One Health 13 (2021) 100356

Contents lists available at ScienceDirect

One Health

journal homepage: www.elsevier.com/locate/onehlt

Reflections on One Health leadership training needs for the 21st century

Craig Stephen [a,*], Chris Oura [b]

[a] McEachran Institute and School of Population and Public Health, University of British Columbia, Canada
[b] School of Veterinary Medicine, The University of The West Indies, St. Augustine, Trinidad and Tobago

ARTICLE INFO

Keywords:
Leadership
Wicked problem
One Health
Training

Imagine a future where we can equitably balance the health needs of people, animals, ecosystems, and generations, such that the health of all is protected and promoted and the unanticipated or undesired effects of global changes can be prevented, mitigated, or adapted to. Then ask, what type of leadership is needed to get there? We have struggled with this question over the past decade while developing and delivering leadership courses in One Health, climate change and health, and wildlife health in North America and the Caribbean. This essay reflects on some issues we confronted while designing and delivering these courses.

1. One illness vs One Health

The typical entry point to One Health, especially in the COVID-19 era, is through prevention and management of the illnesses caused by zoonotic diseases. Illness is the impact of disease on functioning, relationships, and interactions and reflects the impacts beyond pathophysiological effects. Much One Health effort addresses diseases and illnesses as complicated but definable puzzles that have well-defined goals and can be scientifically or technically solved. However, gaps in information and the elusiveness of finding the 'one right answer' due to the complexity of many 21st century health issues, leaves room for different interpretations of the best course of action. The factors influencing health are context dependent and dynamic [1]. There is no technical solution to ensuring health equity across species and generations (i.e., truly One Health for all). One Health problems are not simply health problems. They are often deeply complex social problems that sit across and between different government departments, disciplines, and values. Attempts to deal with them through a single disciplinary or institutional framework have had histories of inadequacy. No longer is it possible, or advisable, to 'just let the science" lead the way. One Health leaders cannot treat the latest health challenge of the Anthropocene as a new puzzle that can be scientifically or technically solved and expect sustainable and acceptable solutions. They must be able to thrive at the intersection where science meets the human dimensions of interspecies and intergenerational health equity.

2. The social reality of solutions

Health is a social construct with diverse stakeholders understanding it differently. One Health problems are a constellation of problems that that are linked within a unique context. Global health challenges are intractable problems that are interconnected with other problems and require people to match their mindsets and behaviors to the challenge of working in complex systems. Each of these aspects of health is socially complex, so working on them is fundamentally a social process that requires highly creative solutions. There are many areas of study and policy that struggle with the reality that a mechanistic approach to pressing health issues has insufficiently translated scientific discovery at the rate and scale needed to inspire or sustain actions against complicated and persistent problems like pollution, endemic infections, extinctions, and inequitable access to ecological services. To overcome this, One Health must grow from its origins as an interdisciplinary approach to veterinary public health issues. The 21st century world is not interdisciplinary it is 'interprobleminary" [2]. It is made up of multiple, simultaneous assets, deficits and problems that interact to pull us closer to or further from critical tipping points. "The future is an emergent property shaped by individual and collective choices,

* Corresponding author.
E-mail addresses: craigstephen.pes@gmail.com (C. Stephen), Christopher.Oura@sta.uwi.edu (C. Oura).

https://doi.org/10.1016/j.onehlt.2021.100356
Received 2 November 2021; Received in revised form 18 November 2021; Accepted 30 November 2021
Available online 4 December 2021

decisions and actions at all levels, and influenced by biophysical constraints" [3]. Emerging diseases, the extinction crisis, climate change and other grand challenges are not just microbiological, ecological or pollution events. They are the results of the constraints we place on human decisions and choice that are shaped by our social and environmental circumstances. These decisions and choices are made in an 'interprobleminary' way wherein people trade-off multiple, interacting needs and expectations to formulate their responses and, therefore, affect future states. One Health leadership needs to be able to facilitate the circumstance that enable healthy decisions within the reality of interacting problems and opportunities that pull us to our decisions.

The proliferation of allied approaches such as ecosystem health, Ecohealth, conservation medicine, One Health, and planetary health speaks to the quest to better translate discoveries into actions that lead to a safer world. All these approaches advocate for a systems approach, yet it remains very challenging to translate the abstract ideas of complex dynamic systems into competencies that help leaders influence and enable others to accept collective responsibility for their collective problems and to act with collective purpose [4]. Successful leadership training for the Anthropocene must build adaptive capacity and creativity in systems or collectives and not just in individuals [4].

3. What does successful leadership look like?

It has been posited that the world responds to problems in three stereotypical ways: as "permanent crises, where the only viable responses are decisive commands; or permanent tame problems, where the only viable responses are to keep rolling out the same process that led you into the problem in the first place; or permanent wicked problems, where the only viable response is to delay decision-making while you engage in yet more consultation and collaboration" [4]. Successful One Health leaders will need to challenge these stereotypes and be able to unfreeze us from the status quo to inspire and mobilize action for all types of problems.

Most evaluations of leadership programs focus on the individual learners' attitudes (e.g., did they like the program and feel it was helpful), and changes in their attitudes, knowledge, and skills post-training. Rare are evaluations that assess if or how trainees apply what they have learned to change outcomes in the teams or systems in which they are leaders. Amidst the explosion in leadership training opportunities, there is growing opinion that a competency-based approach to cultivating individual leaders is not well-suited to creating leaders capable of enabling and empowering changes suited to the Anthropocene [4,5]. Commonly taught leadership competencies reflect what has been done in the past [5]. Much of this may be valid in the future, but there is usually no basis to decide what will and will not be relevant because of the uniqueness and 'interprobleminary' connections that are changing at a global level at unprecedented rates. A competencies-based approach has not been shown to be future-ready [5]. Understanding what successful leadership looks like will need both clarity of how to judge success (ex. by leader attributes or outcomes) and longitudinal evaluation of the impacts of training.

4. What do trainees want?

Our impressions of leadership training needs are biased by the cohorts with which we have worked. Our programs have targeted professionals working in different sectors rather than undergraduate or graduate students. These people have been less interested in traditional forms of power and policy and more interested in making change. They have been frustrated with the emphasis on understanding change - its origins and impacts- rather than on helping make it easier for people to make decisions that are good for people, places, and the planet. Participants have wanted opportunities to practice what has been learned, benefit from peer-to-peer learning, and incorporate their shared experiences into learning opportunities. They were interested in learning-by-doing and needed to see their experiences and knowledge respected and relevant. At their core, there was a desire to solve problems that are relevant to their work, their lives, and their countries. Their experiences bring in tacit knowledge and context to complement more generalized and didactic teaching. This helps to contextualize leadership lessons. These attributes bring opportunities and challenges in One Health leadership development for the 21st century.

The main opportunity is that these types of learners are primed and ready to step up to the challenge of new ways of collective, adaptive, action-oriented leadership. Many are keen on breaking status quo approaches to pressing problems encountered in their personal and professional lives rather than being hierarchical leaders. One of the biggest challenges is sustaining the zeal to lead. Many of the problems we confront today are big, messy problems that will not be solved in a person's working life. Progress can be slow and the attributable impact of one's actions are hard to tease out from other influences. It can be hard to tailor leadership lessons to the specific context of each trainee, especially when the trainees come from different disciplinary or personal backgrounds and cultures. Trying to present generic leadership lessons can re-enforce rather than challenge traditional ways of thinking,

5. Implications for One Health leadership training

The demands on and need for a new type of leadership have been said to be unprecedented in these profoundly challenging times [6]. Addressing the question of how to concurrently protect health for all species and generations is the One Health grand challenge. Leaders must confront the reality that we cannot start again and create a perfect future but instead must start working together to survive and thrive in the circumstances in which we find ourselves. They need to recognize and face up to collective problems rather than seeing themselves as *the* leader who will provide *the* answers by solving *the* puzzle. New forms of collective leadership capable of inspiring actions in the face of uncertainty, ambiguity, complexity, and conflict are needed to move away from crisis management to creating the circumstances for health for all species and generations. This may require a shift from building individual leaders to enabling and empowering teams and collectives to build and sustain the necessary relationships and capacities to empower individuals, institutions, and governments to tip critical tipping points in favour for all.

In the complex world of wicked One Health problems, leadership is not about getting the right things done. It is about getting the right things done, in the right way, in the right places, for the right people (7). It is beyond our capacities to prescribe the path forward in an evidence-based way, therefore, we recommend 3 next steps. First, we need to build the evidence base that leadership training results in sustained leadership that results in sustained changes. Second, we need to refocus from competencies to capacities [5]. Leadership competencies focus on filling deficits in peoples knowledge and skills whereas capacity building supports individuals talents and builds their networks and relationships so that they can continually improve their performance and adapt and cope with changing circumstances. One Health leadership training must help people exploit their assets and experiences and find ways to make the most of collective, but diffuse skills and wisdom distributed throughout their networks in order to create collective influence across the many dimensions of One Health problems. Third, we need to invest in longitudinal training that allows mentorship and support for ongoing leadership development and relationship building necessary to maintain enthusiasm and ability to lead.

Funding

This work was supported in part by the University of Saskatchewan Global Community Service Fund.

Declaration of Competing Interest

The authors declare no conflicts of interest.

References

[1] C. Stephen, Whose health? in: C. Stephen (Ed.), Animals, Health, and Society: Health Promotion, Harm Reduction, and Health Equity in a One Health World CRC Press, 2020, pp. 17–23.
[2] C. Stephen, Collective global amnesia. One Health's greatest challenge, Can. Vet. J. 62 (12) (2020), 1345.
[3] X. Bai, S. Van Der Leeuw, K. O'Brien, F. Berkhout, F. Biermann, E.S. Brondizio, C. Cudennec, J. Dearing, A. Duraiappah, M. Glaser, A. Revkin, Plausible and desirable futures in the anthropocene: a new research agenda, Glob. Environ. Chang. 39 (2016 Jul 1) 351–362.
[4] K. Grint, The cuckoo clock syndrome: addicted to command, allergic to leadership, Eur. Manag. J. 28 (4) (2010) 306–313, https://doi.org/10.1016/j.emj.2010.05.002.
[5] J. Edmonstone, The challenge of capability in leadership development, Br. J. Health Care Manag. 17 (12) (2011) 572–578, https://doi.org/10.12968/bjhc.2011.17.12.572.
[6] J.T. Ryan, S. Jones, P.A. Hayes, J.M. Craig, Leadership evolution for planetary health: a genomics perspective, Challenges 10 (1) (2019) 4, https://doi.org/10.3390/challe10010004.