

FIGHTING HEALTH INFODEMICS: THE ROLE OF CITIZEN EMPOWERMENT

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Summary: As an increasing number of people receive and share health information on social media, misinformation and conspiracy claims have become prevalent on these platforms. To meet this challenge, a comprehensive strategy is necessary, with the empowerment of citizens at its heart. In this comprehensive strategy, big tech, expert organisations and governments have to contribute to reduce obviously false information on social media platforms. However, top down surveillance is not always possible or desirable. Citizens should also become more motivated and skilled to engage in corrective efforts when they encounter misinformation online.

Keywords: Infodemic, Misinformation, Conspiracy Theories, Fake News, Citizen Empowerment

Introduction

The COVID-19 pandemic revealed some of the problems of today's high choice media environment, in which information is no longer exclusively produced by professional "gate-keepers", such as educated journalists. In fact, everyone can create or share content and disseminate it through large online networks. This of course has a huge potential for widening political discourses and for empowering citizens to express themselves at any time. Yet it poses a challenge, because, unlike professional journalists, many citizens do not have the necessary time nor skills to select the most relevant and trustworthy content from the myriad of information pieces in the digital world.

As a result, we are confronted with increasing levels of mis- and disinformation online. **Misinformation**

describes the unintentional sharing of false, inaccurate or incomplete information. For example, some citizens may share false information on COVID-19 treatment because of a lack of literacy and knowledge. **Disinformation**, by contrast, describes the intentional spread of such information, for example based on political or commercial motives. This combination of strategic disinformation and the unintentional sharing of such content contribute to our current information environment, which the World Health Organization has labelled as an *infodemic* – "an overabundance of information and the rapid spread of misleading or fabricated news, images, and videos".^[1]

In this context, it is important that citizens possess the necessary skills and knowledge to judge health-related

> #EHFG2020 – Session link:

<https://www.youtube.com/watch?v=Iymb09UjwIY>

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content in the digital world and are motivated to correct it if necessary. Research in communication studies has shown that citizens can contribute to prevent the spread of misinformation by linking to trustworthy expert sources, such as to content from the WHO. To this end, citizens need low threshold access to fact checking information, so that they can easily identify and correct encountered misinformation.

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Is correction even possible?

There are reasons to assume that misbeliefs are hard to correct.^[2] This is especially true for attitudes and knowledge structures around issues which are emotionally loaded. For example, people with extreme attitudes (e.g. political or religious) are more likely than others to accept attitude-congruent false information and, once incorporated in their worldview, are specifically resistant to question the “facts” behind this construct.^[3] The tendency of choosing information based on prior attitudes rather than on relevance and truthfulness is called selective exposure or selection bias.^[4] Beyond selecting attitude-congruent information, people with extreme attitudes may also engage in motivated reasoning processes, in which they focus on processing information which is in line with their prior attitudes, and refute information which challenges them.^[5] In other words, for some individuals, misinformation about COVID-19 can be used to justify their strong views, such as a heavy distrust against the government or big corporations.

However, not all shared misinformation is suitable to foster strong beliefs and not all online users have extreme positions.

Furthermore, there is reason to believe that even rumour spreaders with more extreme positions can be corrected by strong ties in their social media network, i.e. people with whom they have a close connection.^[6] Thus, even though correction may not always be easy, there is still a huge potential to be unleashed.

The role of expert sources

Health-related information on social media can be corrected by algorithms, such as Facebook’s “related news” approach,^[7] or by citizens themselves. Either way, existing studies hint to the importance of expert sources in the corrective effort.^[8, 9] Such expert sources may include the WHO, but also local health agencies or academic institutions. Citizens may sometimes feel that encountered information may be wrong or imprecise, but they often lack the necessary knowledge to correct misinformation off the top of their heads. They also often lack the time and skills to engage in an in-depth information search. As a consequence, responsibility cannot be easily delegated to the citizens. In fact, regional expert organisations, such as local health agencies, have to provide the necessary facts and make them accessible to citizens. To this end, they need to penetrate social media with factual content, monitor prevailing misbeliefs, and counter them by providing or promoting fact-checking tools which are easily accessible. There are already plenty of English language fact-checking websites available, such as the charity fullfact.org or the private company leadstories.com. Yet, the available information still needs to be translated and adapted to regional contexts.

Empowering citizens

While the cooperation of big tech companies, expert organisations and governments is a prerequisite to help citizens navigate health infodemics and fight the spread of misinformation, the empowerment of citizens might become the key to success for three reasons.

First, while algorithms can only detect obviously false or extreme content, humans can also identify content which is slightly inaccurate or incomplete and

contextualise it, for example because citizens have personal knowledge about the people in their network. This is highly important, because encountered content is often not completely false. However, vague information or even the expression of fear can create climates of uncertainty. For example, some people are concerned that the aluminium used in vaccines may increase their risk of Alzheimer’s. A look on the fact-checking website fullfact.org reveals that there is a lack of scientific evidence for this link and that a person in general “ingests seven to nine milligrams of aluminium per day” through their diet, while a single vaccine contains less than a milligram.^[10] These are important arguments, which can be used to counter expressed fears of vaccination.

Second, rumour spreaders may often judge corrective efforts based on the relationship they have with the correcting source. For example, a corrective effort of a close friend may have a more persuasive effect than one from a distant contact.^[11] For example, if a close friend comments on a post which includes misinformation, the rumour spreader may take the post down or reply by admitting the falsehood, thus making the post less influential in the network. This may not only work on social media platforms, but also when citizens confront rumour spreaders in personal talks or private messages. Such corrections by close contacts may then have a lasting effect, even on more resistant rumour spreaders.

Third, active citizens are the best guarantee for a resilient democracy. In fact, big tech companies, the government and expert organisations are supposed to work in the interest of citizens. However, big tech companies also have strategic business interests, such as reaching wide circulations. False news is often designed to stimulate virality*,^[12] which may impede big tech’s motivation to ban such content entirely. Moreover, government surveillance of the online space may also allow for non-democratic censorship. For example, the Hungarian government has instituted a five-year sentence for disseminating misleading information, [leading to fears from journalists it](https://www.bbc.com/news/world-europe-55888888)

* Virality is the tendency of an image, video, or piece of information to be circulated rapidly and widely from one internet user to another.

could disrupt objective reporting of the pandemic and the government's response.¹⁰

Boosting Knowledge

People with more extreme positions may be more inclined to believe and share information which supports their worldview regardless of the truthfulness of this information. However, misinformation is also often shared because of a lack of literacy to find, appraise and understand health-related content, and thus to acquire health-related knowledge.^{11 12} However, existing research indicates that knowledge is an important protective factor, inoculating individuals against misinformation.¹³ Survey data collected at the peak of the COVID-19 pandemic in Austria[†] indicate that citizens with less knowledge are more likely to believe and share misinformation.

“the empowerment of citizens might become the key to success

In the survey, knowledge was measured with quiz questions (e.g., knowledge of the terms ‘herd immunity’ and ‘incubation period’, or the ability to identify people who belong to the ‘at-risk groups’). Citizens with low knowledge were more inclined to rate the claim that *being able to hold breath for 10 seconds is a good test for COVID-19* as credible. Similarly, people with low knowledge were more likely to deem the assertion that *the coronavirus was spread to stop population growth* as credible. Furthermore, citizens with less knowledge reported that they have shared misinformation which was detected as such by others more frequently than citizens with more knowledge. Boosting citizens' knowledge may thus indeed protect them against falling for online misinformation.

The road ahead

To tackle the current and future health infodemics, governments in Europe need to think about how to strengthen and empower active citizenry in their countries. One prerequisite is the enhancement of literacy in the field of health, politics and new media technology. Navigating new digital environments has become more complex and more demanding and the acquisition of knowledge in these environments requires new skills. Thus, new and innovative educational programmes are needed. Furthermore, public campaigns may target public awareness of social media misinformation and encourage young people to become active in correcting misinformation online. In the event that citizens encounter questionable health information, they need low threshold access to in situ fact checking information from trustworthy sources. Governments, expert organisations and also big tech companies need to engage in an open, bottom-up discourse on what tools and content citizens need. For only when citizens are motivated, equipped and surrounded by opportunities, can their full potential to fight the current and future health infodemics be unleashed.

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† For details on the study visit: <https://research.mci.edu/en/cshi/blog/covid19/sample>