

# ONLINE HEALTH INFORMATION SEEKING DURING ADOLESCENCE: A QUANTITATIVE STUDY REGARDING ROMANIAN TEENAGERS

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## **Abstract**

*How Internet is used by individuals from different age groups to keep their health in check has become one of the major issue of both academic researchers and policy makers. The topic derives mainly from 2000-2014 data which converge towards an Internet accessing pattern as source of information regarding health. Previous studies showed that teenagers are the main consumers of the Internet and they often start surfing for online health concerns on social media (Facebook, Twitter) and popular engines (Google, Yahoo). The current paper describes how Romanian teenagers (N=161, aged 14-19) browse for online topics to keep their health in check. Based on a questionnaire, the data revealed that the Internet is used to a certain extent by more than a third of the respondents for health topics and over half of them consider that the health related information helped them to achieve a good trim. Overall, the research outcomes showed that the adolescents seem less interested in using Internet for health information and sometimes challenge the credibility of online health content.*

## **Keywords**

Internet; ICTs; health; teenagers

## **JEL Classification**

I19

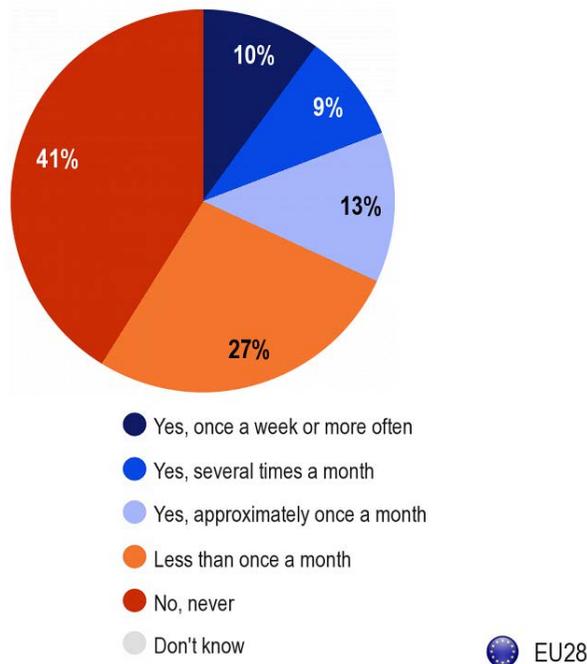
## **Objective of the study and premises**

The social-demographic group researched in this questionnaire-based study, whose results I will present hereinafter, is represented by Romanian adolescents, aged between 14 and 19, most of them high school students who live and study in urban areas, who have a smartphone and a Facebook account. This survey is the second stage of this research, after the qualitative one (Duduciuc, 2014), and has as purpose to describe the way in which teenagers use new technology to access information related to health.

The main focus of the research is to explore the impact online information on this topic (health and a healthy lifestyle) has on teenagers' health and on the decisions they make, such as, for example, treating minor symptoms they could have at a certain point (headaches, for example). The study also explore the socio-demographic data regarding on: technology consumption (the number of devices used), the frequency with which the Internet is accessed from the mobile phone, their residence, gender, participation to sport activities, the presence/absence of chronic diseases. At the same time, the survey took into consideration how the teenagers self-assessed their health, the type of health information searched online (treatments, disease symptomatology, the experiences of sick people, alternative treatment measures, news about epidemics) and their perception of the usefulness of the information found.

### Internet as health information source

The data from 2000–2014 (Flash Eurobarometer 404, 2014; Ólafsson, Livingstone & Haddon, 2013; Mascheroni & Ólafsson, 2013; Kummervold & Wynn, 2012; Pletneva, Vargas & Boyer, 2011; Livingstone & Das, 2010; Edelman Trust Barometer, 2009 Eurobarometer 2008; Eurobarometer 58.0, 2003; Kummervold et al., 2008; Fox, 2006) converge towards an Internet accessing pattern as source of information regarding health. The percentage of the population using the Internet for health related topics grew from 42.3% in 2005 to 52.2% in 2007 (Kummervold et al., 2008), whereas in 2014 it reached 90% of the EU population (Flash Eurobarometer, 404, 2014). With respect to the socio-demographical differences, young women are among the most active Internet users using the Internet as health source. In 2007, the Internet was perceived as an important information source on health by 46,8% of the population, with a significant growth by 6.5% with respect to 2005. Since 2007 and until 2014, the increased usage of the Internet as online information source was overwhelming, growing by 44% with respect to 2007 (Graph 1).



**Figure 1. Frequency of use of the internet to search for health-related information**

Source: Flash Eurobarometer 404, 18-20 September 2014

It is interesting to notice, at the same time, how using the Internet changed people's traditional relationship with healthcare personnel and changed the interaction with doctors, on the whole. According to the Health Engagement Barometer (Edelman, 2009), doctors remain the most significant and valuable information source for patients. In France, a study dating from 2010 revealed that patients preferred to ask the doctor (89%) than to search the Internet (64%) for a possible diagnostic (Edelman, 2009, p. 8). On the other hand, an international study from 2006 showed that 88% of the users go back to doctors to validate the online information. However, the same percentage (88%) turns towards other sources in order to validate the information

about doctors (Edelman, 2009). Other studies (Eysenbach & Köhler, 2002; Fox, 2006) have shown that looking for health sources usually starts on search engines like Google, Yahoo, etc. Nevertheless, the credibility of the search results is often questioned. It has also been shown that the search engine especially created for medical information and healthcare gives more credible results.

### **Using the Internet as information source about health in the European Union member states**

The Eurobarometer (Flash Eurobarometer 40) made in the autumn of 2014 for the EU members states – *European citizens' digital health literacy: Europeans becoming enthusiastic users of online health information* – places the Internet in a top of the population's trust (N=26566) regarding the information sources on health topics. At least 90% of the subjects from 16 EU member states say that they are satisfied with the information they find on the Internet on health. Overall, the satisfaction is higher in Sweden (97%), Ireland (96%) and the UK (96%). Moreover, at least three out of ten people declare themselves highly satisfied in Cyprus, Ireland and Great Britain (31%) and Malta (30%). Overall, one can notice dissatisfaction in Latvia (19%), Greece (16%), Spain (13%), and Germany (12%). Thus, six out of ten Europeans (60%) go to online sources when they look for health related information: eight out of ten Europeans aged 15-39 and less than a third of those over 55 years old ([http://ec.europa.eu/public\\_opinion/flash/fl\\_404\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_404_en.pdf)).

### **The credibility of online information about health.**

The respondents aged 40 or older (61-62%) tend to give more credibility to the information on the Internet when they have to make decisions about their health, compared to those aged 39 or younger (55-57%). Two thirds (62%) of those who know the subject (health) well trust the online health sources when they make decisions, compared with 43% who consider that they have little knowledge about health. The respondents with secondary education and with higher education are more prone to understanding the terminology used in online articles on health (86% versus 78%) and to distinguish between relevant and irrelevant online information (84% versus 75%) compared to those who dropped out of school at the age of 15 ([http://ec.europa.eu/public\\_opinion/flash/fl\\_404\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_404_en.pdf)).

### **The frequency of internet surfing in Romania (N=1006), as source of health related information**

For the question whether in the past 12 months they have accessed the Internet to search for health related information, within the sample for Romania the following distribution of the respondents' opinions was registered: more than half of the Romanians (53%) declared that they had never used the Internet search functions for this type of specialized information, meaning over a tenth (12%) more than the European non-users (41% in EU). Over a tenth of the Romanian users accessed the Internet to search for this type of information less than once a month while almost a tenth (9%) approximately once a month. The rate of regular users of health related information, if we can call them that, is of approximately 26% in Romania which means that more than a quarter of those surveyed surfed the Internet several times a month (13%) and several times a week (13%) in the past year for health related information ([http://ec.europa.eu/public\\_opinion/flash/fl\\_404\\_fact\\_ro\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_404_fact_ro_en.pdf)).

### **General information about health or methods to improve health.**

Those who use the Internet for health related issues were asked about the type of information they are looking for. According to the structure of the Flash

Eurobarometer 404 questionnaire, there was a question (*Within the last 12 months, what type of health-related information have you look for on the Internet?*) for which the subjects could tick, at choice, two answers out of four. Almost half of the respondents (49%) declared that they searched for general information or ways to improve their health. Two fifths of those questioned (40%) searched for specific information about wounds, diseases, epidemics, illnesses or sickness, looked for information about the symptoms of a specific disease or illness, while approximately a third of the ones questioned (29%) looked for details about treatments or medical procedures. More than a tenth of the subjects (12%) used the internet to find a second opinion after seeing a doctor. With regard to the type of searched information, the percentages do not differ very much between Romanian users and European users of medical information.

### **Teenagers’ use of Internet for health topics**

The European and American teenagers generally search for health information either starting from search engines (Fox, 2008), or from their friends’ posts on Facebook (Kummervold et al., 2008, p. 8). In the United States of America, youngsters aged between 18 and 24 represent the age category that most probably starts searching online for health information using a search engine. Three quarters of the American youth (74 %) aged 18-29 started from a search engine, compared to 65% from the age group 30-49 (Fox, 2008, 6). In EU member states, youngsters tend to use social networks to inform themselves about health. Using the “Like” button can influence the youngsters’ decisions regarding health if the online material containing medical information ends up being discussed with the “friends” on the social network (in the case of Facebook). As I have seen from the results of the survey, “only a few participants mentioned that they use forums and social networks to search for information about health” (Kummervold et al., 2008, p. 29).

## **Methodology**

### **The survey participants**

In order to answer the research questions, I have chosen the questionnaire-based survey. Thus, 184 students participated in the survey from two academic high schools in Bucharest and Ilfov county, namely Radu Popescu Academic High School (Ilfov county) and “N. Kretzulescu” Economic High School (Bucharest). The questionnaire was filled online during IT classes, in the interval November-December 2014. The average age of the respondents was 16. The investigated poll was not representative in relation to the total number of the population from the same age group in Romania, but allowed us to probe the patterns of searching for online health information during adolescence.

### **The frequency of online search for health information**

Over a third of the respondents have searched for health information on the Internet (often – 24%, always – 11%). At the other extreme there are around 11% of these who have never searched for online information about health. More than half of those surveyed (53%) have surfed the Internet for health related topics (Table 1).

**Table 1. How often have you searched for health related information on the Internet? (N=161)**

	<b>N</b>	<b>%</b>
(5) Never	17	10.6

(4) Rarely	31	19.3
(3) Sometimes	55	34.2
(2) Often	39	24.2
(1) Always	17	10.6
(99) I don't know/I won't answer	2	1.2
<b>Total</b>	<b>161</b>	<b>100.0</b>

### **Health related topics searched on the Internet and their frequency**

Further on, our survey measured what health related topics adolescents are searching for on the internet, and how frequently they access them. The adolescents included in the survey rarely or sometimes search online for information about healthy food (57%), how to remove pimples (37%), how to have a beautiful complexion (43%), about menstrual cramps (32%), about diets (39%), about sexually transmitted diseases (52%), about contraception (45%) and about how to tone up their body (43%).

### **The frequency of the type of health related information accessed.**

Overall, teenagers seem to be less interested in accessing some health related information on the Internet, as shown in the distribution of the answers for question 12 in the questionnaire. They rarely read on the Internet about how certain diseases are treated (67%), about how a certain disease manifests itself (60%), about stories of people who dealt with the same health issues (57%), natural methods to treat diseases (48%) and news about infectious diseases widely spread around the globe (54%). The highest interest was for information about how a specific disease manifests itself, information which is often accessed on the Internet by teenagers (27%).

### **The perception on the usefulness of health related information accessed online**

Over half of the surveyed subjects consider that the health related information they accessed and read online helped them to a small extent with a health problem they were having at a certain point in time. Conversely, 33% appreciate that the online information on health was useful to a great extent for a health problem, while 13% do not know what to answer to this question (Table 2).

**Table 2. The distribution of the answers to the question “In your opinion, to what extent did the information you read on the Internet help you with your health problem?” (N=159)**

In your opinion, to what extent did the information you read on the Internet help you with your health problem?	N	%
To a very small extent	20	12.6
To a small extent	61	38.4
To a great extent	52	32.7
To a greater extent	6	3.8
I don't know/I won't answer	20	12.6
<b>Total</b>	<b>159</b>	<b>100</b>

## **Conclusions**

The questionnaire-based survey, whose results were previously mentioned, allows us to summarize some facts.

Firstly, the Internet is used to a certain extent by adolescents in order to inform themselves about health and a balanced lifestyle. More than a third of the respondents have looked for information about health on the Internet (36%, out of which: often – 24%, always – 11%). At the other extreme there are 11% of them who have never searched online for health related information. More than half of those surveyed (53%) have surfed the Internet for health related topics.

Secondly, the perception on the credibility and usefulness of online health related information is often debatable. The teenagers surveyed both in the first stage (N=22) (Duduiciuc, 2014), and in the questionnaire-based stage (N=161), challenge the credibility of the online information on health. More than half of the surveyed subjects consider that the health information they accessed and read online helped them to a small extent with a health problem they had at a certain point in time. Conversely, 36% appreciate that the online health information was useful to a great extent for a health problem, whilst 13% do not know what to answer to this question. Overall, the adolescents seem less interested in accessing some health information on the Internet. These seldom read on the Internet about how to treat certain diseases (67%), about how a certain disease manifests itself (60%), about stories of people who dealt with health issues (57%), natural methods to treat diseases (48%) and news about infectious diseases widely spread around the globe (54%). The highest interest was for information about how a specific disease manifests itself, information which is often accessed on the Internet by teenagers (27%).

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