

The COVID-19 pandemic made us aware that the flood of various forms of misinformation is inherently associated with great public health challenges. The omnipresence of health-related misinformation coincides with the emergence of movements questioning academic medicine, rejecting proven and established methods of treatment or disease prevention and the growing popularity of alternative medicine. General attitude originating from questioning scientific reasoning and rejecting the established evidence is typical for denialism. It is inherently associated with conspiracist thinking. Conspiracy theories reject the standard explanation of an event and attribute it to covert groups or organisations that carry out secret plots.

Health literacy was declared as one of the critical determinants of health during the 9th Global Conference of Health Promotion held in 2016. Many studies have shown that adequate health literacy is associated with positive health outcomes and more balanced utilisation of health resources. Negative effects of limited health literacy were confirmed in the Polish population. Health literacy is perceived as the remedy protecting against the misinformation accompanying events imposing an increased burden on public health and health care system.

The main aim of this project is understanding to what extent health literacy may play the role of an effective countermeasure against various forms of misinformation and denialism. Therefore the prevalence and determinants of susceptibility to misinformation substantiated by conspiracy beliefs and attitudes stemming from denialism will be explored in the Polish population. The ambition of the project is modelling of the interrelations between various types of health literacy, denialistic attitudes and conspiracist beliefs.

Main research methods applied in the project will include the synthesis of existing evidence on the role of health literacy in protecting against misinformation, adaptation and validation of feasible questionnaires, survey studies based on personal interviews and performed online. Standardised tools measuring health and e-health literacy, vaccine hesitancy, conspiracy beliefs and pseudoscientific beliefs will be applied in the survey studies.

Understanding of the mechanisms responsible for the occurrence of susceptibility to misinformation and attitudes stemming from denialism is of utmost importance for taking efficient measures when promoting favourable health behaviours and the participation in preventive actions. Furthermore, the ability to recognise and counteract denialistic opinions is critical for the successful implementation of broader public health strategies.

The project will yield responses to the following research questions:

- 1) What is the prevalence of health-related views stemming from broadly understood denialism, such as anti-vaccination attitudes or questioning of COVID-19 pandemic in the society?
- 2) What are the determinants and consequences of adopting attitudes based on health-related denialism?
- 3) Do the denialistic views show a tendency to cluster within the health area or with attitudes in other areas, e.g. ecology?
- 4) How denialistic views coincide with the questioning of academic medicine and supporting the methods called popularly as alternative medicine?
- 5) Do adequate health and e-health literacies increase the resilience against views stemming from denialistic attitudes?
- 6) May health literacy safeguard society against health misinformation?