## Editorial Pandora's box: time to critically review our health care strategy Said Shahtahmasebi, PhD. editor@journalofhealth.co.nz

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Covid-19 has demonstrated the dynamic nature of human behaviour. On the one hand, globally we have observed differing perceptions and attitudes to Covid-19 and differing ways to contain it. As argued in the last issue of DHH (Shahtahmasebi, 2020a; Shahtahmasebi, 2020b) the containment approaches have been economically driven and as a reaction to the circumstances. On the other hand, several months after the of Covid-19, a new strand in <u>the coronaviruses family</u>, the delayed prevention plans, whether or not based on the idea of herd immunity or managing/containing Covid-19 or eliminating it, are in essence interventions. It appears that, despite our knowledge of Corona viruses, only a small number of Asian countries that were exposed to SARS and bird flu had some sort of interventional plan to manage the Covid-19 pandemic. Interventional strategy of such Asian countries as Vietnam, Hong Kong, and Taiwan to prevent spread of Covid-19 included mandatory wearing of facemasks, controls at their borders to restrict peoples' movements and infection rates.

In just a few months Covid-19 has killed more people globally than suicide, it appears to be mutating, and whereas initially it was reported to be affecting the elderly now younger agegroups and children are at a higher risk of contracting Covid-19.

Anecdotal evidence based on genome sequencing research suggests Covid-19's survival capabilities as it <u>mutates</u> in order to survive. For example, in the case of the individual who was recently <u>re-infected</u>, after a visit to Spain, with a different strand of Covid-19 than he was infected with in March (2020). Although, this might suggest that for some people the first infection may not lead to immunity, it also raises important questions. For example, this individual exhibited mild symptoms in the first round of infection and none following the re-infection. , Thus, how sure can we be that the individual was not infected before traveling to Spain? If the re-infection occurred prior to travelling then it suggests that Covid-19 had already mutated, and that there are carriers of new strands, some of which may be evolving to become <u>airborne</u>. The fact that genome sequencing can reveal the source, origin and different strands of Covid-19 in infected people strongly suggests that Covid-19 will continue to mutate – an important practical question is how different or similar are strands associated with different countries or regions.

In order to survive viruses need a host. Philosophically, it does not make sense to destroy one's host whose very existence it depends on. Framed in the bigger evolutionary picture, it is possible for science to map the evolution of the virus so it can co-habit with the host. Unfortunately, the virus's evolutionary development to find the perfect host are not suited to human survival and lead to casualties, but on the other hand, human survival will depend on viruses to evolve. Hosting viruses, bacteria, and parasites for health benefits, as weird and strange as it sounds, is not a far-fetched idea. Certainly, it is unthinkable to re-introduce entities that have been held responsible for illness as a remedy for ill health. Re-introducing bacteria and other parasites into the environment that we have been sanitising well over a century or so, e.g. probiotic products, medicated <u>hookworms</u> and <u>surgical leeches</u> to improve immunity and health are examples of breaking with convention.

Epidemiologically, the variations in hosts, e.g. age, gender, fitness and health status, culture, along with regional, political, and environmental differences, will influence the severity of the outcome leading to morbidity and mortality in the population. Obviously, the rates of morbidity and mortality will depend on the nature of the virus and readiness of the population to deal with outbreaks.

The issue here is that we tend to wait for an event to occur and then develop interventional action plans. So, at every outbreak or adverse health events we are caught by surprise and unprepared; so that we try to control the situation through intervention. Interventional policy actions that are put in place as a result of the intervention then labelled "prevention" actions. And so politicians and scientists fall over each other to be the one with a solution, leading to confusion, and conflict. Such outcomes have clearly been globally observable with different governments/countries pursuing different intervention strategy.

Such conflicts are not restricted to "unexpected" outbreaks. The strategy of waiting for an event to occur and then intervene to reduce the rates of the top ten causes of morbidity and mortality (including, heart disease, cancers, suicide) has led to massive advancement in medical technology, but according to WHO mortality rates due to, e.g. heart disease has been increasing over the last twenty years (WHO, 2018), and similarly for suicide (WHO, 2019).

In spite of decades of information clearly demonstrating that current suicide prevention strategies do not work, "experts" and politicians insist on pursuing a medical approach. The net effect of such a policy has been confusion and misinformation. For example, one of the claims made is that for every suicide there are many suicide attempts therefore suicide attempt is a major predictor of suicide – this is total nonsense. Every suicide attempt is an indicator of the failure of our suicide prevention strategy, because firstly, mental health services failed to prevent a failed suicide attempt. Secondly, the majority of suicide cases are often successful in their first attempt (Hamdi, et al. 2008; Shahtahmasebi, 2003). Thirdly, as mentioned above, it instructs the care professionals and the public to wait until a suicide attempt is made and then intervene.

Current global suicide prevention strategy is either responsible for or completely oblivious to the cyclic patterns in suicide rates. The authorities, mistakenly interpret downturn and upturn components of each cycle as trends: when the cycle is following an upward trend the "experts" and decision makers express surprise and claim suicide is a very complex mental health and social issue and require further research; and when the cycle on the way down the "experts" and decision makers claim that their strategy is working and insist on more investment in mental illness services to stay on track. And so the cyclic pattern continues;

upturns followed by downturns and downturns followed by upturns. "Experts" and governments appear to be suffering from insomnia; each upturn of each cycle is treated as a new outbreak, and the decision makers seem to be going through the same emotions and reactions when the cycle is repeated. As decision makers, governments continually forget or deliberately ignore past behaviour in suicide rates and pour more funding into mental illness services. Thus, through insomnia governments sustain repeated rise, fall, and turn in suicide rates.

In New Zealand, <u>recently released suicide data for 2019/20</u> by the Chief Coroner's Office suggest a small drop in the number of suicides, a welcome change which may signify the beginning of the next cycle after five consecutive record breaking years (Shahtahmasebi, 2019a).

It is highly likely that some of the misinformation feeding the governments' policy making is due to a lack of accounting for the cyclic patterns. There are two main issues: firstly, suicide rates by groups (e.g. age, sex, occupation, diagnosis) also follow a cyclic pattern, secondly, these cycles do not have the same start and finish time, so there are lead and lag effects, e.g. see (Shahtahmasebi, 2019b). So, while the suicide rate for one age group is in the downturn part of the cycle, another age group's suicide rate is still going up, e.g. "lower stats for young people, higher for old". As a result, mistakenly, the "experts" and decision makers, firstly, associate a high suicide risk to such groups in the general population, and secondly, they shift the focus from suicide prevention in the general public to this group. The tragedy is that, based on past behaviour, these age groups will swap statistics in a short few years.

However, breaking with tradition, as demonstrated by the grassroots approach to suicide prevention (Shahtahmasebi, 2013; also see Shahtahmasebi & Omar 2020), it is possible to effectively break the cycle in suicide rates and reduce it.

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