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Dr Google as the source of health information – the results of pilot qualitative study



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ABSTRACT

Introduction: Google is the most popular search engine that covers nearly 90% of the total online searches. It is likely to be used by both, patients and physicians to look for health information.

Aim: The objective of the study was to find out deep motives for using the Internet to obtain health information.

Material and methods: Anonymous study was carried out with the use of individual in-depth interviews (IDI). As many as 20 persons participated in the study (10 women and 10 men). The IDI scenario included the questions on health, the Internet as the source of health information and the credibility of information published online.

Results and discussion: The majority of respondents (15 persons) admit that they sometimes search the Internet for health information because of curiosity, concern, and motivation to increase knowledge as well as broad and quick access to the network. The respondents search for useful information when the information provided by a physician and medical terms are incomprehensible or when the therapy prescribed by a physician is ineffective. For the majority of respondents Internet portals dedicated to one topic only are the most credible.

Conclusions: Women search the Internet for health information more often than men and the scope of their search is broader. The Internet helps to shape basic knowledge, makes it possible to formulate questions asked to the physician and to understand the information provided by a physician.

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1. Introduction

Owing to the progress of civilization and the development of information and communication technologies 67% of men and 60% of women use the Internet regularly, i.e. at least once a week.¹ According to the data of the Centre for Public Opinion Research the number of Internet users among adults has increased almost four times from 2002 to 2015. Age is an important factor in differentiating the use of the Internet. Among adults the highest percentage of users was observed in the group of 18–24 years of age (97%) and 25–34 years of age (95%). It could be assumed that in younger groups the percentage of Internet users can amount to 100%. Independently of age, the education also influences the patterns of Internet usage. As many as 94% of persons with tertiary education declared that they use the Internet regularly, compared

to 45% of persons with basic vocational education.² Access to the Internet differs, depending on the type of household and the urbanization of the place of residence.³ The results of the study carried out by PBI (Polish Internet Research) in 2011 show that 88% of Internet users use health-dedicated services when trying to acquire information on health, diseases or methods of treatment. The physicians and representatives of health care institutions are only the second source of health information (73%).⁴ The results of the study by Bujnowska-Fedak, carried out in the years 2005, 2007 and 2012 in the group of 3027 Polish adults showed that the percentage of the Polish population that used the Internet for health-related purposes grew significantly (41.7% in 2005, 53.3% in 2007, and 66.7% in 2012). The Internet has become significant source of health information for nearly half of Polish citizens, outdoing television, radio, press, and courses or lectures in the ranking list. As the Internet develops, the use of interactive, health-related online services has also increased remarkably.⁵

In USA similar percentage of Internet users searching for health information is observed. In 2013 over 72% of Internet users among USA adults said they searched online for health information of one kind or another within the past year (this includes searches for

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general information, information on to serious conditions, and searches for minor health issues). As many as 77% of respondents said they started at a search engine such as Google. The percentage of online health seekers who said that they looked for information related to their own situation amounted to 39%, but 39% declared they searched for information related to someone else's health or medical situation. As many as 24% of USA adults received online or offline information or support from persons who suffer from the same health condition. As many as 26% of Internet users read or watched someone else's experience with health or medical issues in the last 12 months, but 16% stated that they used the Internet in the last year to look for others who might share the same health concerns.⁶

Generalised Internet access also increases the use of different search engines. These tools are commonly used to search for health information and related conditions. Some Internet users use this information for self-diagnosis and self-treatment.⁷ The term 'Dr Google' means searching for health information online (mostly to diagnose the symptoms of a disease), particularly with the help of Google search engine.^{8–10} Google is the most popular search engine that covers nearly 90% of the total online searches. It is likely to be used by both, patients and physicians to look for health information.⁸ Self-diagnosis and self-treatment can constitute health or even life risk.^{7,11} Factors that influence the online search for health information include amongst others: education, gender, race, age, presence of children in the home, having a poor personal health condition, and geographic residence. Similarly, factors that influence the use of the Internet to track personal health information of other users include gender, race and education.¹²

According to the results published by Hesse (2012) 'Dr Google' is the most frequently used source of information about health in USA. Hesse describes this trend as positive. He stresses, however, that health care should aim at improving credibility and reliability of the information published online, so that it does not mislead the patient.¹³ The author underlines that online health education of patients can lead to measureable impact for healthcare system. However the healthcare system should endeavour to develop an online global collection of credible and scientifically proven health data. The online engagement of a patient in therapeutic and diagnostic process can also result in optimum economic benefits for the healthcare sector.¹³ It should be however mentioned that health information published on the Internet does not provide the users with credible and reliable medical advice.¹⁴ The health information available online is mostly incomplete, outdated, unreliable and unreasonable from the scientific point of view.¹⁴

On the basis of the information stated above, it seems advisable to conduct a pilot study-in-depth qualitative analysis aimed at finding out deep motives behind the usage of the Internet for health purposes and analyse complex patterns of behaviour.

2. Material and method

2.1. Study Group

In qualitative studies mainly nonprobability sampling is used. In this case the so-called snowball sampling was applied. The study included 20 respondents of gender distribution close to the population distribution. The sampling criteria were as follows: age – the group of 20–44 years of age, residence or place of work – Warsaw. The following exclusion criteria were adopted: medical students or graduates of medical universities, PhD students and holders of doctorate in any field of science.

The study group included 10 women and 10 men. As many as 18 respondents live in Warsaw, others work in the capital and live in Warsaw area; 7 participants have a child/children; 16 have tertiary

Table 1
Characteristic of the study group.

No.	Gender	Age	Education	Financial status	Work	Children
1	W	33	secondary	average	yes	2
2	W	38	tertiary	good	yes	2
3	M	30	tertiary	good	yes	0
4	W	34	tertiary	average	yes	0
5	M	40	secondary	average	yes	1
6	W	42	tertiary	average	yes	2
7	M	21	technical secondary	average	no	0
8	M	38	tertiary	good	yes	2
9	M	26	tertiary	good	yes	0
10	W	23	secondary	average	yes	0
11	M	26	tertiary	good	yes	0
12	M	39	tertiary	average	yes	1
13	W	27	tertiary	average	yes	0
14	W	24	tertiary	good	yes	0
15	M	27	tertiary	average	yes	0
16	M	42	tertiary	good	yes	0
17	W	24	tertiary	good	yes	0
18	W	27	tertiary	good	yes	0
19	M	33	tertiary	good	yes	0
20	W	41	tertiary	average	no	2

education. The detailed characteristic of the study group is presented in Table 1.

2.2. Study method

The study was carried out with the use of qualitative research technique – individual in-depth interviews (IDI). As many as 20 interviews were carried out from 4 November to 10 December 2014. The interviews as well as the consent to participate in the study were recorded on a professional digital voice recorder. A transcription and a summary were prepared for each interview. The qualitative analysis was conducted based on the transcription of interviews.

The IDI scenario included the following thematic areas:

- health (health management, preventive healthcare, cold/flu, chronic conditions, medicines and dietary supplements),
- Internet as the source of health information (information on diseases, medicines, dietary supplements, test results and opinion on physicians/medical practice),
- credibility of information published online.

3. Results

In the study group 5 respondents do not search online for health information at all or do it very occasionally. Others sometimes or quite often obtain this information from the Internet. Almost all respondents in the group (14 persons) indicated that they once searched or sometimes search online, for themselves or close persons, for the information on distressing symptoms that could be the indication of disease.

3.1. Health

The respondents understand health as appropriate physical fitness and wellbeing. Lack of pain and diseases, healthy lifestyle, proper functioning of the body, attention to hygiene, sense of security and satisfaction were indicated. Good mental health, vitality, lack of injuries, feelings and emotions that can help proper everyday functioning were also mentioned. Some persons pay special attention to mental health. They underline that 'the physical influences the psychological; therefore health is the

balance between body and mind.' According to the respondents health 'should not be neglected, because it is not eternal, it should be taken care of and, in some part, improved.'

The respondents who regularly engage in physically activity and follow a diet better perceive their state of health. In the whole study group, women, in particular those who have children, are more interested in healthy lifestyle.

3.1.1. Health protection and state of health assessment

Most of respondents (17 persons) declare that they care for their health, amongst others through healthy diet and physical activity. Only persons who belong to the group with the risk of cancer or heart disease as well as persons who due to current disease must monitor their state of health mention diagnostic tests. Walks are the most frequently undertaken physical activity.

3.1.2. Preventive health care

For most of respondents preventive healthcare means preventing the diseases (12 persons), taking care of health through proper diet (13 persons) and physical activity (12 persons). Tests (10 persons) and doctor's appointments were also mentioned. Only 1 person mentioned preventive vaccination and 2 respondents associate preventive healthcare with the use of dietary supplements.

Preventive tests are mainly performed by persons with chronic diseases or with the risk of cancer or cardiovascular diseases. Some of the respondents request, as precaution, blood count test due to a special diet or on their own initiative. The following tests were mentioned: mammography, cytology, breast ultrasound, gynaecological examination, abdominal ultrasonography and urinalysis. Women indicated more tests and preventive healthcare methods.

3.1.3. Cold and flu

Most of respondents suffer from cold 1–3 times per year (13 persons), some once per few years (3 persons) others even up to 5 times per year (4). Mainly colds were mentioned as not all respondents were able to define if and when they suffered from flu. At the beginning of the disease the respondents practice self-medication, using home methods mainly. Additionally, most of them take non-prescription medicines, others avoid pharmaceuticals. The information on how to treat the cold comes from family, friends, can be based on own experience or earlier doctor's prescriptions, from a pharmacist, the Internet or a health care handbook. If the disease persists, they prefer to see the doctor.

3.1.4. Chronic diseases and physician's appointments

Persons suffering from chronic diseases or belonging to the risk group more often see the doctor and regularly perform preventive tests. The group of respondents included persons suffering from: allergy (3), persistent cough (2), heart disease (1), polycystic kidney disease (1), problems with knee joint (2), chronic sinusitis (1), hypothyroidism (1) and migraine (1).

3.2. 'Dr Google' as the source of health information

All respondents use the Internet every day. For most of them the Internet is indispensable to perform work activities. For private purposes it is used for contacting friends, for entertainment, information, shopping, developing interests, storing data and education. They also underlined that at present it is the most rapid and accessible source of information.

3.2.1. Searching for health-related information – motivation

Most of respondents (15 persons) admit that they sometimes search online for health information due to curiosity, concerns, and willingness to increase knowledge or broad access to high-speed

network. The respondents search for useful information, for example when they do not understand the information or medical terms provided by the physician. It happens also in the case of ineffective therapy prescribed by the physician. In the group of respondents two persons independently defined this phenomenon as 'Uncle Google' and one as 'Dr Google'.

The respondents most often search online for the information on simple health issues as well as for health-related advice (in particular related to diet and physical activity). They are also motivated by the willingness to enhance their knowledge before the planned doctor's appointment as they want to have general impression of a given issue. The Internet helps to shape knowledge and makes it possible to formulate questions to the physician that will help a patient to understand health issues. It satisfies the need for knowledge on one's state of health. However seven respondents mentioned that the access to such broad knowledge of different level of correctness may constitute a certain risk. It can be dangerous for the human psyche as some persons tend to attribute more symptoms than in reality and the symptoms that they google may be a sign of many different diseases.

The respondents sometimes search online for the information related to the health of a relative and also to learn about preventive methods or methods to improve their health. Additionally they search for contact information of health institutions and physicians. Some persons define the information available online as certain guidelines that provide them with basic health information.

The respondents who do not search online for health information at all or do it very rarely (5 persons) think that the health information available online is not credible and that is why they do not search for it. The respondents in this group do not plan to read this type of information online as in their opinion the information is often contradictory or they already have the necessary knowledge on the health issue of interest. Others just do not feel the need to expand their knowledge, arguing that they are healthy. One respondent also stated that 'Dr Google is not a good solution as one should rather seek assistance of a specialist.'

Based on the statements of the study group it can be concluded that men search for health information less often and with less consideration than women. It was stated that 'one should differentiate abstraction from reality while searching for this type of information online.' In the interviews with the respondents the opinion that the Internet will not replace doctor's office and specialist help prevailed.

3.2.2. Selecting health-related information

Most persons always evaluate the credibility of the information that they find in an online search. That is how they try to confirm its reliability. Some verify the authors of articles; others do not pay special attention to the issue.

Another, frequently mentioned method of information selection is to choose the website based on the descriptions displayed by the search engine. Some persons pay attention only to the type of the website, while others do not pay attention to selecting the websites that they visit.

3.2.3. Information about diseases

The respondents search online for the information on different conditions, from common ones to more serious diseases. The following were mentioned in the interviews: skin diseases, polycystic kidney disease, Ebola haemorrhagic fever, psychiatric diseases, sinusitis, osteoma, cervical cancer, cystic fibrosis, autism, spine and knee conditions.

The respondents sometimes search for the information out of curiosity or because they want to expand their knowledge on the current conditions. Some respondents are motivated by the need to

learn about a disease that they suffer from or about the disease of a close person. They search for the information where the disease can be treated, what the symptoms, methods of treatment, rules and methods of prevention are. Some respondents want to learn the worst-case scenario of the disease.

The respondents mentioned several times in the interviews that if a specialist provides them with sufficient information, they do not need to search online for the explanation of a given condition. However, the respondents often gain knowledge both, from a physicians and the Internet. It was indicated that specialists only sometimes provide the patients with sufficient information, because they usually do not have enough time.

3.2.4. Information on medicines, dietary supplements and test results

Part of the respondents sometimes search online for the information on medicines and dietary supplements. They use mainly websites that present all medicines, including substitutes, prices and patient information leaflets (out of curiosity or when they lose the leaflet). It occurs that they search for this information also on discussion forums.

Some respondents searched online for the information on the results of diagnostic tests – usually out of curiosity, because of the long waiting period for medical consultation, out of concern/fear and to find out the meaning of the defined parameters and medical terms. It was repeatedly underlined that only a physician can allay the doubts regarding the test results.

3.2.5. Opinions about physicians and out-patient clinics

Over half of the respondents searched online for the opinions about physicians or out-patient clinics. They consider that these opinions are very subjective, often untrue and one should remain rather sceptical. However, even if the respondents have limited trust in the opinions, they consider that, in a sense, they are worth knowing. The respondents notice that negative opinions published online are pointed out four times more often than the positive ones. Additionally, favourable opinions occur significantly less often. The respondents read the information online because they lacked alternative source of information or they wanted to know how other patients perceived a given physician.

Some respondents do not read the statements of other Internet users because they consider them to be of low reliability. They tend to rely on the opinion of friends that they consider more credible.

3.2.6. Social media and internet forums

Majority of respondents use social media. Some of them notice the entries of friends relating to their state of health (most often colds, pregnancies were mentioned as well). As many as 11 respondents admitted that they searched for health information amongst others on Internet forums. It was underlined that the persons who reply to messages in discussion groups are just ordinary people, not related to healthcare system. Some respondents mentioned that sometimes Internet forums constitute the source of knowledge for the patients before the doctor's appointment.

Discussion groups are perceived by the respondents as the source of a wealth of information that are not to be trusted entirely. According to the respondents 'sometimes forums are a very good concept thanks to the possibility of sharing the experience and knowledge with many persons. However one should be sceptical as you never know who the author of a given statement is and what his or her intentions were. This information should only be considered a suggestion.' Some respondents join the discussion and are interested in the opinions of other persons. The respondents indicated even that the opinions are the most valuable and reflect the situation when expressed by the person who suffers from a given disease.

The respondents more often search for health information on websites than on discussion forums. A vast majority of respondents declared that they never published online the information on personal health or the health of a close person.

3.2.7. Diagnosing a disease by means of the internet

The majority of respondents (14 persons) looked online for the information on distressing symptoms. The following reasons, amongst others, were declared: curiosity, expanding knowledge, reassuring, concern or need of information on one's problem. Some searched only for the information on minor symptoms, others on much more serious symptoms. Three respondents underlined firmly that in the case of distressing symptoms, they immediately visit a doctor.

Some respondents consider searching for information on symptoms to be educational while waiting for doctor's appointment. There was a statement in the interviews that searching online for this information helps to quieten down emotions relating to uncertainty. Thanks to the information acquired online four respondents were able to correctly diagnose themselves or a close person with a disease that was then confirmed by a specialist. The respondents suffered from different conditions.

Part of respondents in the first place search online for the information on the symptoms because the Internet is the fastest way to acquire information. Others declare that they both, visit websites and a doctor. They are however aware that the Internet is not a credible source of knowledge.

Some respondents are of the opinion that self-diagnosis is downright irresponsible. Persons who do not search online for the information on their symptoms consider it a waste of time, incorrect method of diagnosis and a symptom of hypochondria. Out of the whole study group a few respondents declared that a physician is a professional therefore they would never suggest anything that they found online.

3.2.8. Verifying diagnosis or physician's recommendations

Half of all respondents verified diagnosis or doctor's recommendations by consulting with other physician or physicians and sometimes with acquaintances with medical background. Some of the respondents talk with patients suffering from the same disease but only out of curiosity. The respondents try to verify the information provided by the physician by searching online on forums, blogs or websites (when doubting whether they have been correctly diagnosed or to verify if the doctor prescribed correct dosage of medicine).

3.2.9. Usefulness of information available on the internet

Certain health information available online proved to be useful for the respondents, amongst others, to expand the knowledge (e.g. medical terminology, home remedies for treating conditions such as cold, nutrition – selection of products, cooking methods, diets and recipes), select a doctor (thanks to opinions found online) and develop physical activity (types of training and sports). According to the respondents the information found online and implemented was in most cases effective and the respondents were satisfied with the result.

3.2.10. Credibility of information published on the internet

For the majority of respondents portals dedicated to one topic are the most credible. They use the available information only superficially – to define the direction of future activities or for basic knowledge. The information published by doctors, experts, trainers, web feeds developed by professionals, websites of foundations and organizations, scientific publications, websites developed by doctors and encyclopaedic terms (at a popular encyclopaedic

portal) are considered the most credible. Articles on websites are considered to be less credible sources.

The respondents defined popular information websites as unreliable sources. As to the discussion forums, it was stated that the more opinions are available, the greater the chance of credibility. However, according to the majority of respondents, discussion forums are not credible due to the lack of control over their content.

4. Discussion

4.1. Limitations

The study is qualitative and the pilot. Therefore, the sample is not representative. The results will be used to develop a methodology the quantitative survey conducted on a representative sample of respondents. However, it should be underlined that it results from the type of the research method. Qualitative research method of data collection was used intentionally, which constitutes a strong point of the study, taking into account the research question. The issue of health of the respondent and healthy behaviours is very personal and complex. The objective of the study was to learn the motivation behind certain behaviours of respondents in terms of taking care of their health. According to Anderson a strengths of qualitative research is that data usually are collected from a few cases or individuals so findings cannot be generalized to a larger population. Findings can however be transferable to another setting.¹⁵ The use of quantitative methods only could have resulted in ignoring social aspects of the 'variables.' Therefore countability can conceal basic social processes and behaviours, the example of which is the search for health information on the Internet. Quantitative research describes the reality clearly and objectively, whereas qualitative research provides deeper understanding of the social science than could be obtained with the sole use quantitative data. Therefore quantitative research (contrary to qualitative research) excludes the observation of respondents' behaviour in everyday situations.¹⁶ According to Anderson in qualitative research issues can be examined in detail and in depth. The research framework and direction can be quickly revised as new information emerges.¹⁵

While according to Baum qualitative research is deemed to be much more fluid and flexible than quantitative research in that it emphasises discovering novel or unanticipated findings and the possibility of altering research plans in response to such serendipitous occurrences.¹⁷ Qualitative methods enable public health researchers to apply theoretical understandings to otherwise rhetorical concepts such as participation and empowerment. Qualitative methods also have considerable strength in allowing researchers to document and interpret the different ways in which people make sense of their experiences of health and disease. Qualitative studies generally, generate considerable quantities of data but are limited by the difficulties of generalizing from what are usually small samples.¹⁷

According to Zakiya a researcher might also be confused by the different terms used by qualitative researchers when describing analysis.¹⁸ Analysis might be described as interpretation, making sense of data, or transforming data. Analysis is sometimes presented to indicate different procedures based on language, theory or what is described as interpretive/descriptive analysis. Most of the analytical approaches to qualitative research in health care are 'generic' and are not labelled within one of the specific traditions of qualitative research. A common approach in most of these studies is general and inductive in nature, but does not comply with the very systematic and rigorous inductive approach of grounded theory.¹⁸

4.2. Principal results

The respondents with health issues or whose relatives suffer from a disease search for health information more often. However it is not typical for all respondents – some of them rely only on doctor's opinion in order not to avoid contradictory opinions, and thereby misinformation. The accessibility to different sources of information as well as insufficient or incomprehensible information provided by a physician, curiosity and willingness to expand the knowledge also determine the search. The respondents more often search for alternative source of health information when they do not have a quick access specialized care.

The experience of respondents in using the Internet as well as their skills are also an important factor. The respondents who visited many websites and therefore observed many information sources have serious reservations about their value. In many interviews the respondents stated that the Internet cannot replace doctor's office and professional help. It was also mentioned several times in the interviews that if a medical professional provides a patient with sufficient information, there is no need to search online for the information on a given condition. It was underlined several times that the doubts regarding the test results can be dispelled only by a doctor.

4.3. Comparison with prior work

The results of a systematic review carried out by Kruse's team demonstrated that most of the studies analysing the use of patient portals by the society indicate positive impact of such practices on the state of health.¹⁹ The results of a questionnaire study carried out by Carpenter's team in 2008 in the group of 232 patients with rare diseases demonstrate the Internet is the second – after the physician – source of medical information.²⁰ At the same time the respondents evaluated the Internet as a very reliable source of information (2nd position, also after the physician). The results of the questionnaire study carried out in the group of 1828 Brazilians in 2011 by Moretti's team indicate that 80% of the society considers the Internet to be the main source of health information.²¹ As many as 90% of the society searches for the information on their own health and 79% – for the information on the health of the relatives. As many as 89% of female replied to this question positively respondents (in our study also shows that women more often search online for health information). Over 50% of respondents in Moretti's study search for health-related information online more often than once a week. The most credible information is published online by the employees of healthcare institutions (physicians, psychotherapists, etc.) as confirmed by 76% of respondents. Only 10% of respondents considered the information published on blogs credible. Over 50% of respondents search online for the information on: quality of life, disease prevention, diet, disease symptoms, diagnosis, conventional treatment, alternative methods of treatment, health of a child.²¹ To compare: the respondents who participated in the our study declared that they most often search online for the information on simple health issues as well as health advice (diets and physical activity in particular). As many as 65% of respondents in Moretti study declared that they changed their lifestyle after having obtained health information from the Internet and 48% admitted that they discussed the information obtained online with a physician.²¹ Most importantly, the results obtained by Moretti's team are very close to the results obtained in the interviews of the our study and correspond with the outcomes of studies carried out by Thackeray's team, Duplaga and Bundorf's team.^{12,22,23} In 2002 Bundorf et al. carried out a questionnaire study in the group of 8378 persons.²³ The authors showed that 33% of respondents used the Internet at least once during the past year

to search for health information, whereas over 12% of respondents use the Internet regularly (every 2–3 months).²³

Thackeray's team carried out a questionnaire study in 2010 in the group of 1745 Americans over 18 years of age. The study also showed, that over 31% of respondents use social networking sites to obtain health information, whereas nearly 10% posted a review of doctors, hospitals, drugs or medical treatment.¹²

It was indicated, just as in the study by Duplaga, that persons with tertiary education consulted online rankings or reviews more often than the persons with lower education (49.3% vs 31.5%, $P < 0.001$).²² Similarly, statistically significant relation was demonstrated between respondents' declaration 'Consulted online rankings or reviews' and female gender (44.6%, $P < 0.001$) as it was demonstrated between the use of social networking sites for health and female gender (34.2%, $P = 0.001$).

Researchers, experts and patients ombudsmen, realising the potential of the Internet, indicate that it can support decisions that influence the improvement of healthcare services. Health information available online can also reduce the costs of healthcare as well as improve the access to knowledge in developing countries. However, the effectiveness of the Internet in achieving these goals is unknown. Therefore, the need exists to evaluate the purposes and circumstances in which patients and healthcare professionals use the Internet. The evaluation of factors that influence the use of the Internet for intended purposes is also important.²⁴

There are also various risks associated with the use of the Internet for health purposes. The results of the Portuguese study carried out in 2010, within which the review of health-dedicated websites (amongst others to hypertension, diabetes and acute myocardial infarction) was made, showed that the quality of information published online is unsatisfactory.²⁵ From 20% to 35% of analysed websites (depending on a disease) included the information on complete diagnosis and treatment. From 45% to 85% of websites included a correct definition of the disease and from 45% to 65% of websites included epidemiological data.²⁵

The results of the present study as well as the above-cited authors show both, positive and negative aspects of searching for health information online. This issue is of vital importance because it indicates new environmental risks for public health that will significantly influence epidemiology and the development of chronic diseases and diseases of affluence. As the number of persons searching for health information online is growing the key issue is to answer the following questions: is the health knowledge of the society really based on the information found online? are these data verified by a primary care physician or a specialist? can this information influence the quality of life of a patient suffering from a chronic disease? This issue requires a thorough analysis from the public health perspective.

5. Conclusions

Motivations of the respondents behind searching for health information are often very complex and mutually inclusive. It results from the conducted interviews that the respondents more often search for health information due to the following reasons: quick access to the Internet; waiting period for doctor's appointment (impatience, concern) and the scope of information the patient is provided with by a physician; health issues of the respondents (diseases or distressing symptoms); diseases of close persons; curiosity (willingness to expand knowledge).

Women search online for health information more often and in a broader thematic scope than men, in particular when they have children.

'Information chaos' is a discouraging factor in an online search for health information.

Limited trust towards information published online dominates, particularly towards anonymous opinions of the Internet users. The information provided by experts, physicians and sportspersons is regarded as more reliable.

The respondents publish the information on their state of health online in order to gain attention and seek advice. It is also caused by the lack of an interlocutor.

For the majority of respondents a physician is the most important and reliable source of health information.

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