Policy Paper
Health and Public communication in the era of conspiracy theories

Milan Urbaník
Summary

The Czech government is under increased pressure to persuade citizens to vaccinate themselves against Covid-19. The strong presence of anti-vaccination movements, as well as general scepticism of Czech public against vaccination represents a serious challenge for public communication. To communicate effectively in the context of conspiracy theories, the Czech Ministry of Health should follow simple best practices to persuade citizens to vaccinate. The messages communicated should be clear and simple, delivered by reliable and familiar messengers. Furthermore, the right channels should be considered, and various governmental institutions should be consistent in their messages. In addition to the short-term adjustments, the Ministry of Health should consider employing or training health communication experts that would design, pre-test and evaluate health campaigns to realise the full persuasive potential of health communication.
Public communication and conspiracy theories

Public communication – how institutions communicate with the general population – has become an important tool to deliver policies across multiple domains like health, sustainability or crisis management. Health communication was allocated a chapter in the United States of America's Healthy People 2010 objectives, illustrating its growing importance as a policy tool. Over the past year, the pandemic created significant pressure for effective public communication. The compliance with lockdown restrictions and, more recently, the potential uptake of the vaccination depends on how well the messages will be communicated, by whom and in which situations.

At the same time, the unique nature of the issue with the strong presence of anti-vaccination movements is yet another obstacle that needs to be bridged for the communication to be effective. Research indicates that exposure to conspiracy theories about climate change has negative effect on people’s intention to limit their carbon footprint, or is also associated with decreased political participation and an increased acceptance of violence against government. In the health context, conspiracy theories decrease the willingness of citizens to vaccinate themselves or their children.

The Czech nation ranks among the most sceptical about the Covid-19 vaccine. The international panel survey released by STEM research agency showed that merely 36% of surveyed Czechs indicated that they would get vaccinated against coronavirus. On the other hand, 46% stated that they prefer not to be vaccinated. Provided that ~70%-80% of the population needs to be vaccinated to overcome the virus, the anti-vaccination sentiment is, therefore, a major and potentially most important obstacle to be bridged by the state. Using the institutional communication to address and persuade the sceptical citizens should, therefore, be a priority of the government to save lives and solve the current crisis.

The urgency to change the ways of national vaccine communication is highlighted by the failure of the efforts made so far by the Ministry. The ministry of health released a campaign that aimed to provide reason for people to vaccinate themselves. The campaign was later tested by Behavio Labs using the representative panel of the Czech online population. The results were very disappointing. Only 1% of people that saw the leaflet actually read it, only 43% of people desired to read through it after observing it for a brief period and only 30% of people could discern that the leaflet communicates something about vaccination in the first five seconds. More importantly, people evaluated the communication as untrustworthy, amateurish and incomprehensible. Additionally, 15% of people perceived the leaflet as dangerous, evoking fear. Therefore, there is an important need for people to vaccinate themselves. The

9 Behavio Labs: The Ministry of Health’s leaflet is an advertising slump, research has shown, Available at: https://www.vetsinacechu.cz/wp-content/uploads/2020/12/behavior-vyzkum-covid.pdf
increased urgency to change public vaccine communication.

In addition to the immediate adjustments to the public communication in relation to the Covid-19 vaccination, this paper outlines, how the persuasive effect of well-designed public communication in health domain can be leveraged to improve public health and, subsequently, public well-being. Therefore, this paper aims to outline short-term as well as long-term course of action that would help increase the effectiveness of public communication of the Czech Republic and realise the full potential of health communication in promoting beneficial behaviours of Czech citizens.
Short-term remedy – Best practices of public communication

Summary of best practices that should be followed (not only) in this crisis, but also in general public communication in the time of conspiracy theories, were summarised by Connolly and colleagues.10 Their article highlights four simple practices for public communication, making specific recommendation to the context of vaccination messaging in the Czech Republic.

Firstly, the message communicated should be clear and simple. Information that is easy to understand is more likely to be followed by citizens.11 Perhaps counter-intuitively, less detailed messages that are typically shared on social media invoke higher levels of trust in government than more elaborate messages rich in detail12, potentially, because clear and concise information is more easily understood and retained in the memory, thus making it more likely to be followed. When faced with information overload, people are at the risk of ignoring information completely or focusing only on things that confirm what they already believe. The research by the Behavioural Insights Team recently uncovered that adding too many additional details to handwashing guidance posters obscured the main handwashing messages and impede recall of guidance.13 Therefore, in the context of vaccination uptake, the government should simplify the communicated message into clear and concise form. A potential route would include emphasizing the health and lifestyle benefits of vaccination.

The second practice to guide public communication concerns the role of messengers that deliver the message. Research found that the people most reluctant to get the COVID-19 vaccination also tend to have low trust in government.14 Therefore, this segment of the population may be unwilling to listen, or straight up ignore the communication from the government. To reach this particular group of population, the government should pick the right messengers to deliver the message. A rich body of scientific knowledge indicates that people are influenced not only by the content of the message but also by the messenger.15 The messenger effect had many forms. For instance, people are more likely to act on information when the messenger has similar characteristics to themselves.16 Multiple studies indicate positive messenger effect in health communication.17 More importantly, the findings have increased relevance in the context of conspiracy theories. People are more likely to believe government sources rather than conspiracy theories when the sources are seen as part of one’s own group.18 A good example how the power of messengers can be leveraged in vaccination communication comes from the UK; religious leaders and BAME community leaders have started a campaign to encourage BAME communities to get vaccinated.19 Local Authorities should work with

---

14 The Behavioural Insights Team, Holding up our (behavioural) guard long enough for the vaccine to take hold, Available at: https://www.bi.team/blogs/holding-up-our-behavioural-guard-long-enough-for-the-vaccine-to-take-hold/
leaders and community groups at the neighbourhood level to identify and share the messages about vaccinations that will resonate in those communities. Therefore, to increase the persuasive effect of health communication to increase vaccination uptake, messages to different groups of population should be delivered by messengers that come from these groups and share their characteristics such as age, socio-economic class or community membership.

The third recommendation focuses on the communication channel. The government should have strong presence on social media, communicate with citizens though websites and email, as well as consider the preferred channels of various groups of populations like older adults. The benefits of using social media, websites or emails are multiple. They are more efficient than traditional channels, they promote transparency by allowing government actors to share information with greater frequency and in real time. Furthermore, research has shown that the provision of greater access to government information and increased transparency through the use of information technologies like social media increases trust among citizens. These communication channels are already used by the Czech government. The Ministry of Health has a unit dedicated to the press communication that is also used to react to inaccurate information, which is commendable. However, more emphasis should be placed to develop technological capacities to communicate effectively through these platforms, with systematic guidance on the goals that health communication should aim to accomplish.

The fourth principle focuses on the consistency of the communication. The Czech public administrators should centralize the distribution of information to one social media account in order to avoid conflicting messages. Furthermore, the social media communication of the members of the various governmental organisations should be monitored for consistency in messaging. Potential mixed messages can have a negative impact on trust towards the institutions and lead to a more conducive environment for conspiracy theories.

Employing these four principles into practice should be possible in the short-term horizon, which is important given the urgency of the vaccination uptake issue, and it should contribute to the increased effectiveness of public communication in the form if trust and compliance of the citizens.

Long-term potential – Health communication campaigns

In addition to the short-term solution, health communication itself presents a significant potential for the public health of Czech population. Health communication is widely used around the world, helping change risk behaviours such as consumption of tobacco or alcohol, high salt intake, low fruit
or vegetables intake\textsuperscript{27} or low physical activity\textsuperscript{28} in the population. Successful examples of health communication institutions include Netherland’s Centre for Healthy Living or UK’s Public Health England.

A good illustration how health communication can serve the public good can be found in the Australian health campaign “The Compass Strategy”. The campaign aimed to decrease the negative incidence of poor mental health in the population. It included the use of multimedia, a website, and an information telephone service. The campaigned increased awareness of mental problems and suicide, the frequency of identification of depression and higher rate of seeking out of help among subjects.\textsuperscript{29} Thus, if crafted well, health communication presents an important opportunity for the Ministry of Health, whereas health campaigns can be used to change risky behaviours of Czech citizens, such as high tobacco consumption or low physical exercise, which are among the major death contributors in the republic.\textsuperscript{30}

Currently the health campaigns in Czech Republic are sparse and if they are done, their effects are rarely evaluated. Between 2012 and 2017, the Czech Ministry of Health realised 4 major standalone health campaigns, focusing on the issue of first aid, cancer prevention, smoking and salt intake.\textsuperscript{31} None of the campaigns was scientifically evaluated, which prevents from making conclusions about the efficacy of the campaign itself. Firstly, therefore, there is a significant need for evaluation of the campaign design and implementation. From the tentative evidence based on qualitative interviews, the campaign design was ineffective in evoking desirable responses from the subjects.\textsuperscript{32} Therefore, there as a window of opportunity to build on the already established use of health campaigns.

\section*{How campaigns should be designed}

Three key aspects are needed in order to ensure effective design of public health campaigns. Firstly, the campaigns should be built on the state-of-the-art knowledge generated from the academia. The health campaigns should aim to change human behaviour. The science of human behaviour is evolving rapidly, and new methodologies are slowly helping overcome the replication crisis.\textsuperscript{33} New studies uncover what contextual factors play key roles in influencing human health behaviours. Therefore, having access to and building the policies on academic knowledge is a cornerstone for successful policy design in behaviour change.

Secondly, the design of the policies should be pre-tested through qualitative as well as quantitative methodologies. Human behaviour is context-dependent. What proved to be important in one country or one age group may not be important in others. Testing the design on small groups before rolling out the intervention to the general population can help increase the benefits of the policy as well as safe time and cost. Therefore, examining the policies before implementation is key for the successful health campaigns.

Thirdly, the overall effectiveness of the campaigns should be evaluated using experimental or quasi-experimental methodologies. Testing the actual

\begin{itemize}
\item \textsuperscript{29} Heger I, Köhler S, van Boxtel M, et al Raising awareness for dementia risk reduction through a public health campaign: a pre-post study BMJ Open 2020;10:e041211. doi: 10.1136/bmjopen-2020-041211
\end{itemize}
effects of the intervention is critical, because the policymakers may fail to uncover that the policy is ineffective, or even producing negative effects. The negative spillover effects or rebound effects occur when policy intervention not only affects the targeted behaviour, but also has an unintended effect on other behaviours. For instance, direct negative spillover effects occur when lower energy costs (e.g., from improved motor vehicle fuel economy or more efficient household appliances) increase the use of and thus energy consumption from those same goods. In some situations, people who spend time, resources and energy having their appliances changed for more energy-efficient and eco-friendly ones, then use more energy by increasing heating at home, because they perceive that they did their fair share by changing the appliance. Another example outlines that an information campaign may increase the purchases of carbon offsets for the use of electricity. However, some people may perceive that by buying the offsets they “acquire” a moral permission to use more electricity. This may result in an increase in carbon emissions that diminishes the benefits initially brought by the intervention.

Furthermore, testing the interventions using unreliable and biased methodologies can serve to the detriment of the Czech population, especially in the domain of health. An example from the health domain comes from experimental study conducted in the United Kingdom. An intervention that aimed to support higher physical activity in adult population, either through payments for activity or verbal encouragement, was successful in increasing the physical activity. However, followed by the activity, people who exercised more were also more likely to eat more unhealthy snacks. A biased methodology would include only the first variable – physical exercise, whereas for the successful change in healthy lifestyle, inclusion of the second variable – healthy eating, is crucial.

Policy evaluation is primarily concerned with causal effects – knowing which actual changes were caused by the treatment and which were due to chance or wider socio-economic trends. Causal inference poses a major challenge for successful policy evaluation, because of the fundamental difference between natural and social sciences – human behaviour is volatile and ever-evolving, with multiple moderators and mediators of the causal effect. However, combining various experimental, quasi-experimental as well as correlational methodologies can improve the accuracy of the evaluation, therefore providing better outlook on which policies actually worked and which did not. Therefore, reliably evaluating treatment effect is essential if the Ministry aims to achieve improvements to the Czech public health.

**How this can be achieved – a paradigm shift**

To realise the full potential of health communication, the first important step is to change the focus of the policy-making on prevention. Currently, only 3% of the total health spending is allocated to prevention. The need to shift to prevention is furtherly highlighted by the fact that major contributor to the preventable mortality comes from risk behaviours of the Czech population. It is these risk behaviours that cannot be treated in hospitals but rather through prevention activities like health campaigns. What is more, research on prevention plays a strong part in public health.

Furthermore, testing the interventions using unreliable and biased methodologies can serve to the detriment of the Czech population, especially in the domain of health. An example from the health domain comes from experimental study conducted in the United Kingdom. An intervention that aimed to support higher physical activity in adult population, either through payments for activity or verbal encouragement, was successful in increasing the physical activity. However, followed by the activity, people who exercised more were also more likely to eat more unhealthy snacks. A biased methodology would include only the first variable – physical exercise, whereas for the successful change in healthy lifestyle, inclusion of the second variable – healthy eating, is crucial.

Policy evaluation is primarily concerned with causal effects – knowing which actual changes were caused by the treatment and which were due to chance or wider socio-economic trends. Causal inference poses a major challenge for successful policy evaluation, because of the fundamental difference between natural and social sciences – human behaviour is volatile and ever-evolving, with multiple moderators and mediators of the causal effect. However, combining various experimental, quasi-experimental as well as correlational methodologies can improve the accuracy of the evaluation, therefore providing better outlook on which policies actually worked and which did not. Therefore, reliably evaluating treatment effect is essential if the Ministry aims to achieve improvements to the Czech public health.

**How this can be achieved – a paradigm shift**

To realise the full potential of health communication, the first important step is to change the focus of the policy-making on prevention. Currently, only 3% of the total health spending is allocated to prevention. The need to shift to prevention is furtherly highlighted by the fact that major contributor to the preventable mortality comes from risk behaviours of the Czech population. It is these risk behaviours that cannot be treated in hospitals but rather through prevention activities like health campaigns. What is more, research on prevention plays a strong part in the strategic document Health 2030 from the Ministry of Health. This creates a unique

---

37 OECD: Czech Republic: Country Health Profile 2019, Available at: [https://doi.org/10.1787/058290e9-en](https://doi.org/10.1787/058290e9-en)
opportunity to integrate health communication as a policy tool in the Czech Ministry of Health.

There are multiple ways of supporting effective health campaigns, either involving the 3rd party institutions or developing expertise inside ministry. The employment of experts in health communication and subsequent development of health campaigns can have multiple benefits for the Ministry of Health, as well as Czech general public. Firstly, changing the focus on prevention can help decrease the likelihood of development of non-communicable diseases, keeping many cases outside of the hospital, decreasing costs and increasing well-being. Secondly, having experts in the design of health campaigns can ensure quicker reactions to fast development and crises, whereas the Ministry would need not to go through the public competition in order to pick a supplier of the campaign, potentially also decreasing the costs. Lastly, employing experts with relevant experience that deploy experiments in pre-testing and evaluation of policies can spin-off to other ministries, providing improved policy-making toolkit across the spectrum of governmental institutions.

The relevant experts trained directly in public communication and policy design, with strong knowledge of experimental methodologies, should be employed to meet the three key criteria for successful health campaign design – building the policies on academic knowledge, pre-testing the policies and evaluating the policy effects. This can be done by two routes: Hiring the experts that already have the expertise or training the employees of the ministry themselves. The workforce with such expertise should fall under the auspices of Section of the protection and support of the public health of the Ministry of Health.

From the short-term perspective, the Ministry can aim to train already existing employees in collaboration with international organisations such as The Behavioural Insights Team, Behavioural Experiments in Health network or existing health organisations that are part of the governments of various nations like Public Health England. Inviting experts from abroad to participate in national policymaking would facilitate the diffusion of knowledge and potentially serve as a good example of collaboration between academia and state. From the long-term horizon, the ministry might consider an option to support young individuals in pursuing careers in health communication. The support can have a form of a bursary, equivalent to the Bursary of Filko in Slovakia, where the government agrees to pay the full tuition costs at some of the leading education institutions in exchange for the agreement that upon successful completion, the student returns and spends some time working at the ministry. In case of Slovakia, the period is set to 3 years. This way the Ministry can gain experts from leading institutions help transform health education system from within, as well as providing wider social benefits by supporting higher education.

---


40 The Ministry of Education, Science, Research and Sport of the Slovak Republic, Martin Filko Scholarship. Available at: https://www.minedu.sk/stipendium-martina-filka/
About the author
Milan Urbaník is a Junior Researcher at EUROPEUM Institute for European Policy.
Contact e-mail: murbanik@europeum.org

About EUROPEUM
EUROPEUM Institute for European Policy is a non-profit, non-partisan, and independent think-tank focusing on European integration and cohesion. EUROPEUM contributes to democracy, security, stability, freedom, and solidarity across Europe as well as to active engagement of the Czech Republic in the European Union. EUROPEUM undertakes original research, organizes public events and educational activities, and formulates new ideas and recommendations to improve European and Czech policy making.

More about us

Contact
Web: europeum.org
Prague Office address: Staroměstské náměstí 4/1, 110 00, Praha 1
Tel.: +420 212 246 552
E-mail: europeum@europeum.org

Brussels Office address: 77, Avenue de la Toison d'Or, B-1060 Brusel, Belgie
Tel: +32 484 14 06 97
E-mail: brussels@europeum.org

More publications can be found on our website.