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Editorial: Public health

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In our desire to promote a healthy population the emphasis appears to be focussed on eliminating diseases and ill-health. As a result the framework for developing public health policies has been predominantly medical with a clinical focus. Nations and governments have spent millions of dollars on information systems (e.g. electronic patient record) in order to improve the flow and access to information by care professionals. Yet, health informatics systems provide access to only a minimum set of clinical outcomes (Shahtahmasebi, 2008; Shahtahmasebi & Millar, 2013). Thus, emphasis on clinical data has caused numerous missed opportunities to develop a more appropriate informatics system that unifies clinical and non-clinical data (Shahtahmasebi, 2008; Shahtahmasebi & Millar, 2013).

According to the World Health Organisation (WHO) (WHO, 2015a) public health is about a collective approach to prevent disease, promote health, and prolong life among the population as a whole. To this end, public health activities aim to create conditions so that entire populations can be healthy, rather than individual patients which mean that public health is concerned with the total system.

WHO further explains that there are three main public health functions (WHO, 2015a):

- The assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities.
- The formulation of public policies designed to solve identified local and national health problems and priorities.
- To assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services.

Our current knowledge suggests that the conditions necessary for a healthy population are governed by dynamic processes such as social, environmental, economic, and education. To create conditions in which people can be healthy we must have information and knowledge of the parameters and attributes of such dynamic processes.

This suggests a discrepancy between the global definition of public health and its practice. Furthermore, it can be observed that the main functions of public health are clinically/medically oriented, e.g. identifying health problems, or access to care suggests a focus on tackling the incidence and prevalence of an illness rather than preventing it. Very little attention is given to disease, or, health development. Absence of disease does not necessarily imply a healthy population.

The fact is that people take up health care services when they have a health problem and therefore efforts are concentrated on medical intervention. As centuries of experience suggests intervention is no prevention. For example, despite advancements in medical technologies and medical interventions such as heart and lung transplants, heart disease is still the number one cause of death worldwide (WHO, 2015b).

Complexities arise because of the dynamics of human behaviour. One of the main features of a dynamic process is the feedback effect. As a result we can observe shifting social

norms that do not necessarily contribute to improved environmental, health and social outcomes. Therefore, prevention strategies must account for dynamics of human behaviour and feedback effects.

In an earlier paper (Shahtahmasebi, 2014), I argued that feedback effect is the main feature of every dynamic process. For every change, every decision, every policy that is designed to influence and effect social, health or economic change we lose a degree of freedom. The loss of freedom will have an adverse effect on all the processes. For example, very basic and necessary human activities such as building homes, farming, maintaining food security has resulted in centuries of deforestation: the adverse consequences of which have only begun to manifest itself in recent decades as global warming, pollution, depletion of resources, and so on. Technological advancement means lives can be saved with multi organ transplants but people have to die prematurely and donate their organs in order for someone else to live.

It is possible to lessen the adverse effects of feedback effect (loss of freedoms) through adopting a holistic approach to decision making. Tackling the symptoms alone does not eliminate the source of the problem and does not prevent adverse health and social outcomes. Consider a simple but real life example: in an effort to eliminate bullying and stress in the workplace one institution introduced jigsaw puzzles for staff to use at break times! Even if there was a reasonable uptake by staff, and, even if such a solution did help to de-stress, at the end of their break staff would be returning to the source of bullying and stress.

Prevention strategies have placed a heavy emphasis on educating and informing the public on a "healthy" lifestyle. However, improvements in health and social outcomes occur only when appropriate and relevant changes in nutritional habits and behaviour are implemented. The prerequisite for successful lifestyle changes is having the will and the means to change, as well as resilience to external factors.

On the other hand, there is quite a lot of information that is easily accessible through the internet which has led to an increasing trend in self-diagnosis and self-medication. However, this practice requires a degree of expertise and confidence to distinguish valid and relevant information from poor quality and unmonitored data which in turn could lead to poor health and social outcomes (Shahtahmasebi, 2008).

By the same token, a prerequisite for holistic policy development is the political 'will' to implement positive change. Governments have the resources required to strategise for the "big picture" rather than independently visualised actions through various sections and departments.

In the meantime, collective and integrated strategies will be possible through individual leadership. In the absence of a holistic unified and integrated care policy (care for when people are not ill and care for when they are) some professionals promote holistic care at an individual level. That is to say, they attempt to address the whole person rather than an individual's symptoms. Other things being equal this may be good practice, but in reality controlling extrinsic factors is beyond a health care professional's capacity. Thus, following 'holistic' treatment individuals will still be subjected to the external factors that caused their symptoms in the first place. The question is do interventions lead to better outcomes than a 'jigsaw' policy to combat workplace stress?

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References

Shahtahmasebi, S. (2008). Researching health service information systems development. In A. Dwivedi (Ed.), *Handbook of research on it management and clinical data administration in healthcare* (pp. 598-615): IGI Publishing.

Shahtahmasebi, S. (2014). Editorial: Human behaviour and degrees of freedom. *Dynamics of Human Health, 1*(2), http://journalofhealth.co.nz/?page_id=280.

Shahtahmasebi, S., & Millar, R. (2013). Conceptualising the future of health informatics: A discussion. *International Journal of Informaiton Science (IJIS), 3*(3), <http://article.sapub.org/10.5923.j.ijis.20130303.20130304.html>.

WHO. (2015a). Public health. *http://www.who.int/trade/glossary/story076/en/*.

WHO. (2015b). The top 10 causes of death. *http://who.int/mediacentre/factsheets/fs310/en/index2.html*.