Can the scientific world positively influence decision makers on planetary health?

The 2017 G7 Health Ministerial Meeting was on Nov 5–6, in Milan, Italy, and for the first time the effect of climate and environmental factors on health was addressed in the agenda of the meeting. As reported in the final Health Ministers communiquè after the meeting (signed by all seven countries),[1] the delegation agreed to identify and promote some fundamental adaptation actions. In addition to the novelty of these subjects being in the agenda and in the final meeting documents, we believe the process that led to these outcomes is innovative and interesting.

In 2016, the Italian G7 Presidency declared an intention to address the effects of climate change and environmental degradation on human and animal health and on food systems. The G7 Sherpas circulated a preliminary concept paper highlighting, among other items, *The Lancet* Commission on planetary health.[2]

After the first G7 health experts' meeting, the Italian Presidency proposed a process to prepare for the Ministerial Meeting in November, 2017, consisting of two stages. Firstly, a comprehensive literature review that involves all the G7 health delegates and technical experts from leading international organisations that attend the meetings, and, secondly, a direct interaction with the scientific and academic world. To achieve a wide consensus on the priorities to be dicussed at the G7 Ministerial Meeting, more than 700 international experts identified by the G7 health experts were consulted via a Delphi questionnaire. This questionnaire was drafted by the technical team at the Italian Ministry of Health and a research team at the Ca' Foscari University in Venice, Italy.

This first questionnaire was based on information from international documents and articles.[2–4] The questions were organised from a matrix with the following columns: exposure: the first element the experts were required to comment on, to highlight the potential health risk exposures due to climate change; health outcome: for each exposure, potential consequences for human and animal health were identified; expert statement: to ascertain the experts' opinions on possible strategies to mitigate or adapt to the health outcome; and actions: to adapt health systems and health-service delivery systems to the specific effects of climate change.

Each of the matrix components cited official or background documents. The final matrix was agreed on via three face-to-face meetings between the G7 delegates (as well as experts from WHO, the Food and Agriculture Organization of the UN, the World Organisation for Animal Health, and the European Union) and mail consultations (via draft documents shared through a data-cloud service organised by the Italian Presidency).

This first survery round yielded over 100 proposed adaptation actions (and a few mitigation actions considering the known co-benefits) with specific reference to health systems. Priority actions from this list were identified by scientists and academics who were also requested to define the role of G7 countries in the promotion of these priorities, and to indicate the timeframe for their potential effect. This prioritisation process was done via a web-based Delphi survey.[5] On the basis of the answers collected from almost 200 experts in the first round and 130 in the second round of questionnaires, some clear and coherent messages emerged and were shown to the G7 delegation for policy appraisal and decision making (panel).

As expected, the work done with the G7 delegates and international scientists through the Delphi procedure generated recommendations that are consistent with other experts' opinions and works published in the field of planetary health.[3,4,6]

This work contributed to the first science-based draft of the G7 Health Ministerial Meeting communiquè, and to framing the discussion of policy makers within the boundaries of scientific evidence and consensus. Policy makers were provided with evidence for consideration, which was supported by several keynote presentations offered by world-leading experts and academics.

We believe the innovative preparatory work provided important opportunities to move forward on the international agenda, dealing with difficult and controversial issues.

This was an interesting and promising exercise that showed how scientists and policy makers can find common terminology and semantics

***Panel:* Main priorities suggested by international experts through the Delphi exercise**

For the G7 countries

- Support the application of the Global Action Plan on AMR in cooperation with WHO, the Food and Agriculture Organization, and the World Organisation for Animal Health
- Support the development and monitor the effectiveness of evidence-based strategies, tools, and interventions to combat AMR
- Support research associated with the strategic objectives of the Global Action Plan

For advocacy and help in the countries and regions at high risk

- Improve the resilience of the infrastructure for waste water and drinking water
- Apply vector controls as a cross-cutting issue for public health
- Support the improvement of water, waste water, and sanitation infrastructure
- Support the strengthening of health systems and immunisation programmes in the countries that have high levels of migration

For both the G7 countries and countries and regions in need of advocacy and help

- Promote policies on emission reduction (considering the co-benefits)
- Increase surveillance of infectious diseases
- Promote and strengthen integrated surveillance (including entomological surveillance)

AMR=antimicrobial resistance.

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and formulate relevant decisions. Science and politics are not familiar with joining forces and working together, especially in such high-level meetings. The Italian G7 Presidency's final communiquè[1] shows how this collaboration could become possible for future meetings too, and how a common vision could help to sustain and implement appropriate, documented, and relevant actions and bring measurable results in an otherwise purely political framework.

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The growing problem of loneliness

Imagine a condition that makes a person irritable, depressed, and self-centred, and is associated with a 26% increase in the risk of premature mortality. Imagine too that in industrialised countries around a third of people are affected by this condition, with one person in 12 affected severely, and that these proportions are increasing. Income, education, sex, and ethnicity are not protective, and the condition is contagious. The effects of the condition are not attributable to some peculiarity of the character of a subset of individuals, they are a result of the condition affecting ordinary people. Such a condition exists—loneliness.[1–3] Loneliness is often stigmatised, trivialised, or ignored, but—with the rapidly growing number of older adults in industrialised countries, the increased likelihood of premature mortality, and the deleterious effects of loneliness that have been identified in animal models and human longitudinal investigations—loneliness is emerging as a public health problem.[4] Physicians are encountering this condition, but most do not have the information needed to deal effectively with loneliness in their patients.

Loneliness has been associated with objective social isolation, depression, introversion, or poor social skills. However, studies have shown these characterisations are incorrect, and that loneliness is a unique condition in which an individual perceives himself or herself to be socially isolated even when among other people. Furthermore, human longitudinal studies and animal models indicate that the deleterious effects of loneliness are not attributable to some peculiarity of individuals who are lonely, instead they are due to the effects of loneliness on ordinary people.[1,5,6] Quick and valid measures exist that can diagnose if a patient has abnormally high levels of loneliness,[7] and although so-called common sense treatments (eg, social skills training, and provisions for social support and social contact) have proven ineffective,[8] the availability of community programmes, behavioural interventions, and online resources is increasing to address the problem of loneliness.

Loneliness is a public health problem that can be largely solved in our lifetime but doing so will require the full engagement and support of the medical community. The physical health and mental health of a growing number of afflicted individuals and their families and friends are at stake.

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Influenza vaccination and prevention of cardiovascular disease mortality

Catharine Paules and Kanta Subbarao presented in their Seminar (Aug 12, 2017, p 697) the clinical features, therapeutic options, and controversies regarding treatment and prevention of seasonal influenza infection.[1] Although they acknowledged that influenza can impair different organ systems, little attention was given to cardiovascular