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A Wonca SIG: Systems and Complexity in Health – welcome to the future of General Practice / Family Medicine



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Since its inception, Wonca has led the way in addressing the pressing issues as well as the emerging challenges of General Practice and Family Medicine around the globe.

The next big challenge for the discipline arises from having reached the boundaries of the reductionist research paradigm. As much as this research approach has provided us with great detail about the underlying mechanisms of many health problems, it is no longer able to provide the knowledge to solve the many “subtle and context specific” problems encountered in daily practice.

Analysis of our daily problems quickly leads to the realisation that many elements contribute, in less than predictable ways, to these issues. We often say *X causes Y, but X was already influenced by Z, and Y has an effect on Z as well*. It is this kind of complex adaptive – meaning interconnected – behaviour that is at the heart of complexity sciences. Expressed differently, the interdependent nature of interactions resulting from feedback loops between various elements explains the emergent nature in problem solving; different solutions are possible, depending on the initial conditions underpinning the problem, yet these different solutions are mutually agreeable.

The Need for a Wonca SIG for Systems and Complexity

The current financial, health and educational crises force us to look for different approaches to knowledge generation and problem solving. Paraphrasing Einstein, the old solutions that created these crises are no longer suitable to solving them – more of the same will not lead to new and stable equilibriums.

The Patient's Health Experience as the Driver for the Health System

Fundamental to understanding complex adaptive systems is the notion of a core driver, the central point of orientation of a system. We believe that the *patient's health experience* should be the core driver, in the presence as well as in the absence of discrete pathologies.

Aims for the Systems and Complexity SIG

To secure a sustainable and stable people-centred health system for the next 50 years, a coordinated and concerted effort is required by everyone: policy makers, educators, health and health service researchers, health care professionals and patients.

Initially the SIG wants to provide a forum for those working with or contemplating to engage in systems and complexity research to discuss their research and ideas.

For those interested in **health care delivery**, systems and complexity sciences offer a way for studying, understanding and conceptualising the interconnected nature of a patient's health experiences, their need to seek medical care, their interactions with various health care providers, the nature of the local community and the broad structure of the social, economic and political environment.

For those interested in **medical education**, systems and complexity sciences provide means for understanding the dynamics of teaching and learning throughout a health professional's career, curriculum development and methods of assessment, learning in the work place, and inter-professional working and learning, and will inform the design and implementation of medical education research programmes.

For those interested in **health service organisation**, systems and complexity sciences offer different means to gain an understanding of the workings of practices within their environmental, organisational, social and economic constraints, and in particular to explore the complex adaptive system nature of health services in regards to empowerment, direction setting and taking responsibility of staff members and teams.

For those with **policy and administrative responsibilities**, systems and complexity sciences provide the means to understanding decision-making in the context of outside pressures on their portfolio, and to gaining an upfront appreciation of the intended and unintended consequences of various policy options.

The long term aim of this SIG will be to promulgate systems and complexity sciences within Wonca, to offer workshops in systems and complexity methodologies, and to become an expert body to advise on research and policy issues within General Practice / Family Medicine.

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