# The valuation of social media use in spreading the health information online

# **Summary**

### Introduction

The recent growth of the digital networks such as the Internet as well as new communication tools like social media has changed the way people communicate and receive information. The process does influence the health area as well. All those changes have meant that the knowledge once reserved for specialists has never be elitist anymore. In order to increase the benefits and minimize the negative effects of this wide availability of information, it is necessary for new media users to be able to critically assess its suitability for their own needs. Developing skills in this field, known as an e-health literacy, becomes one of the most important challenges facing modern public health, but they have not been well understood so far.

#### Aim

The valuation of social media use in reveiving and sharing information about health and disease in relation to the e-health literacy of Polish Internet users.

## Material and methods

In the first stage of the study, social media monitoring (Facebook, blogs, microblogs, internet forums, photo and video services) was carried out using the Brand24® tool. During the period 29/03 - 05/04/2017, 61 projects in the area of health and disease were analyzed, which were taken in the MedlinePlus database. In the next step, a qualitative analysis of the obtained material was carried out, using the QDA Miner v. 4.0® program.

In the second stage a quantitative CAWI survey was conducted among Internet users (N = 1527, mean 32 years, SD = 10.37), using social media. An author's questionnaire and an e-Health Literacy Scale (e-HEALS) adapted to Polish conditions (tool validation was carried out) were used in the study.

# **Results**

As a result of social media monitoring conducted in the first stage, 901 153 mentions from the area of health and disease were received, the most of them was found on Facebook (n = 661,670, i.e. 73.42%). As a result of the qualitative analysis of the content, it was revealed that the largest group of mentions (n = 292,086, i.e. 32.41%) were classified to category K1: "Sharing

information". It was found that women are more often involved in discussions on health issues, and the sentiment of the analyzed material is largely neutral.

In the second stage of the research, a psychometric evaluation of the P-eHEALS scale was carried out, which confirmed that the scale is reliably tool (Cronbach's  $\alpha = 0.84$ ) for measuring the level of e-health literacy among Polish-speaking internet users, both women and men, in various age categories. Exploratory factor analysis confirmed the assumed one-factor structure of the tool, explaining 47.42% of the variance. As a result of the analysis of the obtained quantitative data, it was found that women aged 25 to 34, better educated people living in more urbanized areas and pursuing private business showed a significantly higher level of e-health literacy. It was also shown that people who use social media more often show a significantly higher level of P-eHEALS; the most noticeable correlation concerned blog users. There was no statistically significant difference between the level of interest in health issues in social media and the result of P-eHEALS. However, it has been shown, that users who use social media more to: search for help in the interpretation of research results and alternative methods of treatment, obtained significantly lower e-health literacy level. As a result of the conducted analyzes, it was shown that the youngest respondents (under 17 years old) are less likely to use social media to search for information or conduct health-related conversations. It was also shown that older, better educated women significantly more often rated the usefulness of social media in the context of health and disease. It was found that with the greater interest in health issues in social media, the frequency of their use in the context of health and illness is definitely increasing.

# **Conclusions**

The demonstrated dependencies and the results of the social media monitoring indicate that the Polish-language social media environment has enormous potential in terms of: the wealth of content in the area of health and the interest shown by internet users. The conducted research should be treated as an introduction to further in-depth analyzes and studies remaining in the paradigm of mixed methodology as well as a reflection for policy makers related to the health sector in Poland.

**Keywords**: health information, social media, e-health literacy