Making sense of complexity: Our era's most important challenge

To the Editor,

We read the article titled "Sustainability, criticality, transition, fragility; pandemics, war, climate change and resource restriction–a recipe for the end"^[1] with great interest.

The article was indeed thought-provoking. We would like to draw attention to a few specific points of interest. People's behaviour should first start changing to better understand complex systems. The act of altering behaviour in reaction to or in anticipation of events, however, can be seen as a complex system in and of itself.

An interesting article delves into the ideas of interconnectedness, non-ergodicity and non-linear dynamics that apply to behavioural changes.^[2]

Conventional approaches frequently fall short when delving into the complexities of data analysis or developing organizational systems because they tend to ignore the critical role that interdependencies play and the significant complexity that their presence results in. Simply put, traditional methods produce a flawed and insufficient understanding of the current situation because they fail to account for the interdependence of many factors and how they affect one another. Such errors can lead to poor decisions and inefficient solutions, which can be expensive. As a result, to gain a more complete and accurate understanding of interdependencies, we must recognise their importance, account for the complexity they bring, and incorporate them into our research and design processes.^[3]

Public health is intending to place more emphasis on climate change mitigation. By addressing climate change, we can not only save the planet but also invest in the health and prosperity of our communities while also enhancing public health and general well-being. This approach may make its associated costs less alarming.^[4]

We would like to conclude by emphasizing the importance of trans-disciplinarity. The era of reductionist approaches to scientific research appears to be passing. In this day and age of constant intercommunication and interaction between disciplines, we must recognise that no area of human effort can be seen in a vacuum. To gain a more comprehensive and holistic understanding, we must recognise the connectivity and interdependence of various disciplines.^[5]

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Conflicts of interest

There are no conflicts of interest.

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