised, or stigmatised, or excluded. Another advantage is that you can have fantastic opportunities for innovation, for example when a particular country takes a particular initiative. Norway did this with its efforts under the Stoltenberg government to collaborate with the Gates Foundation on the issue of global vaccination.

Political will and financial investment can transform health.

If it had not been for the Prime Minister of Norway, a leading European country, championing the issue of vaccines, speaking about it publically and then committing politically and financially, the Global Alliance for Vaccination and Immunisation (GAVI) would not have been as successful as it was. It could not have worked with just the money from the Gates Foundation. Prime Minister Stoltenberg's actions were transformational in terms of getting other nations to take the issue seriously.

Out of the GAVI alliance came the global focus on maternal and child health. This example represents only one dimension of Global Health, but that leadership clearly demonstrates how the two elements of political will and financial investment can transform an issue. At the beginning of the 2000s the area of women's and children's health was a "no go" zone. By the end of 2010 – in just one decade – interest in this area led to it being the focus of Ban Ki-moon's "every woman, every child" initiative.

Tens of billions of dollars were invested in women's and children's health, thanks to this transformative commitment and judicious leadership. This makes me very optimistic about what we can do with other initiatives. It demonstrates that you can be transformative when you have these two things, the politics and the money, coming together in such a virtuous way.

(time code 9:30) Q4 How would you expand on radically redefining our notion of "we" and "one health" and extending our global conversations to strengthen our social relatedness, our communities, and the circumference of our lives and concerns?

I think that one of the challenges we face today is that at one level our species has become so incredibly powerful and successful.

We are living in an era of sustainable development, but we do not yet understand the meaning of sustainable development. I think we really need to step back and really examine what the word "sustainability" means.

Sustainable development depends on inter-generational equity.

To me it means something very different from what is being articulated today in terms of 17 goals, which are really 17 silos with associated targets that we are supposed to meet. To me, sustainable development is about a different way of thinking about the world entirely. It is about recognising that sustainable development is about the future as much as it is about the present.

Within the concept of sustainable development, we think about equity, or the idea of "fairness", which is not just about fairness for the people in the world living today, it is about fairness for people living in the world in the future. It is about inter-generational equity. How is what we do today going to affect people in the next generation? We are not thinking along these lines at all. The SDGs do not encourage us to think this way. For the SDGs, 2030 is the goal. I think that is too close. We need to be thinking about what happens in 2050 and 2100 and we need to adjust our actions accordingly.

"We"

A second challenge we humans face is to be thinking about the relationship we have with the rest of the living world. The future is not just about the human species, and its hubris and narcissism. We need to reflect on what paper after paper after paper, is telling us - that human health, our well-being, totally depends on other species. Bio-diversity has given us the strength to be so successful as a species.

It is not human beings living in an abstract, isolated little box, that has enabled us to be so powerful as a species. It is the fact that we draw on other eco-systems, other species, not just animal life, but plant life as well, that we have been successful. If we destroy these eco-systems, we will become weaker and weaker and weaker until we will wither away as a species.

We have to re-conceptualise our relationship with the whole biosphere, and not just the living world, but our relationship with the physical world as well. We need to reflect about how we relate to the entire planet, which is not an inert mass of rock, but a dynamic system in and of itself. We need to put all that in the context of the political, economic, and social systems that we have created and reflect on how we have constructed our civilisation. The results of this reflection will determine our future.

Reconceiving the notion of who we are

In any museum in any city, you can learn about civilisations that have come and gone in the past. Our civilisation may do the same because we killed our environment, we did not understand our fragility, we did not understand the perils of our economy, and we did not work together as countries in a cooperative manner in order to create a sustainable future. In short, we did not put inter-generational equity at the heart of what we do.

This is the meaning of sustainability. It is radical. It is transformative. It is almost revolutionary in the way we need to think about our species and the world today. This is the big challenge for our species. Our survival depends on reconceiving the notion of who we are.

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