

The One Health EJP contribution to science, health policy and society

Impact on society



Moderator:
Wim Van der Poel
WUR

“Reflections on the Social Sciences in One Health”
Spencer Moore
WUR





Reflections on the Social Sciences in One Health

Spencer Moore, PhD, MPH
Wageningen University & Research

One Health EJP Final Meeting

Paris, 11-12 September 2023



Overview

- Social science contributions to the study of human health
- Integrating the social sciences into One Health
- A few challenges to consider

The social sciences and health

- Social Science
 - *Any branch of science that systematically studies the social world, investigating how humans interact with each other and their environment.**
- Medical Sociology
 - *The branch of sociology concerned with the social construction, causes, and effects of disease and health.**
- Social Epidemiology
 - *the branch of epidemiology concerned with the way that social structures, institutions, and relationships shape health and the distribution of health*

Implications of social sciences approaches

- Expands the notion of health from one based on the presence or absence of disease to a more holistic one in which health is viewed as a state of complete physical, mental, and social wellbeing.
- Highlights the role of context in shaping people's risk to disease and ill health.
- Shifts focus away from individually-proximate clinical and biomedical explanations of disease to the socially-distal structural and environmental influences on human health and wellbeing.

Shifts the question from the individual to the population level

Instead of asking:

“Why did this person get this disease at this time,”

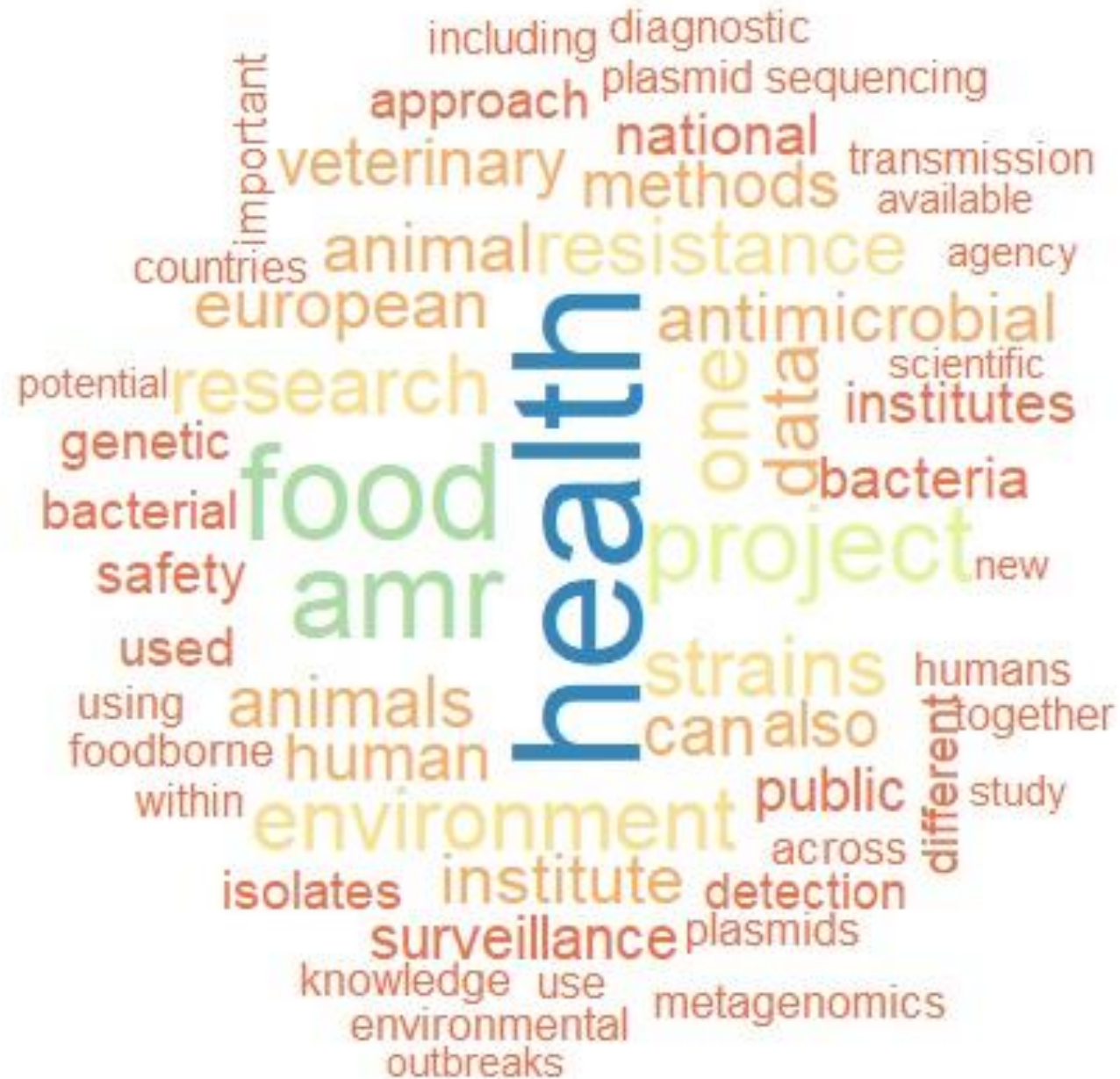
population approaches ask:

“Why do some populations have high rates of disease and others have low rates?”

- Geoffrey Rose, The Strategy of Preventive Medicine

Integrating the social sciences into One Health

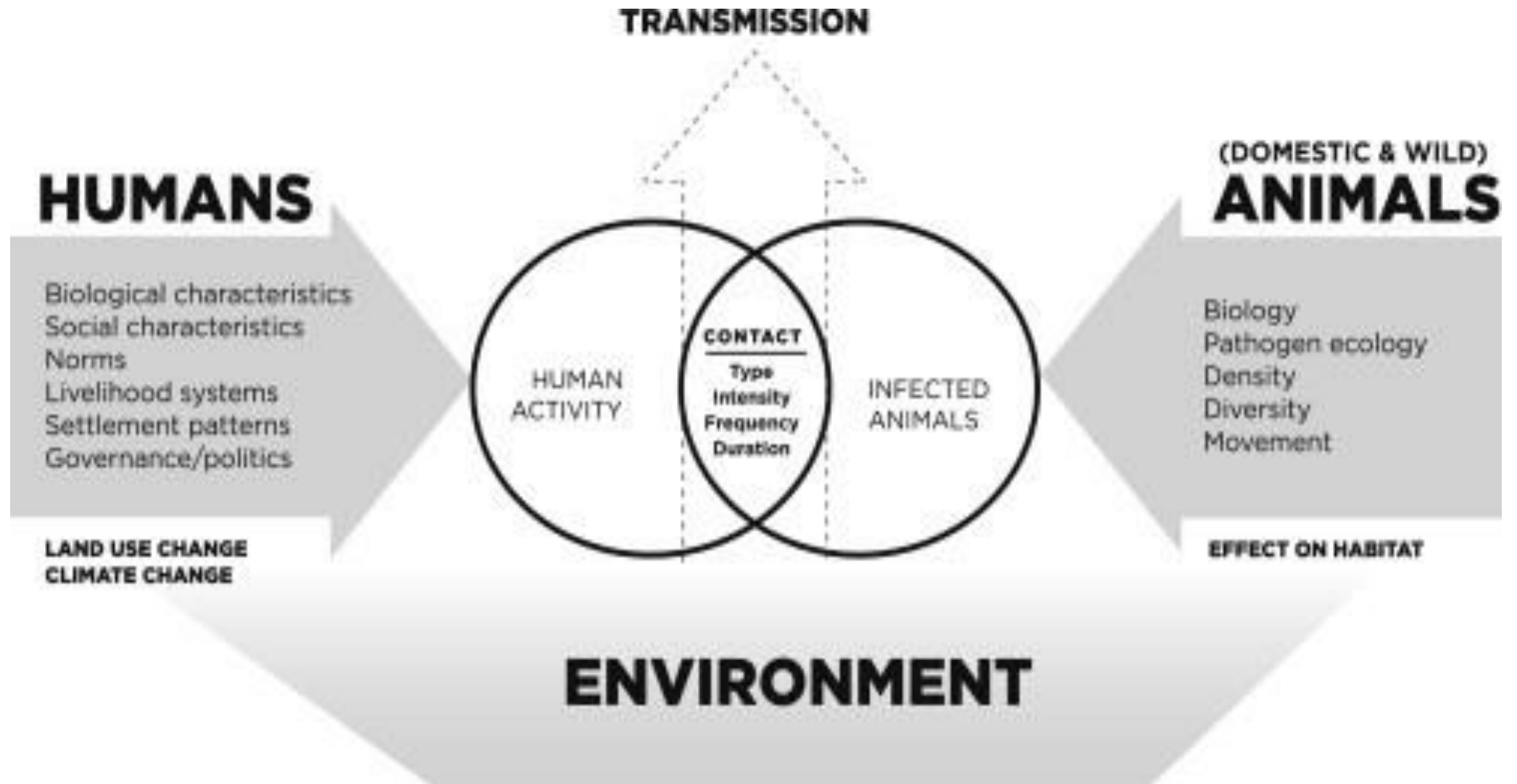
Project Impact Brochures



Integrating the social sciences into One Health

- The question of human behavior and practices and the environment are less present than the issues of human and animal medicine. (Estabanez and Boireau, 2022)
- Making space for new types of knowledge (scientific, local, non-human) (Estabanez and Boireau, 2022)
- Identifying and characterizing vulnerable populations, and the high-risk behaviors and practices for disease transmission from animals to humans (Richard et al. 2020)
- Consideration of policy and structures need for a integrated and deliberative governance approach.

Woldehanna, Zimicki. An expanded One Health model



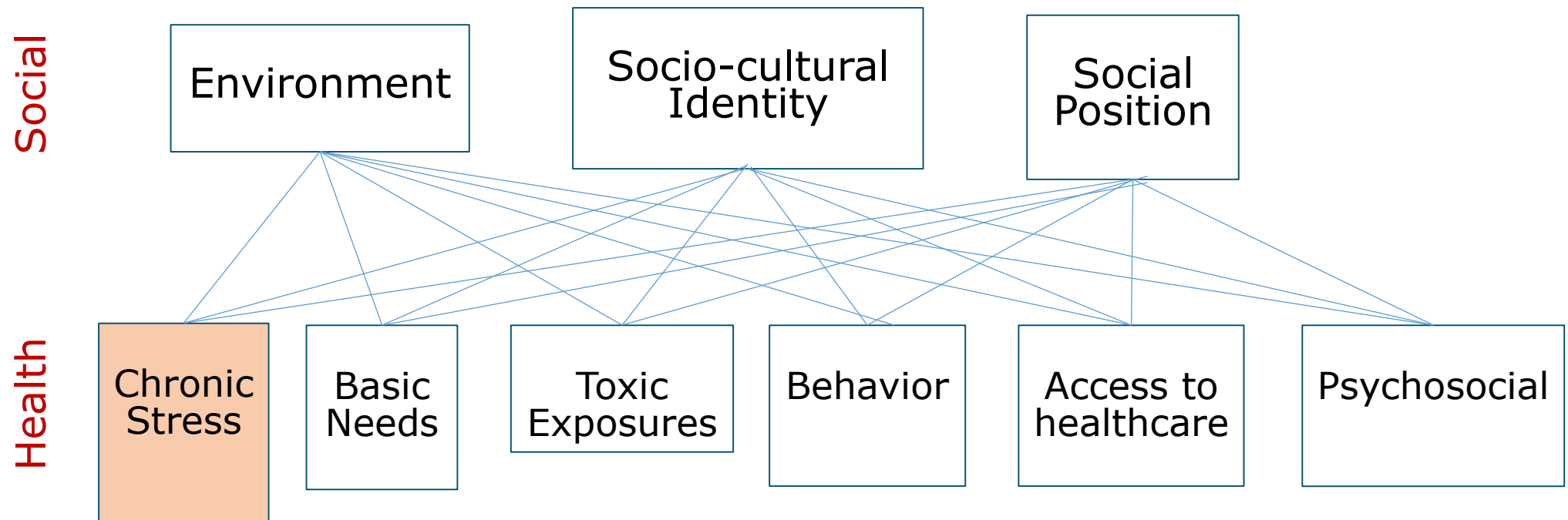
A few challenges to consider

Understanding context

- Social structures, cultural beliefs, food practices, etc. may pose different formulation of what context means and implies for zoonotic risk, AMR, and One Health programs.
 - *Recognize that one size does not fit all and the importance of creating best practices rather than generalized principles.*
- Social and environmental influences (e.g., norms, land use patterns, gender inequalities) may operate through different causal pathways with diverse mediating and moderating variables.
- Not only variation in pathways across geographic space, but pathways may differ in time and among particular groups in a society.

Linking the social to the biological

- How do social influences “get under the skin”?



Need for complexity approaches

- Conventional epidemiological methods (e.g., case-control, RCTs, associational studies) are limited in being able to assess these multiple and time-dependent pathways.
- Standard regression methods prioritize linearity and strong effect sizes at the individual level.
- Systems approaches
 - Feedback processes/cycles
 - Non-linearity
 - Multiple scales
 - Differential effects

Summary

- Thinking at the population level of why certain groups are at higher risk compared to other groups.
- Expanding the One Health portfolio to include more fully human behavior and the social environment, understanding the nature of vulnerability, and the importance of governance structures.
- Recognizing the complexity of studying context and the importance of multiple tools and approaches in addressing One Health topics.

Selected references

- Estebanez J, Boireau P. One Health: A social science discussion of a global agenda. *Parasite*. 2022;29:17. doi: 10.1051/parasite/2022014. Epub 2022 Mar 22. PMID: 35315768; PMCID: PMC8939297.
- Richard L, Aenishaenslin C, Zinszer K. Zoonoses and social determinants of health: A consultation of Canadian experts. *One Health*. 2020 Nov 28;12:100199. doi: 10.1016/j.onehlt.2020.100199. PMID: 33335969; PMCID: PMC7733021.
- Woldehanna S, Zimicki S. An expanded One Health model: integrating social science and One Health to inform study of the human-animal interface. *Soc Sci Med*. 2015 Mar;129:87-95. doi: 10.1016/j.socscimed.2014.10.059. Epub 2014 Nov 1. PMID: 25464873; PMCID: PMC7115783.

Thank you for your
attention!



@OneHealthEJP



/company/h2020-One-Health-EJP



OneHealthEJP.eu