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Internet jako źródło informacji o ciąży, porodzie, połogu i pielęgnacji dziecka – analiza wyników badań

Streszczenie

Wstęp. W Polsce w ostatnich latach z Internetu korzysta coraz więcej osób, które chcą w ten sposób poszerzyć i zdobyć wiedzę z różnych dziedzin.

Cel. Celem pracy jest przedstawienie sposobu wykorzystania Internetu jako źródła informacji o ciąży, porodzie, połogu, pielęgnacji i wychowaniu małego dziecka.

Materiał i metody. Narzędziem badawczym była ankieta internetowa. Grupę badaną stanowiły 475 osoby, które deklarowały, że w ciągu 12 miesięcy poprzedzających badanie poszukiwały informacji o ciąży, porodzie lub połogu.

Wyniki. Internet był wykorzystywany jako źródło wiedzy o zdrowiu przez ponad 80% badanych. Spośród informacji o ciąży, respondenci najczęściej poszukiwali wiadomości na temat rozwoju dziecka i żywienia w czasie ciąży; o porodzie chcieli dowiedzieć się, jaki jest jego przebieg; natomiast rozwój i choroby dziecka stanowiły najczęściej poszukiwane informacje przez osoby mające małe dzieci. Największą zaletą wiadomości w Internecie jest, według badanych, dostęp do nich przez całą dobę. Korzystanie z Internetu wpływa również na relację pacjenta z lekarzem. Część respondentów po znalezieniu potrzebnych informacji w sieci rezygnowała z wizyty u lekarza.

Dyskusja. Internet stanowi źródło wiedzy medycznej dla coraz większej grupy osób. Jednocześnie jednak pacjenci mają trudności w odróżnieniu informacji rzetelnych i poprawnych od niejasnych, nieprecyzyjnych czy nieścisłych. Tym samym korzystanie z tego medium niesie za sobą pewne zagrożenia.

Wnioski. W Polsce niewiele serwisów czy placówek medycznych wykorzystuje technologiczne możliwości, jakie daje Internet (np. zapisy do lekarza czy kontakt z pacjentem za pomocą poczty e-mail). Warto byłoby, aby z medium tego skorzystali specjaliści, co mogłoby w znaczący sposób przyczynić się do poprawy jakości usług medycznych.

Słowa kluczowe: Internet, informacje o zdrowiu, relacja lekarz-pacjent, kompetencje zdrowotne, ciąża.

The Internet as a source of information about pregnancy, confinement and child care. The analysis of the research results in Poland

Abstract

Introduction. In the last years the Internet is used in Poland by an increasing group of people who use this medium in the search of information in various fields.

Aim. The aim of the article is to describe the use of the Internet as a source of information about pregnancy, childbirth, confinement and child care and upbringing.

Material and methods. The research tool was Internet questionnaire. The sample consisted of 475 people who said they had been seeking information about pregnancy, childbirth or confinement over 12 months prior to the research.

Results. The Internet was used as a source of information about health for over 80% of respondents. The most frequently sought information about pregnancy concerned foetal development and nutrition in pregnancy; about childbirth – the stages of labour; information about child development and diseases was the most frequently sought by people with small children. According to those surveyed, the greatest advantage of Internet information is its availability all the day. Using the Internet has an influence on patient-physician relationship. Some respondents, having found useful information on the Internet, resigned from seeing a physician.

Discussion. Patients experience difficulties distinguishing reliable and adequate information from unclear, imprecise or inadequate information.

Conclusion. As a result, using the Internet poses some threats. It would be useful if specialists used the Internet, as it might contribute to improvement of the quality of medical services.

Key words: the Internet, health information, doctor-patient relationship, health literacy, pregnancy.

INTRODUCTION

The Internet is becoming a very important tool used in everyday life for an increasing number of people. In Poland, in mid 2009, 56% of the Poles had access to the Internet.

The Internet is a source of information, facilitates making and keeping contacts with other people (both in professional and personal life), helps in everyday tasks (e.g. shopping or money transfers).

In this paper I am going to concentrate on the role of the Internet as a source of knowledge. The Internet contains an unimaginable amount of information, posted by professionals who are experts in a given area, as well as by people who have some experience in this area or simply want to express their own opinions. Because of such differentiation of knowledge authors have and the aims they want to fulfil when posting information, we can observe a significant diversity in adequacy, precision, clarity and presentation of posted information. The quality of websites is particularly significant when Internet users use online information in a specific situation in their private life, as the Internet is used as a source of medical knowledge. The issues concerning health and disease attract a lot of interest among the Internet users. In the United States, at the end of 2008, 61% of adult Americans and 83% of the Internet users sought health information on the Internet [1].

AIM

The aim of this paper is to describe the use of the Internet as a source of information about pregnancy, childbirth, confinement, child care and upbringing and to present the research results, which will be confronted against results obtained in other research concerning similar issues. The topic seems particularly important and interesting itself, also because of the fact that recent years saw a significant increase in the number of births in Poland. The number of babies born in 2005 was 366.095, whereas in 2008 it was over 50 thousand more – 416.437 [2]. There are more and more Internet websites dedicated to issues of parenting, which attract a lot of interest. In September 2008, 12% of Polish Internet users visited parenting websites [3].

MATERIAL AND METHODS

This paper is going to present the results of research conducted in July and August 2008 on using the Internet to seek information about health, disease, pregnancy, childbirth and confinement. The research tool was an Internet questionnaire displayed at random on websites using audit of stat.pl/PBI. The criteria for selecting respondents for the sample were very strict. The part of the questionnaire concerning information about pregnancy and childbirth was answered only by the people who reported having sought information about pregnancy and birth over 12 months prior to the research and also said they were pregnant when completing the questionnaire. The analysis concerned fully completed questionnaires of 325 people – 275 women and 50 men. In the description of the research findings this group will be referred to as Group I. The second group (Group II) consisted of women who re-

ported having sought information about confinement, child care or upbringing for the last year and having a child under 3 years old. There were 251 questionnaires fully completed by people matching these criteria.

The approval of the bioethics committee was obtained before the beginning of the study.

Respondents aged 20-25 constituted the largest percentage (37.5%) of those seeking information about pregnancy and childbirth, whereas respondents interested in knowledge about confinement, child care and upbringing were usually 26-30 years old (37.4%). Breakdown of respondents by age is presented in Figure 1.

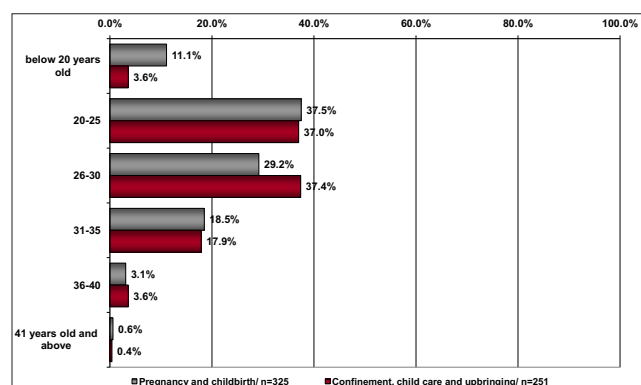


FIGURE 1. Respondents by age.

Approximately 40% of respondents had higher education, another 30% of them – secondary education. They usually came from the largest cities (over 500.000 inhabitants) and also from villages. In cases when subgroups were distinguished in the course of analysis, significance testing checking differences between the frequencies Z were tested with 0.05 the level of significance. Statistically significant differences are marked with asterisks next to a given percentage.

RESULTS

The most frequently sought information about pregnancy, childbirth and confinement.

The most frequently sought information about pregnancy concerned child development in foetal stage (60.3%) and nutrition in pregnancy (51.1%). Significant interest in nutrition in pregnancy is also confirmed by other authors [4]. A substantial number of respondents were interested in pregnancy ailments and necessary checkups and tests (47.4%). The course of labour and delivery was the most frequently sought information about childbirth. Breakdown of topics connected with pregnancy and childbirth sought by the respondents are shown in Figure 2 and 3.

The second most frequently sought information about childbirth was information about labour with a birth partner, with 45.2 % of Group I respondents interested in it. It is worth emphasizing that labour with a birth partner was not common in Poland until 90's in the 20th century. According to the data of Childbirth with Dignity Foundation (Fundacja Rodzić po Ludzku) in 2006 about 40% of women decided to have birth partner, therefore it is not a very popular idea yet. The reason might be lack of proper conditions in hospitals, where the majority of maternity rooms are shared by a few women.

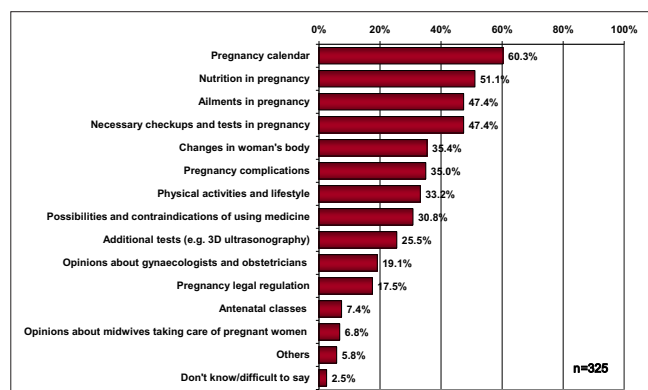


FIGURE 2. Information about pregnancy sought by respondents.

(Respondents selected up to 5 answers, percentages do not sum to 100)

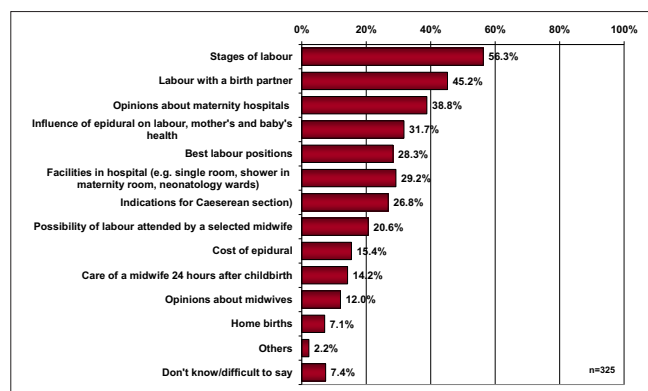


FIGURE 3. Information about childbirth sought by respondents.

(Respondents selected up to 5 answers, percentages do not sum to 100)

Almost all Group II respondents sought information about child development (92%). 66.9% of respondents were interested in child diseases, and 64.9% – tests/checkups that a child should have, over a half (53%) of respondents sought information about childcare (Figure 4).

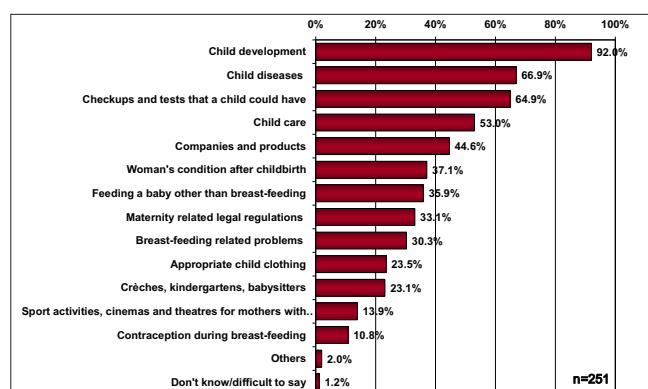


FIGURE 4. Information about confinement, childcare and upbringing sought by respondents.

(Respondents selected up to 5 answers, percentages do not sum to 100)

Sources of information about pregnancy, childbirth, confinement, childcare and upbringing

The surveyed online users generally sought information about parenting on the Internet (over 80%). A physician was a source of information for 67.2 percent of those interested in pregnancy and childbirth (Group I), whereas respondents

searching information about child care consulted a physician far less frequently (48.4%, Group II). However, this group consulted books, guides and magazines dedicated to parenting more frequently than Group I. It is worth noticing that a midwife was a source of information about pregnancy and childbirth for only 15.4% of Group I respondents, and as many as 35.7% of Group II respondents (seeking information about confinement and child care). The results concerning sources of information about parenting are presented in Figure 5.

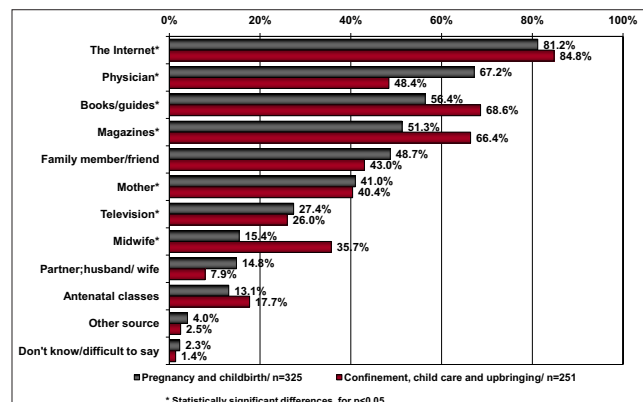


FIGURE 5. Sources of information about pregnancy, childbirth, confinement, childcare and upbringing.

(Multiple choice questions, percentages do not sum to 100)

It is worth emphasizing that in Poland a maternity services provider is usually a gynaecologist-obstetrician no matter if it is a high-risk or normal pregnancy. Although midwives are entitled to take care of women with physiological pregnancies, women seldom choose midwifery care exclusively. The exceptions are women who are planning a home birth. They still constitute a small percentage of all childbirths, as in 2007 99.4% of childbirths were in hospitals [5]. A pregnant woman has contact with a midwife as late as in the second half of her pregnancy, during antenatal classes if she is taking them, and sometimes in hospital during labour and hospitalization. This is the time when a young mother gathers most information about how to take care of her baby and of herself after the baby is born. A midwife visits a mother and her baby at home in a few days after the childbirth. The following reasons probably contribute to the fact that respondents rarely point to a midwife as a source of information about pregnancy and childbirth.

Group I respondents who reported seeking information about confinement, child care and upbringing on the Internet usually entered a query into a search engine and visited the websites listed in search results (73.2%), over a half of them visited websites dedicated to maternity (54.9%). Group II respondents, who sought information about pregnancy and childbirth, also typically used search engines (64.1%).

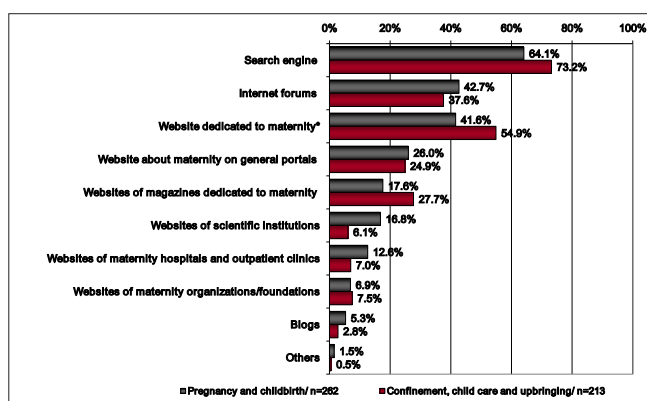


FIGURE 6. Most frequent Internet sources of information about pregnancy, childbirth, confinement, childcare and upbringing.

(Respondents selected up to 3 answers, percentages do not sum to 100)

Using the Internet vs. contacting a physician

Group I (expecting a baby) respondents used the Internet more frequently when seeking medical information – 60.3% reported seeking information about pregnancy or childbirth once a week or more often. Group II respondents (already having a baby) go online a little less frequently – 45.5% of those surveyed 2-3 times a month or less frequently (Figure 7).

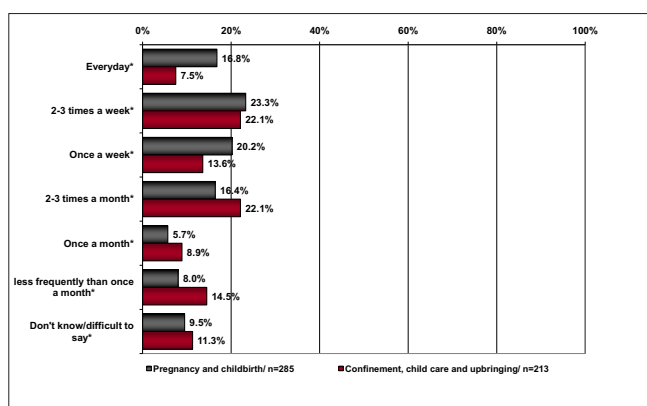


FIGURE 7. Frequency of using the Internet as a source of information about pregnancy, childbirth, confinement, childcare and upbringing.

According to online users, the biggest advantage of Internet information is that it is available 24 hours a day. This was emphasized by people with small babies (65.7%, Group II). It is worth pointing out that almost a half of those questioned (49.7% of all respondents) reported seeking information on the Internet to gather information that they have not received from a specialist. Another 27.2 % of all respondents used the Internet to be better prepared for an appointment with a physician or a midwife. According to some authors, availability of the Internet allows patients to expand the knowledge they have gained from a physician. Owing to that, they feel more comfortable and satisfied with their decision concerning treatment, which is a potential advantage of using the Internet [6]. The fact that patients use the Internet and expand their knowledge cannot shift physicians' responsibility for providing patients with accurate and detailed information. Helman points out that diagnosis and suggested treatment must refer to a specific patient and take into consideration their image of an illness and their personal experience, as well as their individual interpretation of symptoms [7].

The high percentage of respondents saying that they go online to gather information which they have not received from a physician suggests certain difficulties in patient-physician communication. This issue is, however, beyond the scope of the research analysis.

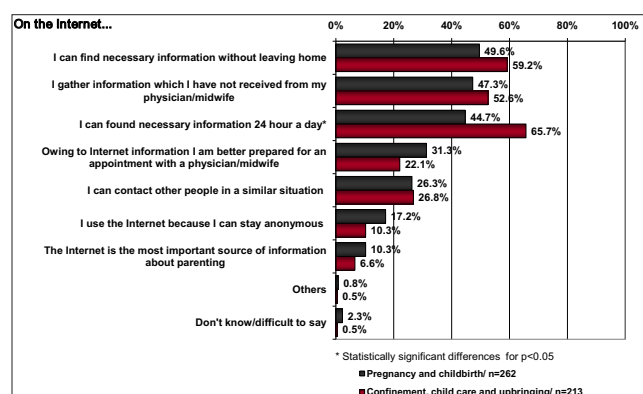


FIGURE 8. Evaluation of the Internet information.

(Respondents selected up to 3 answers, percentages do not sum to 100)

Over a half of respondents said that finding information on the Internet should not replace contact with a physician. However, when enquired about their real behaviour, not beliefs, the respondents were not so firm. The possibility of resigning from contacting a physician after finding the necessary information on the Internet was more frequently reported by Group II (having small children) than by pregnant women. Breakdown of responses is shown in Figure 9.

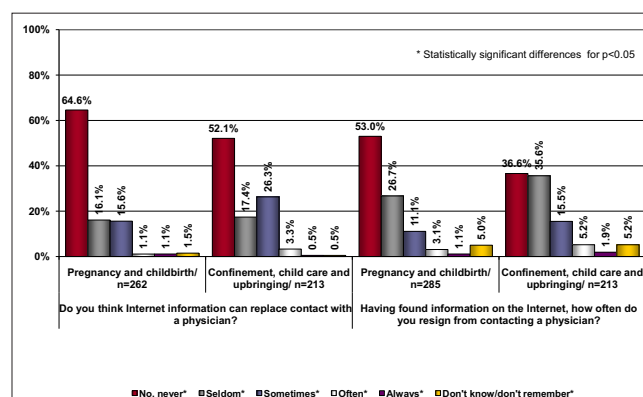


FIGURE 9. Searching information on the Internet vs. contacting a physician.

These results are probably connected with respondents' belief that during pregnancy contact with a physician is essential and irreplaceable. If the respondents considered replacing contact with a physician, it was usually (62.5% of all surveyed) because they decided that their problem was too trivial to consult a specialist. Almost a third of them (24.6%) thought that visiting websites containing specialists' advice was enough to resign from contacting a physician.

Moreover, 22.8% of those questioned reported hardly ever or never consulting a physician about the information found on the Internet, 33.3% sometimes do it, and 40% often or always. The findings of other research confirm that a relatively high percentage of people do not consult medical information with a physician, for example Diaz [8].

DISCUSSION

The questioned online users sought information about pregnancy, childbirth and confinement on the Internet. Larsson, who conducted research on pregnant women in Sweden, obtained similar results. The findings reveal that 84% of those questioned used the Internet to seek information about pregnancy or childbirth [9]. The Swedish respondents searched for topics similar to the ones sought by Polish Internet users. The most popular topic concerning pregnancy was information about foetal development in pregnancy, and as far as childbirth was concerned, the respondents were mostly interested in stages of labour [9].

In our research, respondents typically started seeking health information with a search engine. The popularity of this method of finding medical information was confirmed by other research. In the United States, over a half of adult Internet users (66%) used search engines when looking for medical information [10]. It is worth pointing out that online users tend to go on the websites listed on the first page with search results, which does not mean finding websites containing professional information. The research on ways of searching information conducted in Germany confirmed that respondents, when asked to find some information, typically used a search engine and went on websites listed on the first page of search results; they generally did not go on the second page but changed the search query. Moreover, they rarely paid attention to information about people or organizations authoring a given website or were not able to remember the name of the website [11]. Other research findings also confirm that Internet users seldom check the author of information posted on websites. What is more, this information is often not included or difficult to find. In 2008 American Journal of Obstetrics and Gynaecology magazine published the results confirming that the first pages of search results rarely contain links to websites created by medical professionals. In Google and Yahoo search engines the following search queries were entered: cerebral palsy, birth injury, shoulder dystocia, forceps delivery, epidural anaesthesia, Caesarean section. The first pages of search results, 350 websites in total, were analysed. The findings revealed that the sponsors of the analysed websites were lawyers, the second group were websites of commercial companies (23%), only 20% were websites sponsored by physicians or medical institutions [12].

In the research presented in this paper we did not analyse whether respondents check the authors of information posted on websites. A conclusion can be made that the majority of Internet users believe that if a website contains professionals' advice, it can be treated as a definite answer to their questions and does not need to be consulted at an appointment with a specialist. It is worth noticing that about 40% of those questioned sought medical information on Internet forums, which can be used by anybody to express their opinion, no matter how knowledgeable they are in a given area. Therefore, posts often contain information which is inaccurate or does not take into consideration a particular person's specific situation. They might be useful when seeking practical information or opinions. However, as a source of medical information, posts are frequently misleading. It is connected with a broader and frequently discussed issue concerning the quality, reliability and adequateness of posted information.

This problem was pointed out by various authors [6,13]. Other authors emphasize the necessity to provide parents with facilitated access to information about child health, also including pictures [14].

Gathering health information on the Internet influences patient's behaviour related to a physician's appointment, mentioned above, as well as the way a physician fulfils their role. Laypeople's access to medical knowledge makes a physician take into consideration information found by patients and treat them like active partners rather than passive recipients of their recommendations [15]. It would be useful if doctors knew websites visited by their patients and were able to recommend reliable sources. According to my research, only a minority of doctors do so (12.6%). The results of research in other countries show that it happens more frequently, e.g. 63% of doctors questioned by Schwartz, Roe, Naorthrup, Meza, Seifeldin, Neale in American centres [16]. The authors emphasized that 'Physicians need critical appraisal skills to determine whether information found by a patient is relevant to that patient's condition and is based on the best available evidence. In addition, physicians directing patients to websites for health information must be confident that the site is maintained and updated by a reliable and credible source' [16]. Therefore, physicians should determine whether given information is accurate and relevant in a particular patient's condition. Awareness that patients have knowledge gathered on the Internet and physicians' and nurses' capability of taking advantage of this knowledge is also pointed out by other authors [17]. McMullan summarises that health professionals can follow three scenarios in contacts with Internet-informed patients. The first of them assumes a health professional-centred relationship. Such an attitude can be observed in physicians with poor information technology skills who feel threatened as medical experts. According to the second scenario, a patient cooperates with a physician, which is a patient-centred relationship. A specialist answers all of the patient's questions which occurred when searching information on the Internet. In the third scenario, a physician recommends particular websites containing reliable information, as well as helps to filter online information [18].

CONCLUSION

The Internet provides access to professional medical knowledge, which used to be inaccessible for laypeople. It is connected with broader sociological debates about deprofessionalization and consumerism [19]. However, we face a fundamental problem, pointed out by e.g. Cockerham and Glasser, whether laypeople are capable of distinguishing contradictory or misleading information [19].

The research results and theoretical reflections presented in this article are connected with the concept of 'health literacy', which is defined as 'degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions' [20]. Access to comprehensible and reliable information can exert a positive influence on health literacy. The research results show, however, that people with a low degree of health literacy (Basic or Below Basic) use the Internet to seek health information less frequently than other people. This group of people tend to rely on information

from press or television, health care professionals, family, friends or colleagues rather than written sources [21].

In conclusion, it is worth pointing out that creators of Polish commercial Internet websites dedicated to health and disease, as well as medical institutions, rarely take advantage of technological possibilities of the net. Only a few private clinics provide their patients with a possibility to make an appointment online with a physician. This means of communication is seldom used by specialists as a tool in contacting their patients. Patients, however, as shown in Figure 10, would like to use a computer to make an appointment with a physician and to contact a specialist via email.

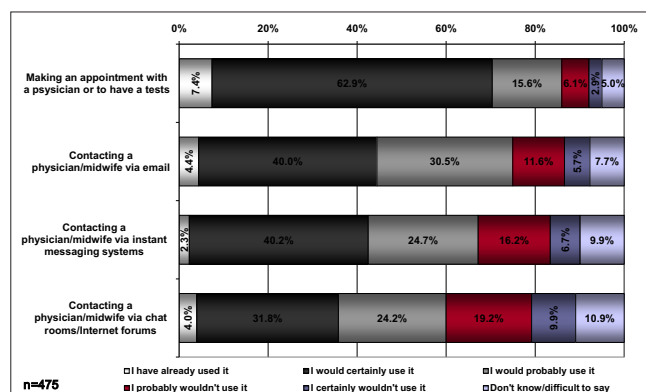


FIGURE 10. Interest in services available on the Internet free of charge.

Users of foreign websites far more frequently have a possibility to contact a specialist via the Internet, and making an appointment online with a physician is a standard practice in many countries. Patients can access their personal health records via the Internet. Research conducted on pregnant women who have online access to their health records reveal that this use of the Internet, which takes into consideration a patient's individual condition, gives women a lot of satisfaction. "Pregnant patients are prepared to use a health information website and web-based health records. When personal information is provided there is greater use than when general pregnancy information alone is provided. Given the almost universal availability of the Internet, this option has the potential for wider application to patient-related outcomes" [22].

The Internet is a very important source of general information about health and disease. It is also a rich source of knowledge for many people in their specific situation, which is proven by the fact that over 80% of the questioned Internet users went online to seek information about pregnancy, childbirth, confinement and child upbringing. It seems that the Internet is an important tool used also in such a private area of life as pregnancy, childbirth and child care.

Although using the Internet may pose some threats, it can bring enormous benefits, particularly if used by specialists as a tool to improve the quality of medical services.

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