



Innovative strategies to promote global health: Lessons from the Covid-19 pandemic

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ABSTRACT

The current view is that the hold of the Covid-19 virus is now being altered from pandemic to endemic status with global cooperation. While vaccination remains a central component of the public health interventions required to achieve this, a range of innovative health promotion strategies are also needed in parallel if we are to ensure that the pandemic continues to wane further.

Research and personal experience tell us that Covid-19 vaccines offer high protection against severe illness, aid the delivery of health care and save lives. However, WHO communiqués reiterate that vaccine hesitancy is a major threat to global health and that many countries still need to improve vaccination rates. It is also stated that in order to do this innovative strategies are needed to establish greater trust, improve communication and reduce misinformation. Consequently health care providers are being urged to build on lessons learned during the pandemic, find ways to build trust, counter residual vaccine hesitancy and promote other health related behaviors that are inclusive, allay fears and avoid scapegoating.

Importantly, the strategies needed to increase willingness to be vaccinated and promote the health-related knowledge and behaviors necessary for the pandemic to continue to wane are now known to be highly country-specific, and regional differences in what approaches are required are also evident within counties. Consequently, as health care providers we need to develop innovative strategies and employ task shifting to the meet the specific needs of the individual populations we serve. This review summarizes ways to approach this challenge based the core principles advocated by WHO for promoting health literacy and changing behaviors; community empowerment, people-centered strategies, innovative education, novel and improved tools, training to respond to local needs, and the use of non-traditional avenues and outlets.

Keywords: *Health education, Health literacy, Misinformation, Public health, Public trust, Vaccine hesitancy, Covid-19 pandemic.*

1. Introduction

Innovative interventions are consistently needed to promote health. This was made clear by the challenges we faced at the height of the Covid-19 pandemic. It is now 3 years since the world first learned about the SARS-CoV-2 virus, and the story of COVID-19 continues to evolve, so as global health providers, what lessons can we learn from initiatives tried during this time, and are there approaches that were effective that we can continue to use to ensure that the pandemic wanes further?

The stated aim of the World Health Organization (WHO) is that 70% of the world's population should be vaccinated against Covid-19, as this public health measure is seen as the most effective way to ultimately contain the pandemic (WHO, 2021). Currently, most countries still need to improve vaccination rates in order to achieve this goal. Consequently, a global health management priority must be to better understand the information, attitudes and behaviors that continue to drive resistance to vaccination, and in this way identify strategies to intervene more effectively.

Disparities in the rates of COVID-19 infection, deaths and vaccination across communities serve as a reminder of the continuing need to better understand the factors across all sections of society that are barriers to our efforts to mitigate the effects of the Covid pandemic. The importance of such understanding is underscored by the recent reappraisal of the death toll from Covid using systematic analysis of excess mortality, the emergence of new variants of the virus, and growing awareness of huge impact of second order ramifications of the pandemic (increased poverty, malnutrition and sexual and gender related violence (Wang et al., 2022; Dubé et al., 2013).

Vaccine hesitancy is an example of a health promotion challenge that has been prominent during the pandemic (Sallam, 2021; Cascini et al., 2021), and the WHO has named it as one of the top ten threats to global health (Geoghegan et al, 2020). But publications emphasize that vaccine hesitancy just one example of many health-related behaviors that have contributed to the evolution and impact of Covid-19. Consequently following evidence-based health promotion principles that encourage positive health behaviors is a logical way to approach vaccine hesitancy and the other public health challenges that we need to address to continue to contain the pandemic. (Macnab, 2022; Ajeigbe et al., 2022). Such principles include the use of 'innovative interventions' and 'health equity through action;' as advocated by WHO (Marmot et al., 2008), and 'innovation to empower people to take control of their lives' as called for by the Lancet Commission on the future of health in sub-Saharan Africa (Agyepong et al., 2017). 'Task shifting' is a central theme in calls for action from both organizations; task shifting involves transitioning away from conventionally relied on forms of health informatics and instead generating greater public engagement to promote health literacy; in parallel, efforts are made to improve access to essential health services.

This commentary frames how we as global health providers can base innovative health promotion strategies to ensure that the Covid pandemic continues to wane on six principles outlined by WHO and the Lancet Commission. These are:

- Taking a 'community empowerment approach;
- Adopting 'people-centered strategies;
- Creating 'innovative education;
- Developing 'novel and improved tools;
- Training personnel to 'respond to local needs;
- Using 'non-traditional' avenues and outlets.

2. Community empowerment

It is essential in any community that we identify where unique barriers to Covid containment exist, and then make it clear that these have been heard by including them in the process of 'winning over' the community to join efforts to contain the virus. In parallel, we need to identify positive attitudes and approaches that community members have and also factor these into constructive dialogue (Gilmore et al., 2020).

Special attention should be given to sub-populations in the community most at risk of being severely affected by Covid infection; these groups include the elderly, and those living with other significant morbidities; immune compromise can increase the severity of infection, and also prolong Covid-19 carriage which increases both the risk of infectivity of others and the potential emergence of new variants (Msomi et al., 2021). Healthcare workers in the community should also be targeted as they are key

influencers of vaccine decision making; their example, and the knowledge they share all have impact (Cascini et al., 2021). Involving and motivating other individuals to ‘champion’ health issues has also been proved to be valuable; teachers, parents and individuals who have chosen to be vaccinated are an example, but community members of all kinds are suited to this role; to be successful just requires energy, industry and commitment, so candidates able to champion vaccination and other strategies to contain the virus can be found and empowered in most communities.

3. People-centered strategies

Health behaviors that contributed to the spread of Covid and led to people refusing the vaccine often had their origins in low public confidence and lack of trust (Rodriguez-Morales & Franco, 2021). Hence, people-centered strategies that build confidence in those providing care, advice and information, and increase public trust will lead to more people believing that the truth is being told. Trust and belief are central to ‘buy-in’ and compliance with health promotion initiatives (Gilmore et al., 2020).

More effort must be made to ensure that the facts and data available to all of us are correct, reliable and up to date, and also, that when we share information that this is done in a people-centered way. The words we use can often be improved, made clearer or be delivered in a different way that makes it more likely that our listeners will understand. Always respects the culture and roots of your audience. As officials and health experts we always need to say “I don’t know” when the required facts are not available; not only is this more honest, it also makes the facts and information we so share more believable. In particular, WHO strongly advocates that communication about the benefits and side effects of vaccination is open and honest (WHO 2022).

In the context of vaccines, people need to understand that misinformation is as dangerous as the disease itself (Larson, 2018). Misinformation from the internet spreads fast and is a serious threat to public health, so it is important to counter it (Triwardani et al., 2021). One sensible strategy is to remind everyone that not everything we read online is true or reliable. As health care providers, we need to learn how to evaluate if facts come from a legitimate source and have a scientific basis, and a good example to set is to always ask someone you trust to explain facts that you do not understand.

4. Innovative education

The reasons why people do not follow health advice are complex, vary across the globe and are often specific to a given community. Hence, the key to finding an effective innovative educational approach is to first identify the gaps in knowledge, controversies and potential enablers that exist among those with whom you are working.

Research shows that those with more knowledge and greater understanding are most likely to be compliant with health recommendations, including calls to be vaccinated (Sallam, 2021), so novel and socially applicable ways need to be explored to make sure the target population know the facts and understand the priorities needed to make informed decisions.

Finding ways to share health information that is relevant in a local context has obvious benefit. In the absence of local data, the innovation required is to make general facts or generic data meaningful by translating the core educational messages into a local context. An example is to identify where individuals living locally have benefited from vaccination by having symptoms that are milder than those normally encountered.

Working to engage young people through school-based initiatives is helpful; effective engagement of young people is particularly relevant in countries where they make up a high proportion of the population. Research shows that knowledge and behaviors children acquire through school-based health promotion ‘trickle down’ from them into the family and broader community (Macnab Stewart & Gagnon, 2014), and that where positive behaviors evolve in adolescence, they tend to carry forward into adult life (Viner et al., 2012).

5. Novel and improved tools

Novel tools principally evolve in response to a local need, but creative application of existing concepts or technology developed elsewhere is often possible. This applies in particular to a fear of needles which is a major factor that deters people from being vaccinated (Freeman et al., 2021); simple tools that provide an ‘alternative focus’ or sense of being able to control something during the injection process have been identified which can help alleviate such fear; these include verbal reassurance combined with hand holding, teaching how to focus on each breath, and in the case of children being allowed to blow bubbles as the injection is given (Macnab, 2022). Alleviating fear is a simple and effective way to positively impact vaccination rates; it is a strategy we should use not just for Covid, but also during other campaigns, like those needed to improve child immunization for the prevention of infectious diseases (Hotez et al., 2019; Jain et al., 2020).

Music and dance are cultural elements that can be used in novel ways to educate and inform. Many young people know and share health-related facts contained in music videos with health education messages sung by celebrities (Macnab and Mukisa, 2019). In health promotion terms, such knowledge transfer is a significant achievement.

This also emphasizes that there is value in using inquiry as a tool to identify what health promotion messages are most likely to resonate with particular sub-groups of a target population, and who the optimal messengers would be [13] Dzinamarira. This was shown in research inquiring how youth could be engaged to adopt health care behaviors potentially able to prevent non-communicable diseases (NCD's) in their offspring. During school-based discussions guided by health care providers several benefits of avoiding NCDs were explained to the pupils, but only one factor proved compelling. This was the fact that if they have a healthy child, she/he has significantly greater earning potential than one who is unhealthy. In addition, pupils emphasized that who delivers health messaging affects their interest and uptake, stating they would be more likely to take note of a celebrity rather than a parent or teacher (Macnab and Mukisa, 2019). Such preferences reinforce that for certain groups, the impact of important health promotion messages will be most effective when information is shared using novel avenues and non-traditional messengers (Lazarus et al., 2021).

6. Training personnel to ‘respond to local needs’

We all need to be trained to recognize and counter mistrust and misinformation where it exists. During the Covid pandemic mistrust in government sources and authoritarian agencies has been a common problem (Dzinamarira et al., 2021; Eschoru et al., 2021), especially where Covid-driven restrictions have impacted the freedom of the population. Legislation to impose curfews was particularly resented, and school closures have had a profound social impact. Mistrust has undoubtedly compromised recognition of key facts related to the pandemic and prevented accurate appraisal of the benefits of vaccination.

In many communities we need to train our health care providers in ways that enable them to empower women. In this way the voices of women, and their concerns, wisdom and suggestions for solutions can be better heard. Sometimes, this requires an intervention that focuses on men, as was learned during the AIDS epidemic (Ditekemena et al., 2012). When prophylactic maternal drug administration during pregnancy became available to prevent HIV transmission to the fetus, husbands had to be engaged in order to get the permission required for a mother to be tested for HIV. As such testing was a prerequisite for prophylaxis, mothers and their offspring were dependent on male decision making if they were to benefit from this health intervention. Many training approaches to strengthen male engagement were developed in this context (Dunlap et al., 2014).

Training personnel to engage spiritual leaders, traditional healers and others who are comparably respected in the community is valuable, as trust in such leaders and support from their followers does influence beliefs and behaviors (Pronyk, et al., 2019). Importantly, such engagement does not require

these individuals to actively advocate for an approach such as vaccination, but rather they should be encouraged to see the value of teaching those that follow them how to evaluate information, and supporting them being free to act on what they have learned in matters related to their health.

We also all need to provide a required training to respond to the call from WHO to limit pollution and improve waste management for the personal protective equipment, vaccine supplies and test kits that have accumulated as a result of the Covid pandemic (WHO, 2022).

7. Non-traditional avenues and outlets

Effective non-traditional approaches are most often developed at a community level in response to the identified obstacles; creativity in this regard should be encouraged, and we should translate solutions that are effective to other communities or find ways to replicate them at a national level. During the height of the Covid pandemic the public were commonly shown Presidents and Prime Ministers being vaccinated as a way to endorse vaccination and even to infer vaccine safety. However, a less traditional way to promote trust and encourage health-related behaviors is to enlist the help of other well known, and hence influential personalities.

We can for instance benefit from the appeal of celebrity, which is considerable (Macnab and Mukisa, 2019); endorsements by Olympic gold medalists, models, broadcasters and recording artists for various causes are common, so why not identify such individuals and enlist their help to revitalize basic health promotion principles? Public service messages in South Africa during Covid included endorsements from sports personalities during broadcasts of sporting events with messages like “Don’t wait, vaccinate” and “Your shot to save lives.”

In rural communities long-serving members of local health teams have unique potential to aid public health campaigns, and continue national efforts to contain the Covid pandemic, as they are trusted in the communities they serve, and ideally placed to generate dialogue over healthy practices and illness prevention (Turinawe et al., 2014). The novel model of using non-traditional outlets to improve malaria management can be adopted to expand access to Covid-19 vaccination. National programs have validated the feasibility of utilizing staff in pharmacies and trained teachers in school-based initiatives to provide increased access to rapid diagnostic testing for malaria, and a range of preventive measures and treatments for neglected diseases; these avenues particularly benefit rural populations (Macnab, 2020).

Currently, to meet the WHO goal for vaccination rates against Covid it is imperative that we as public health providers combine use of non-traditional avenues, with people-centered approaches and measures to improve trust in order to remediate residual resistance to vaccination. While vaccination is only one part of the toolbox of important measures needed to curb the pandemic, in the face of an evolving and increasingly transmissible virus, high population immunity is essential to minimize deaths, severe disease and overall disease burden, and enable us all to maintain the return to more normal socio-economic activity we have begun to enjoy again in spite of the emergence of new variants of the virus.

Conflict of Interest

The author has no conflict of interest to declare.

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