Editorial

Why health promotion matters to the COVID-19 pandemic, and vice versa

At the time I am writing this editorial, the world is overwhelmed by the pandemic caused by the SARS-CoV-2 virus. In a desperate attempt to contain the further spread of the virus and the diffusion of the COVID-19 disease it causes, governments across the world have taken measures that are unprecedented. Entire cities, regions and countries are sealed off, travel is banned, schools and universities are closed, shops are running out of stocks, and all economic, cultural and social activities have come to a stop. Never before in modern history has a health problem had such an overwhelming impact on society. Health (or rather the threat of ill health) has become the prevailing concern that takes precedence over all others issues, making health in all policies become a reality, albeit not in the way it was intended.

At first sight, this pandemic and the world’s response to it seems far removed from the health promotion perspectives we publish and that the International Union for Health Promotion and Education advocates for. When all hands are called on deck to prevent a contagious virus from spreading and to reinforce hospital staff facing a tsunami of patients suffering from a potentially deadly disease, there seems to be little need for specialists whose expertise lies at the other end of the continuum of care spectrum (Springer and Phillips, 2006). The real war heroes in the battle against the CoV-2 virus are virologists, epidemiologists, doctors and nurses, and even if many of the actions taken serve a preventative purpose, their focus is on the prevention of disease, not on promoting health.

Yet on the other hand, many of the measures that are now taken to prevent citizens and health workers from getting infected imply a change of behaviour. Hand washing, wearing face masks and protective gloves and ‘social distancing’ (which should really be termed ‘spatial distancing’) are all forms of human behaviour. As the expertise with regard to health behaviour change is one of the core competencies of health educators and promoters, their advice may help governments to achieve the required behaviour change. Moreover, and perhaps more importantly, the rapid and continuous evolution of the COVID-19 problem and the scale of the measures that are put in place may, rightly or wrongly, create the perception that the existing health system is failing to protect citizens against the spread of the virus. This creates a need for people to regain control of their health, to protect oneself against the disease and to deal with its disruptive consequences.

Enabling people to increase control over their health and its determinants is at the core of health promotion. As such, health promotion may paradoxically be more important in this time of crisis than ever before. As a discipline within public health and a field of professional practice, health promotion can contribute to addressing the CoV-2 virus threat at different levels (Brownson et al., 2010): at the downstream level focusing on individual behaviour change and disease management, at the midstream level through interventions affecting organizations and communities and at the upstream level through informing policies affecting the population.

IMPROVING PREVENTIVE BEHAVIOUR CHANGE MEASURES

To contain the spread of the CoV-2 virus, health authorities have tried to enhance protective behaviour amongst citizens, first by issuing warnings and recommendations about the new virus, and at a later stage by imposing legal restrictions, in some cases involving a complete ‘lock-down’. These measures have met with varying degrees of success. Especially in the beginning of the epidemic the public’s response to warnings was often weak and ineffective, thus wasting opportunities to effectively
contain the spread of the disease. And even when the scale of the problem became pandemic, a significant number of people did (and continue to) not strictly follow the recommendations. This lack of adherence is often condemned as irresponsible and selfish, but that need not necessarily be the case. Changing people’s behaviour is simply not as easy as just informing them of the risks. Years of research in protective health behaviour informed by theoretical models such as the Health Belief Model (Champion and Skinner, 2008) or the Protection Motivation Theory (Prentice-Dunn and Rogers, 1986) have shown that people will only act on health warnings if they:

i. believe that they are personally susceptible to develop the condition against which protection is required;
ii. perceive the condition as severe;
iii. perceive the preventive action as effective to reduce the threat; and
iv. believe they are capable to perform the preventive action.

It is clear that in the case of COVID-19 these conditions are not always fulfilled. People may not consider themselves at risk (e.g. if they have not been in contact with others who have been contaminated), may underestimate the seriousness of the condition (e.g. when they are told that most fatalities are older people or people with pre-existing morbidity) or may not see themselves as capable to perform the preventive behaviours.

On the other hand, the wide coverage of the pandemic by the media and the scope of the preventive measures that are taken also create anxiety. While a certain level of concern is an important driver for protective behaviour, too much anxiety can elicit cognitive avoidance strategies which minimize the perceived threat (Croyle et al., 2013). In a similar vein, an individual’s social identity needs in interaction with contextual factors can increase and mitigate the actual rejection of evidence—a phenomenon that is known as knowledge resistance (Klintman, 2019).

Nevertheless, changing people’s transmission-related behaviours across society remains important to flatten the peak of the epidemic. Drawing on widely accepted behaviour change principles, Michie et al. (2020) make the following recommendations to reduce the transmission of COVID-19 in the population:

i. motivate people to adopt preventive behaviour by presenting them with clear rationale, preferably in the form of a mental model of the transmission process;
ii. create social norms that encourage preventive behaviour, through campaigns targeting people’s self-identity and by getting people to give each other feedback;
iii. create the right level and type of emotion by coupling health warnings with concrete advice for protective action;
iv. give advice on how risk behaviours can be replaced by more effective ones, rather than just asking to stop them; and
v. make the behaviour easy, for instance by building it into existing routines or using nudges.

Health promoters can suggest to authorities to follow these recommendations when setting up campaigns to prevent further transmission of the CoV-2 virus. It will increase the likelihood that people will effectively change their behaviour.

ACKNOWLEDGING THE ROLE OF HEALTH LITERACY AND INFORMATION BIAS

In times of crisis people want to be well informed, so they know what individual preventive measures they must take and how they can deal with the consequences. With respect to COVID-19, there is an abundance of information available, with official and unofficial websites continuously updating recommendations and instructions, and news media covering the situation around the clock. The question is, however, whether all this information is useful. A bombardment of communication, although well intended, can create confusion. Therefore, coordination of key messaging between the health sector and other sectors is necessary in pandemic responses (Smith and Judd, 2020).

Moreover, for information to be helpful it must not only be available, but also understood, accepted and applied. Research on health literacy has shown that more than a third of the population worldwide has difficulties in finding, understanding, evaluating and using information that is necessary to manage their health (Sørensen et al., 2015; Duong et al., 2017). Authorities should take that into account when informing the public about COVID-19 and adapt the information to the literacy needs of the people they want to reach. That means the response to the pandemic should be looked at through an equity lens (Smith and Judd, 2020), with attention for those who are the most vulnerable in pandemics, such as elderly, migrants or people with disabilities. Okan et al. (2020) give the following recommendations to take health literacy into account when communicating about the CoV-2:
i. provide information in an understandable way, recognizing that people and groups with low health literacy may need more explanation and different communication formats such as animations that explain the virus, the disease, its transmission and protective measures;

ii. explain the situation transparently and clarify the overriding objectives repeatedly, to prepare people for the fact that interventions and recommendations might change when new evidence arrives and scenarios must be adapted;

iii. communicate new evidence and information without being afraid to correct earlier messages and statements if necessary; and

iv. avoid blaming, but instead strengthen the well-informed responsibility of the individual while showing solidarity with vulnerable population groups.

Authorities also need to acknowledge that taking up health information is an active cognitive process. To inform themselves about the virus and ways to protect themselves, people actively select information sources and information from within these sources, some of which may be contradictory. Information processing theory teaches us that this selection is influenced by context, emotions and selective attention (Estes, 2014), thus introducing a potential selection bias whereby more attention is paid to some information than to other. The use of cognitive schemes to process this information adds another form of bias, namely confirmation bias (i.e. the tendency to seek information that confirms the beliefs already held and to ignore or discard information that contradicts these beliefs). Likewise, the activation of cognitive schemes to filter, classify and assimilate information and make connections with already available knowledge that takes place when trying to understand and appraise the information about the virus and to judge the importance of preventive measures can again cause a series of biases. In the context of the COVID-19 crisis, the most important ones are possibly negative information bias (i.e. the tendency to attach more importance to negative than to positive information, resulting in «catastrophic thinking»), positive information bias (i.e. the tendency to consider oneself as less at risk for negative consequence, causing «unrealistic optimism»), and familiarity or recency bias (i.e. things that are familiar or recent are more easily retrieved from memory and therefore more easily considered as «true»).

Since information about COVID-19 is also diffused via social media, there is an additional risk that false information is accessed and taken for truth. Among the persistent ‘myths’ about CoV-2 are the belief that the virus was made in a laboratory or otherwise engineered, that cold weather or hand dryers can kill it, that young people cannot get infected, or that antibiotics or vaccines against pneumonia protect against the infection. These false beliefs can be reinforced by the false consensus that is created when information is shared on social media, leading to the ‘echo chamber’ or ‘illusion of truth’ effect, basically implying that information that is often repeated tends to be more easily considered as true.

To counter these effects, some basic principles can be applied to limit the spread of biased, false or misleading information, such as encouraging people to cross check the accuracy and credibility of information, to check the source of information (where does it come from, who is behind the information, what is the intention, why was it shared, when was it published), to verify the information by consulting a second source, to consult family members and trusted health professionals about information that is ‘doubtful’, and to think twice before sharing information that has not been fact-checked (Okan et al., 2020).

EMPOWERING ORGANIZATIONS AND COMMUNITIES

While preventing the further spread of COVID-19 relies heavily on informing and encouraging the population to adopt protective behaviours, these efforts may be more successful if the advice from experts is combined with local community knowledge. Experience with the way the Ebola epidemic was responded to in African countries shows that in an environment of trust, community partners can help to improve the understanding of disease control protocols and suggest moderate changes that better reflect the community’s sensitivities without compromising safety (Marais et al., 2015). Such an approach not only prevents stigmatization and fear-driven responses among affected individuals, families and communities that can hamper preventive efforts, but also act as a powerful lever to enhance adherence and mobilize community engagement.

Community engagement can make a substantial difference in health outcomes, and strengthen the capacity to deal with the disruptive effects of the pandemic at organizational and community level. When schools, creches, universities, offices, churches, shops, restaurants and sports fields are closed, the usual structures and mechanisms around which people organize their daily lives are no longer functioning. Communication
and interaction can to some extent be replaced by digital means in the form of online meetings, e-learning platforms or distance learning tools, but these tools do not provide the same depth of interaction as face-to-face meetings and require sufficient digital skills and organizational support. Furthermore, they do not allow the same level of ‘informal’ contact that make human interactions meaningful, and are difficult to implement at a level that goes beyond the organization and involves the larger community. Yet while the switch to different modes of operating creates a lot of insecurity and stress, many communities react by showing high levels of solidarity and mutual support. These expressions of a positive mindset, which are not uncommon in times of crisis, show the communities’ resilience, and provide a strong basis to build on to help organizations and communities cope with the unfamiliar situation, re-organize and regain control.

Health promotion has a long tradition of helping organizations and communities to increase control over the factors that define health. The Ottawa Charter emphasizes the importance of community action, in the sense of needs assessments, setting priorities, joint planning, capacity building, strengthening local partnerships, intersectoral working and enhancing public participation and social support (Nutbeam, 1998). All of these activities aim to create empowered communities, where individuals and organizations apply their skills and resources in collective efforts to address health priorities and meet their respective health needs. Importantly, community action builds on the existing strengths and capacities within a community, to further strengthen its resilience.

The models, strategies and case examples of successful community action and empowerment documented by health promotion researchers and practitioners over the years can provide guidance to communities facing the challenge of the COVID-19 pandemic. In a similar way, the expertise of health promotors with creating healthy settings, or places where people actively use and shape the (organizational) environment so as to create or solve problems relating to health, can be a source of inspiration and support for schools, universities and workplaces that have to deal with the longer-term disruptive effects of the pandemic. Such actions can take different forms, but will usually involve some form of organizational development, including changes to the physical environment, the organizational structure, the administration and even the management (Nutbeam, 1998).

LEARNING FROM THE CRISIS

The above paragraphs illustrate that health promotion can contribute in several ways to tackle the challenge of the COVID-19 threat and its societal impact. But health promotion can also learn from the crisis.

One thing that has become clear in the current crisis is that infectious diseases can pose a major threat to public health. In its effort to move away from a strongly disease-oriented approach to public health, health promotion has traditionally focused on non-communicable disease, where it has significantly contributed to the progress made in areas like tobacco and obesity prevention. But with the exception of HIV/AIDS, the application of health promotion principles and methods to tackle infectious diseases has been largely neglected. As a result, public health professionals who deal with communicable diseases are often unaware of the approaches used by health promoters (ECDC, 2014), although there is a good reason to assume that these can be usefully adapted and applied to preventing infectious diseases as well. That would require, however, that health promotion researchers and practitioners develop a keen interest in infectious diseases. McQueen (2015) argues that to further the cause of health promotion applied to both infectious and non-communicable disease, health promotion needs to focus more on intervention research and understand the processes involved in implementation, rather than on outcomes and causality. As interventions are dynamic and subject to change during implementation, participatory methods should be further developed, recognized and documented in the scientific literature and in research protocols.

A second lesson to be learnt from the COVID-19 crisis is that human health is not an isolated issue. There is a general consensus that the SARS-CoV-2 virus is of animal origin, jumped species boundaries to infect humans either before or after it evolved to its current pathogenic state (Andersen et al., 2020), and could then very rapidly spread in a globalized economic system characterized by high levels of interconnectedness and mobility. Health promotion has never paid much attention to zoonotic causes of human health, but the current crisis suggests that maybe it should. A good starting point would be to embrace the concept of ‘One Health’, which recognizes the interconnection between people, animals, plants and their shared environment, with the goal to achieve optimal health outcomes (Atlas et al., 2010; Calistri et al., 2013). After all, the collaborative, multi-sectoral and transdisciplinary nature of the One Health approach is very much akin to health promotion’s principles and strategies. It also links very well with the growing interest of health promotion researchers and practitioners for sustainable development, as exemplified by recent projects (e.g. INHERIT; https://www.inherit.eu) and by the choice of ‘planetary health and sustainable development’ as the theme for the latest IUHPE
World Conference on Health Promotion (Ratima, 2019).

A third lesson to be drawn from the COVID-19 pandemic is that health promotion should not wait until a crisis happens, but prepare itself to respond swiftly. To deal with an epidemic effectively, we must not only understand viruses and how they spread, but also the ways in which people make decisions, organizations operate and communities relate in reaction to them (Kickbusch and Sakellarides, 2006). Health promotion researchers should learn from crisis situations, analyse the reactions and document the learnings. A good example is the way the Singaporean government dealt with the SARS outbreak in 2003, where it was shown that, rather than the actual knowledge about the virus, the high confidence and trust in the government’s ability to cope with SARS was a key factor in controlling the crisis (Deurenberg-Yap et al., 2005). This confirms findings from other studies highlighting the importance of trust in dealing with crisis situations (Siegrist and Zingg, 2014). In a similar vein, a comparison between the response to Hurricane Katrina in New Orleans and to SARS in Toronto put the success of the Toronto response down to social cohesion (Matthews, 2006, cited by Kickbusch and Sakellarides, 2006). These and other findings call for further research on the ways trust in public institutions can be enhanced and social capital can be mobilized in order to make populations more resilient against crises.

Just like the banking and terrorism crises before it, the COVID-19 pandemic teaches us that the faith in the predictability and control of events that has dominated our thinking since the Enlightenment may be too optimistic. We have to accept uncertainty and learn to live with it. The only certainty we have is that the world will be different after COVID-19. As a consequence, this crisis can also be a turning point for health promotion. Confucius, in all his wisdom, believed that it is the study of the past that helps to define the future. But in the current situation, it may well be the present that gives us directions in which to look forward.

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References
Andersen, K. G., Rambaut, A., Lipkin, W. I., Holmes, E. C. and Garry, R. F. (2020) The proximal origin of SARS-CoV-2. Nature Medicine, 1–3. https://www.nature.com/articles/s41591-020-0820-9.pdf (last accessed 17 March 2020).
Atlas, R., Rubin, C., Maloy, S., Daszak, P., Colwell, R. and Hyde, B. (2010) One health—attaining optimal health for people, animals, and the environment. Microbe, 5, 383–389.
Brownson, R. C., Seiler, R. and Eyler, A. A. (2010) Measuring the impact of public health policies. Preventing Chronic Disease, 7, 1–7.
Calistri, P., Iannetti, S., I. Danzetta, M., Narcisi, V., Cito, F., Di Sabatino, D., et al. (2013) The components of ‘One World–One Health’ approach. Transboundary and Emerging Diseases, 60, 4–13.
Champion, V. L. and Skinner, C. S. (2008) The health belief model. In Glanz, K., Rimer, B. K. and Viswanath, K. (eds), Health Behavior and Health Education: Theory, Research, and Practice. Jossey-Bass, San Francisco, CA, pp. 45–65.
Croyte, R. T., Sun, Y. C. and Hart, M. (2013) Processing risk factor information: defensive biases in health-related judgments and memory. In Petrie, K. J. & Weinman, J. A. (eds), Perceptions of Health & Illness. Psychology Press, New York, pp. 283–306.
Deurenberg-Yap, M., Foo, L. L., Low, Y. Y., Chan, S. P., Vijaya, K., & Lee, M. (2005). The Singaporean response to the SARS outbreak: knowledge sufficiency versus public trust. Health Promotion International, 20, 320–326.
Duong, T. V., Aringazina, A., Baisunova, G., Pham, T. V., Pham, K. M., Truong, T. Q., et al. (2017) Measuring health literacy in Asia: validation of the HLS-EU-Q47 survey tool in six Asian countries. Journal of Epidemiology, 27, 80–86.
ECDC. (2014). Transferability of Health Promotion and Health Education Approaches between Non-communicable and Communicable Diseases. European Centre for Disease Prevention and Control, Stockholm.
Estes, W. K. (2014) Handbook of Learning and Cognitive Processes (Vol. 5): Human Information Processing. Psychology Press, New York.
Kickbusch, I. and Sakellarides, C. (2006) Flu City—Smart City: Applying health promotion principles to a pandemic threat. Health Promotion International, 21, 85–87.
Klintman, M. (2019) Knowledge Resistance: How We avoid Insight from Others. Manchester University Press, Manchester, UK.
Marais, F., Minkler, M., Gibson, N., Mwau, B., Mehta, S., Ogunsoa, F., et al. (2015). A community-engaged infection prevention and control approach to Ebola. Health Promotion International, 31, 440–449.
McQueen, D. V. (2015) Health promotion applied to infectious diseases. Global Health Promotion, 22, 3.
Michie, S., West, R., Amlôt, R. and Rubin, J. (2020). Slowing the covid-19 epidemic: changing behaviour by understanding it. BMJ Opinion, March 11, 2020 (last accessed 17 March 2020).
Nutbeam, D. (1998) Health promotion glossary. Health Promotion International, 13, 349–364.
Okan, O., Sørensen, K. and Messer, M. (2020) COVID-19: a guide to good practice on keeping people well informed. The Conversation, March 19, 2020.
Prentice-Dunn, S. and Rogers, R. W. (1986). Protection motivation theory and preventive health: beyond the health belief model. *Health Education Research, 1*, 153–161.

Ratima, M. (2019) Leadership for planetary health and sustainable development: health promotion community capacities for working with Indigenous peoples in the application of Indigenous knowledge. *Global Health Promotion, 26*, 3.

Siegrist, M. and Zingg, A. (2014) The role of public trust during pandemics: implications for crisis communication. *European Psychologist, 19*, 23–32.

Smith, J. A. and Judd, J. (2020) COVID-19: vulnerability and the power of privilege in a pandemic. *Health Promotion Journal of Australia, 33*, 1–3.

Sørensen, K., Pelikan, J. M., Röthlin, F., Ganahl, K., Slonska, Z., Doyle, G., et al. (2015). Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU). *European Journal of Public Health, 25*, 1053–1058.

Springer, F. and Phillips, J. L. (2006). The IOM model: a tool for prevention planning and implementation. *Prevention Tactics, 8*, 1–7.