# **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 suitability for their own needs. Developing skills in this field, known as e-health literacy, are one of the most important challenges facing modern public health, but they have not been well understood so far.

#### Aim

The assessment of the usefulness of social media in the dissemination of information about health and disease in relation to the e-health literacy of Polish internet users.

## Material and methods

The first stage of the study included social media monitoring (Facebook, blogs, microblogs, internet forums, photo and video services) by using the Brand24® tool. During the period 29/03/2017 - 05/04/2017, 61 thematic projects in the area of health and disease were analyzed. The projects were taken from 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. 1527 internet users, using social media, participated in the study (Mean 32 years, SD = 10.37). A authors' questionnaire and e-Health Literacy Scale (e-HEALS), adapted to Polish conditions (tool validation was carried out) were used.

### **Results**

As a result of social media monitoring conducted in the first step of the study, 901 153 mentions were received from the area of health and disease, including the most on Facebook (n = 661,670, i.e. 73.42%). As a result of the qualitative analysis, it was revealed that the largest group of mentions (n = 292,086, i.e. 32.41%) were those 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 statements is largely neutral.

In the second stage of the research, a psychometric evaluation of the P-eHEALS scale was carried out, which confirmed the receipt of consistent and high internal compliance (Cronbach's  $\alpha=0.84$ ) tool for measuring the perceived level of e-health literacy among Polish-speaking internet users, both in the case of women and men, in various age categories. Exploratory factor analysis confirmed the assumed one-factor structure of the tool, respectively 47.42% of 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 (rho = 0.141); the most noticeable correlation concerned blog users (rho = 0.243). 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 often to: search for help in the interpretation of research results and alternative methods of treatment, obtained

significantly lower P-eHEALS results. 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 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 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