

Navigation health literacy through the websites of key institutions in Slovenia

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BACKGROUND

Over the past decade, the structures and regulations of health care systems in many countries have become increasingly complex, making it ever more difficult for users to navigate through them (Schaeffer et al., 2018). Users are required to orientate themselves within a large service landscape, to manoeuvre between and within various health care organisations and to interact with a range of different health professions to plan and negotiate further health care. Navigational health literacy is defined as people's knowledge, motivation and skills needed to access, understand, appraise and apply information and communication in various forms necessary to navigate health care systems and services adequately in order to obtain the most suitable health care for oneself or related persons (Griese et al., 2020: 6). Users/patients - through active participation in all interactions and communication where professionals can provide them with the answers to make health care decisions – need very well developed, functional navigational health literacy (Barry et al., 2012). A user/patient with a lower level of navigational health literacy is unable to meet such navigational requirements, often leading to disorientation through the health care system, stress, uncertainty and discontinuity in health care (Lopez et al., 2019). Studies show that this particularly affects people with low general health literacy (Levy & Janke, 2016; Van Der Gaag et al., 2017) and vulnerable population groups, such as older adults and socially disadvantaged population groups (Loignon et al., 2018; Levy et al., 2016).

The aim and purpose

The purpose of the research is to examine the current communication of health-related information on the websites of government and health care institutions in Slovenia and to determine how accessible, transparent, useful and understandable the published information is from the user's point of view, and whether as such they enables an increase in the health literacy of the population. The aim of the research is to design proposals for possible solutions in the system based on such information.

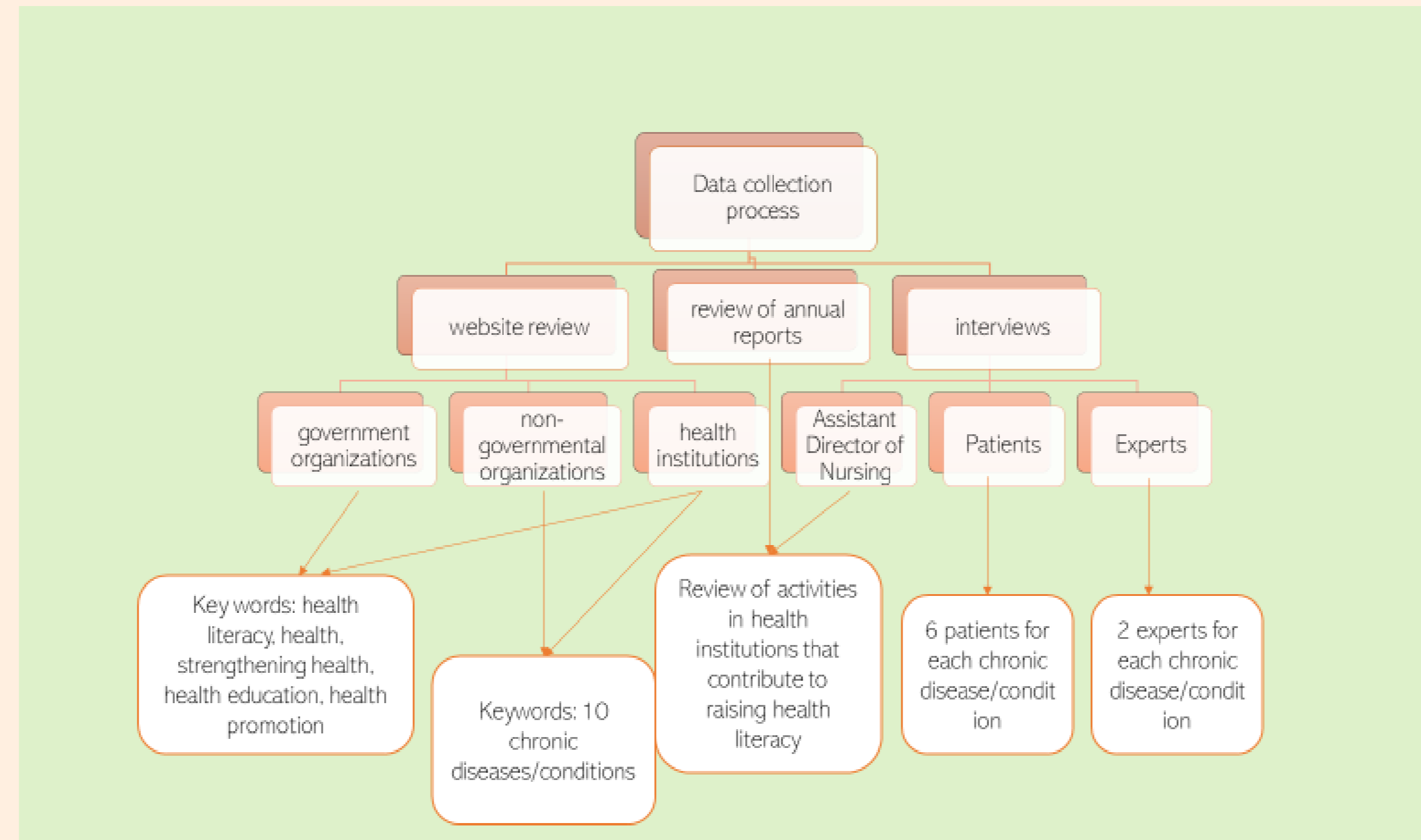
METHODS

Extensive qualitative research was carried out, part of which was a review of governmental organisations and health care institution websites in Slovenia, in order to determine to what extent published health-related information contributes to raising the health literacy of the population. Figure 1 presents the entire set of data collection activities in the qualitative study. The data form the basis for researchers to prepare the path of patients through the health care system. The researchers reviewed 28 governmental websites and 95 websites of health care institutions at the primary, secondary, and tertiary levels. The review was conducted by non-health researchers to ensure an understanding of websites from the perspective of health care system users. In the first phase of the research, the key words were: health, health promotion, strengthening health, health education and health literacy. In the second phase they searched for the results regarding the selected 10 most common chronic non-communicable diseases/conditions in Slovenia: type 2 diabetes, ischemic heart disease, heart failure, chronic obstructive pulmonary disease, low back pain, depression, stroke, breast cancer, prostate cancer and periodontal disease. A critical review and assessment of the content of the information was carried out in terms of transparency, comprehensibility, usability and data accessibility.

RESULTS

The advantages of the accessibility of information from governmental organisations can be seen in the established joint website of the entire state administration, which enables the unified communication of health information.

Figure 1: The process of carrying out qualitative data collection



Most health information is published on the website of the National Institute of Public Health. The researchers provided their assessment of the accessibility of information in a SWOT analysis (Figure 2). When reviewing the websites of health care institutions using keywords of the 10 most common chronic non-communicable diseases/conditions, most hits were for prevention programmes managed from the national level (Table 1). This information is equally accessible from the point of view of the individual disease on all key websites. In accordance with a critical review, the content of the information was numerically evaluated with a rating of poor (1), good (2) and very good (3) in terms of transparency, comprehensibility, usability and accessibility (Table 2).

The results of the review of governmental organisation websites

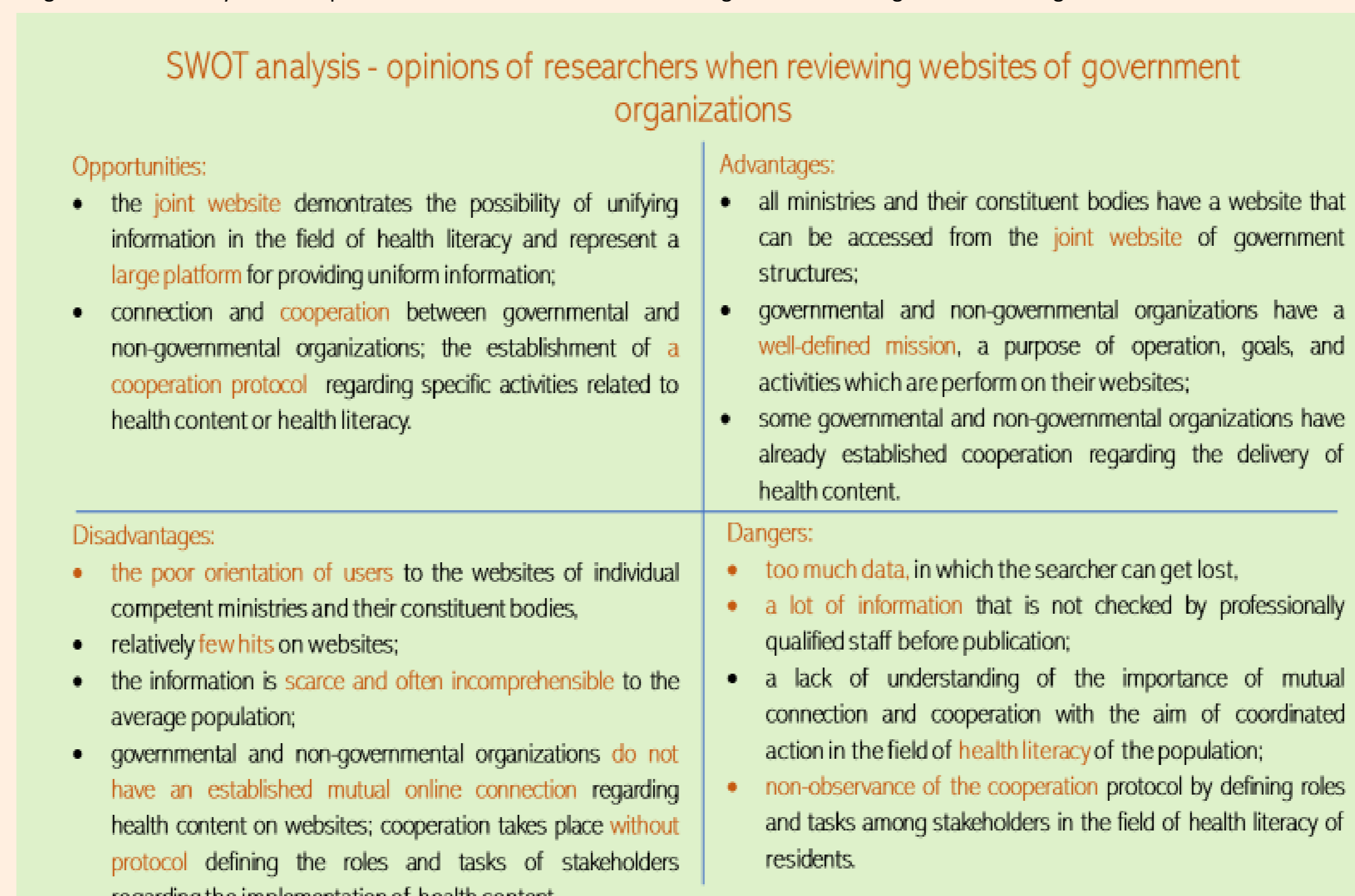
Websites of all ministries and the Government of the Republic of Slovenia:

- the researchers identified 46 hits, of which 13 are on the website of the Ministry of Health;
- the results was related to the keyword „health“;
- the results was related to the phrase Ministry of Health, Minister of Health.

Websites of agencies and organizations related to the government sector:

- the researchers identified 6468 hits, of which 2928 are published on the website of the National Institute of Public Health;
- the results was related to the keyword „health“;
- the results was related to press releases, drug safety monitoring, and inappropriate products.

Figure 2: SWOT analysis – the opinions of the researchers after reviewing the websites of governmental organisations



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Table 1: The number of hits on the websites of health organisations for the keywords of the selected chronic diseases/conditions

	PATIENT INSTRUCTIONS			INSTRUCTIONS FOR HEALTHCARE PROFESSIONALS		
	SYSTEM NAVIGATION	UNDERSTANDING DISEASE	DISEASE MANAGEMENT GUIDELINES	SYSTEM NAVIGATION	UNDERSTANDING DISEASE	DISEASE MANAGEMENT GUIDELINES
ISCHEMIC HEART DISEASE	4	0	0	0	1	0
BRAIN STROKE	26	17	11	4	3	8
CHR. PULM. OBSTR. DISEASE	12	7	0	1	10	0
HEARTH FAILURE	22	16	11	1	5	5
DEPRESSION	94	24	5	1	12	0
LOW BACK PAIN	3	5	10	0	1	1
TYPE II DIABETES	104	13	12	6	4	6
BREAST CANCER	82	16	0	2	7	0
PROSTATE CANCER	18	13	15	0	0	4
PERIODONTAL DISEASE	4	1	1	0	0	0

Table 1 and Table 2 show the results of a review of the websites of all health care organizations for the keywords of 10 chronic diseases/conditions:

- hits on websites are mainly aimed at patients;
- most hits in the Patient Guidance category were identified in the field of system navigation, for type II diabetes;
- among the hits that are identified as instructions for health professionals, most concerned the topic of understanding diseases in the field of depression;
- the average ratings of all websites are good.

Table 2: Information assessment

	TRANSPARENCY	COMPREHENSIBILITY	USEFULNESS	DATA ACCESSIBILITY
AVERAGE RATING OF ALL WEBSITES	1.9	1.9	2.1	2.6
RATING DESCRIPTION	Information is provided mostly in one place on the website; users do not need much time to find the information they are looking for.	The information is mostly given in an understandable way; not many professional terms are used.	The information is helpful in understanding, identifying, and/or treating the disease.	Access to the information required some searching through the healthcare institutions website.
GOOD				

DISCUSSION

In 2020, we conducted a national survey on the health literacy of the general population in Slovenia, which showed that almost 50% of the population has insufficient or problematic health literacy and 60% has problematic or insufficient navigational health literacy. Through qualitative research, we wanted to deepen our view of the factors that can influence the navigation literacy of the patients/users of the health care system. An important factor is knowledge of the complex health care system and the uniform communication of key information to users. We found that the communication of information intended for patients on the websites of both governmental organisations and health care institutions is deficient. On the websites of governmental organisations, users do not receive information that would guide them through the health care system. On the websites of health care institutions, information is related to clinic schedules and programmes being implemented. Users do not receive information that could be used to understand their illness and for the effective self-care of a chronic non-communicable disease/condition. According to the World Health Organization (2015), navigational health literacy is based on the ability to handle information in such a way that one can easily navigate the health care system and “find the right care at the right time in the right place.” The key concern of providing authentic and uniform data related to health and the use of the health care system must become part of the national health care development strategies that ensure equal access to health care services for all.

CONCLUSIONS

- Provide clear, comprehensible information in the system for empowering patients and health professionals.
- Prepare a unified strategy for communicating simple and understandable information.
- Unify health-related information communicated by relevant stakeholders to establish safe and credible information platforms