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Young people, health and the internet. Perceptions, attitudes and motivations of young people in relation to health information

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Abstract

Introduction. Young people use the internet on a daily basis to search for different types of information. **Objectives.** This research article seeks to analyse the attitudes and motivations of young people in relation to health information. **Methods.** The study is based on a semi-structured questionnaire survey applied to a sample of 250 university students, aged 18 to 24 years, from the Autonomous Communities of the Basque Country and Navarre, between 2014 and 2015. The survey results have a +/- 95.5% confidence interval and a 3% margin of error. **Results and Conclusions.** Young people use the internet, mainly, to search for information, to communicate with friends and to obtain information to do their homework. Although they consult the internet, they prefer to discuss their health problems with their parents or friends. With regards to the roles they play on the internet, they define themselves as trolls, provocateurs, commentators, observers or creative users. Among the most reliable scientific sources of health information, they rely on books and specialised magazines, displacing newspapers and the internet to secondary positions.

Keywords: Communication; health; health information; young people; internet; social media

Contents: 1. Introduction. 2. Theoretical and contextual dimension. 3. Methods. 4. Results. 4.1. Profile of young internet users who seek health information and internet uses. 4.2. Risks for internet users. 4.3. Young people's attitudes and motivations in relation to health problems. 5. Discussion and conclusions. 6. Notes. 7. References.

Translation by **CA Martínez-Arcos**
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1. Introduction

The promotion of healthy behaviours during adolescence and the adoption of measures to better protect young people against health risks is essential for the prevention of health problems in adulthood, as well as for the future health of countries and their ability to develop and thrive (WHO, May 2017)

Information and Communication Technologies (ICTs) offer new tools for health information search, exchange and participation. This information is now much more accessible and no longer requires intermediaries, however, we are not going to talk about the revolution provoked by the internet and the new technologies applied to the search for health information or the numerous possibilities and advantages offered by their use across all levels and sectors of the population. This article will examine the profile of young people from the Autonomous Communities of the Basque Country and the region of Navarre who seek health information; internet users' use and consumption of information on medicine and healthy habits; as well as the frequency with which they seek that information. At the same time, the study examines the degree of reliability internet users give to this information. With regards to the relationship between health information and medical consultation, the study delves into the information search performed before or after the medical consultation to determine whether users contrast it with the information they receive from doctors and relatives. Regarding online health consultations, it is necessary to know the potential motivations, risks and problems in relation to these searches, as well as users' opinions on the health information disseminated by traditional and online media and public institutions, etc.

It has been confirmed that young people use the internet more than the rest of the population. In Spain, 94.5% of young people aged 16 to 24 years had used the internet at least once a week in the last three months, and constitute the age group that uses social networks the most. In comparison, only 83% of 25-to-34-year-olds consume social networks with this frequency (INE, 2014).

Technological convergence has blurred the differences between telecommunications, broadcasting and information technologies. Smart phones, tablets and smart TVs are the most obvious examples of this phenomenon. Although broadcasting remains the main medium to distribute information and entertainment in Europe, the on-demand consumption of audiovisual content is increasing, while the internet is increasingly more present thanks to the exponential growth of 4G internet connectivity, which soon will become 5G (Informe ONTSI, 2017).

This study focuses on internet use and consumption among university students aged 18 to 24 years, the so-called *millennials* [1], who are under 30 years of age and have been described as self-centred, very clever and academically prepared (in fact, in Spain 54% of the people who make up this group have a college degree), were born in the age of economic prosperity, enjoying higher levels of well-being, but are now living a hard 'awakening' because their access to the labour market is very precarious (with internship contracts or temporary contracts, and generally poorly paid). In the beginning, the term *Millennial* generation was used to refer to young people born between the late 1980s and 1996, but this criterion has been extended to all young people under 30 years. This group is also known as the "Y generation" because it adapts easily and quickly to changes, "echo boomers" and *ni-ni* (Spanish term to refer to young people who neither work nor study). In Spain the *ni-ni* generation has recently become smaller but also more discouraged by the circumstances of the labour market. The unemployment rate among Spanish graduates is three times higher than the OECD average [2].

The COMSA research group of the University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU) has conducted various studies on ‘Communication and health’ and ‘Youth, health and technology’. The areas addressed in these studies are journalism and health, internet and health, quality of health websites, media literacy in health information, health information consultation by young people and teenagers, etc...).

Undoubtedly, most of the information that young people seek on the internet is related to those topics that result motivating or stimulating to them. For this age group health is not a big concern, although there is great interest in healthy habits and topics related to physical and mental wellbeing; as well as in diseases suffered by close relatives and friends.

Most young people enjoy good health, but premature mortality, morbidity and injuries among adolescents remain significant. Diseases can affect the ability of adolescents to grow and develop fully. The consumption of alcohol or tobacco, the lack of physical activity, unprotected sex or exposure to violence may put in danger not only your current health, but also their health in adulthood and even the health of their future children (WHO, 2017).

At first, it was necessary to examine young people’s interest in health and the way they educated themselves in this field, to determine whether health education is acquired at home since childhood or learnt at school, and to establish whether public institutions are involved in the transmission of healthy living guidelines. With regards to the dissemination of such contents, it is important to determine whether the media educate people on the area of health. The results indicate that 26% of young people think that health information is acquired through life experience, while 25% consider that it is learnt at home. There are also opinions shared among those who consider that public institutions participate in the dissemination of healthy living practices, and in this case the role played by schools is highlighted by 17%. The group of young people who believe the media educate on health issues is slightly smaller, representing 11% of the sample (Ronco, Echegaray, Peñafiel, 2016).

In May 2017, the WHO published a major report on the global implementation of measures in favour of the health of adolescents and young people, the *Global Accelerated Action for the Health of Adolescents (AA-HA!): Guidance to support country implementation*. This report is based on the input received after an extensive process of consultation with Member States, UN organisations, teenagers and young people, civil society and other partners. Its aim is to assist governments when it comes to deciding what to do, and how to respond to the health needs of these age groups.

According to a 2016 report produced by the National Observatory of Telecommunications and the Information Society (ONTSI), the internet has become an important source of consultation on health. 60.5% of the Spanish population uses the internet to search for health information, and one of every five carries out the same search through social networks.

In terms of the frequency of internet use by the Spanish population in 2016, differentiated by gender, men use the internet more frequently. The percentage of those who use it daily (at least five days per week) is very similar between men and women (68.3% and 65.3%, respectively). On the other hand, the percentage of people who use it very little, less than once a week, is under 5%. Here, women represent 4% and men 4.2%, as shown in the 2016 data on the Spanish Information Society provided by ONTSI. The Spanish population that has never used the internet represent 19% of all women and 15.4% of all men.

With regards to the devices used to access the internet, the mobile phone remains the most used, way above other devices. The development of the internet and the proliferation of digital devices have given

citizens greater and easier access to all sorts of information in the global era, although there is still a digital divide here. Health issues are also part of the searches but are not part of their main activities. We can say that digital media are becoming the main platforms to disseminate educational health-related contents that aim to influence the lifestyles of the population in general.

New technologies, the internet and social networks have acquired great relevance in society, especially among young people aged 16 to 26 years. They admit that when they do not have these technologies they feel 'isolated', 'incommunicado' and 'incomplete' and do not know how to fill their routines or socialise, according to the conclusions of the study *Young people and communication. The imprint of the virtual*, carried out by the Reina Sofia Adolescents and Youth Centre (Portalatín, 2014). In this same order, Baker, Wagner, Singer and Bundorf (2003) and Premsky (2001) emphasise the considerations of the 'digital natives', who use ICTs on a regular basis and in all areas of their life.

Interestingly, women excel in the use and consultation of health services (Injuve, 2012). On the other hand, this same study highlights a clear difference in access to the technological possibilities in such a way that the lower the educational level, the lower the use, the lower the perceived training and the greater the distance from any of its potential uses.

Given this context, the research developed by the University of the Basque Country/EHU [3] reveals that young people aged 18-24 years search for information about the health problems that concern them on the internet as their first choice. Parents, teachers and friends are the second option despite their opinion weighs more than the opinions they find on the web, according to the article "Study of scientific communication on health for young people and assessment of the quality of digital resources" (Peñafiel *et al*, 2015). This article confirms that females and males share a common interest in the search for information on the internet and mostly search for useful information and advice on topics such as healthy eating, exercise and mental health. Females are more concerned about issues related to sexuality and males about infectious diseases. Altogether, the study shows that young people use the internet to obtain the first batch of information, but do not grant a high level of reliability to the health information found there. Moreover, for the so-called 'digital generation', the internet is a source for first information, but never the final or valid information unless it is followed by a consultation with a specialist. Already in 2008, Eysenbach (2008a) pointed out that access to the internet does not affect trust in medical professionals. On the other hand, this author maintains that these professionals mediate and interpret the information ("apomediation").

Some of the positive aspects encountered by young people in the search for online health information are anonymity and confidentiality, the fact of reading people with similar problems, and the free use of the network. In this sense, young people who seek health information on the internet prefer to do so on official websites because they consider them more reliable, especially because they are institutional. They are distrustful of private websites that contain many ads; and prefer it when advertising and information and professional and amateur opinions are clearly differentiated. At the same time, aspects such as the organisation and structure of the website, as well as its possibilities of navigation, can be also measured when it comes to assessing the information offered by the website in question. With regards to this last aspect, we have taken into account the perceptions of Gladney, Shapiro and Costaldo (2007), who address the journalistic field.

Currently, young people and adolescents have at their fingertips an enormous amount of information whose proper management, whether at the level of transmitter or receiver, is essential to ensure the proper fulfilment of the educational and prevention objectives. The creators of health information websites for young people are aware of the importance of their work and the responsibility that falls on them, as reflected in the aforementioned study. Similarly, according to Cari Merkley (2015), age,

the level of knowledge on health issues, previous education and the regular use of the internet are very important to determine the success in managing the huge amount of health information that is available on the network

2. Theoretical and contextual dimension

The first questions to answer in this type of study are whether young people search for health information and what do they understand for health. Once these aspects are known, it is necessary to determine which issues are of greater concern to them and what is the importance given to this information. Where and how they consulted the information and whether the information aimed at them was properly contextualised is also relevant.

In today's society, it is important to establish a degree of health literacy among the younger population. Here, literacy is understood as "the social and cognitive skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health" (WHO). Literacy involves a focus on the education of the population, intersectoral policies and correct communication directed at society through the media. Researchers working in this type of literacy (Basagoiti *et al*, 2017; Díez, 2012; Falcón and Luna, 2012; Baker *et al*, 2004 and 2006; Sorensen *et al*, 2011; Norman and Skinner, 2006) agree that literacy, in all orders, involves social compromise that covers different areas: education and health, the pharmaceutical and food industries, the scientific and news media, patient associations, health professionals and users and, of course, institutions, governments and other institutions with political responsibilities. María Falcón and Aurelio Luna, who have been part of a European project on health literacy, consider that "community-based interventions are most effective when education is accompanied by structural measures that facilitate and reinforce changes sustained on behaviours; and for this we need the support of the institutions and the political commitment of the public administration" (Falcón and Luna, 2012). For his part, Hernán Díez maintains that one of the main challenges in the field of public health is to advance in the implementation of transversal and cross-sectoral policies (Díez, 2012).

Another dimension to consider is the importance of social communication in an inclusive model of health for citizens. This area has been researched by Ubaldo Cuesta and Tania Menéndez, who highlight aspects such as:

The transmission of information that allows to know the different options of healthy behaviour or risk; the creation of healthy behaviours through the implementation of health education programmes; the creation and dissemination of social frameworks that facilitate adaptation or maladjustment to the environment through the creation of goal standards and creation of dissonances (Cuesta and Menéndez, 2017: 61).

This health culture is required in a society focused on information, and it is very relevant for the education of young people through the dissemination of healthy habits, general well-being, medicine, prevention and information on diseases, always with quality and scientific rigour. As Fox and Jones (2009) have pointed out, we can see that this warning is still valid, since there is a high percentage of people who do not find reliable information about what they are looking for or cannot distinguish which websites provide quality information or not. This view is shared by Eysenbach (2008b), who puts the emphasis on youth, and Eysenbach, Powell, Kuss and Sa (2002), who assessed web quality.

Most of the works that have addressed young people's search for health information focus on the use of information and communication technologies and social networks as communication channels used by the younger population. It is completely verifiable that young people and adolescents concentrate

their interests and motivations in the search for any type of information, as first consultation on the internet. In the field of health, we assume they act the same.

ICTs modify reality and this demands the professional practice to incorporate new ways of approaching and observe social reality (Pichardo Galán, 2008). Thus, the internet has become a very important factor in the process of construction of knowledge and social relations and is the younger population who demands a strong digital communication and quality of information.

Information and communication technologies facilitate feed-back between health professionals and patients, but they are not free of the risks arising from the overabundance of information in the web. Fox and Duggan (2013) presented a report on the situation of the USA, which indicated that 59% of internet users consulted health information and that one of every three adult users followed an online health advice. The report indicates that the search for health information is the third most important internet activity after checking e-mail and finding information about general news.

In short, the information flowing through the internet is very large, and anyone can create or distribute health-related contents. Thus, the selection of reliable sources of information becomes a great challenge (Peñafiel, Echegaray and Ronco, 2017). Hence our interest in analysing the communicative relationship and the modalities of information search among young people, based on the results of a focus group, an ethnographic study and a survey.

3. Methods

According to the framework of study described above, the article presents the results of an anonymous survey that is part of a wider research project that seeks to understand and analyse the perceptions and opinions of the young population of the Basque Country and Navarre on the use, consumption of online health information, its risks, and role of institutions and online media on its dissemination. This article is the result of one of the phases of research carried out on the quality of health information on public and private websites targeting young people and teenagers.

The objective of this study was to explore the use of the internet to search for health information. From a global point of view, the research adopts a mixed approach that combines qualitative and quantitative techniques. The study has been carried out in different phases, each based on a different research technique: review of documentary sources (web resources); in-depth interviews with the people responsible for health news websites; content analysis of a sample of web pages with health information; focus groups with young people and teenagers from the selected territories; ethnographic observation of navigation and search for health information, and finally, a survey to explore our object of study.

The survey was applied to a representative sample of the age groups of interest, 18-24 and 12-17, belonging to the Basque Country and Navarre, according to the recommendations of the ESOMAR code of ethics for social, opinion and market research, both in relation to young participants and the specifications for interviewing certain groups.

The survey is based on a finite universe, with a +/- 95.5% confidence level and a sampling error of 3%. The sample is composed of a total of 250 interviews, conducted through a semi-structured questionnaire, with items that resulted from the previous phases of research. The questionnaires have been distributed according to the characteristics of the universe: age, sex and area of residence. The survey was conducted and processed in two stages, from October 2014 to January 2015, and March

and July 2015, respectively, at the centres of study of these age groups. The questionnaire consisted of 46 questions, and required about 20 minutes to be completed.

This article only presents the survey results of the answers of the participants aged 18 to 24 years, with respect to the use and consumption of the internet to search for health information: frequency of internet use and online health-information searching; consulted issues; aspects related to risks on the internet; and attitudes towards health concerns and problems; language of the search (Spanish or Basque); degree of credibility given to online content; motivations to search for health information; views on different aspects of trust with family or friends; considerations on health information in traditional and online media; and opinions on the dissemination of health information by public institutions, among other topics of interest.

This study is of interest because society in general and, specifically, the younger population, who is more susceptible and vulnerable to these issues, worry about health education, not only in terms of the transmission of information but also about the motivations, personal skills and self-esteem. Thus, the sectors involved in the management and responsibility of health can generate information of higher quality and empower the population in relation to health issues.

4. Results

4.1. Profile of young internet users who seek health information and internet uses

93% of the 18 to 24-year-old male participants say that they use the internet daily while 97% of their female counterparts do so. The remaining 7% of males and 3% of females use the internet several days a week, but not every day. Less common responses are ‘once a week’, ‘once a month’ or ‘once every fifteen days’; they are quite insignificant and fail to provide absolute values.

The information searched by males and females on the internet is very similar. Both seek information about leisure, social networks, themes related to university course works and other academic aspects. There are no significant differences across genders, although a very small percentage carry out online group activities: video games, Prezi, Google docs, Skype, Drive and social networks.

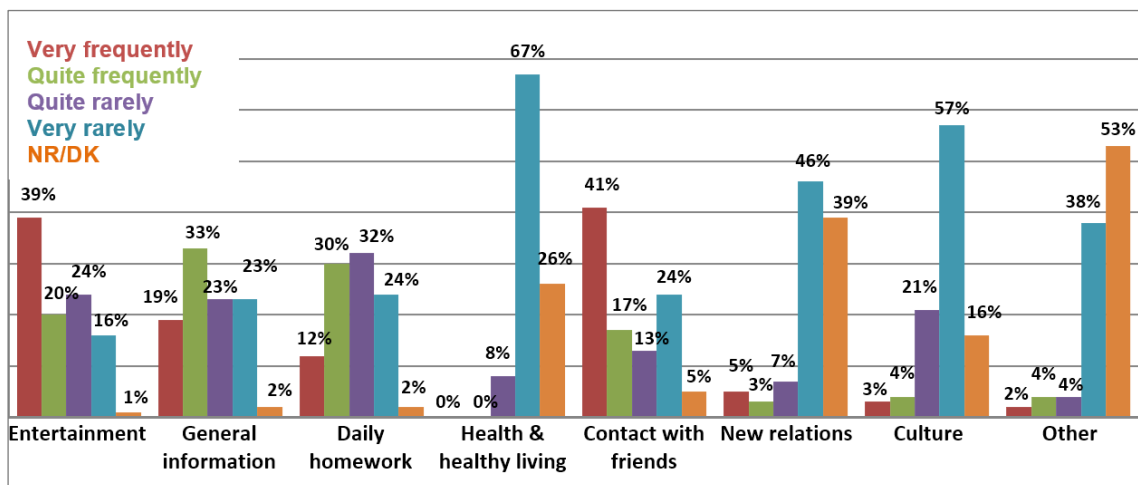
The main interests, with regards to entertainment, revolve around topics that have to do with music, photography, video games, film and TV series, fashion, sports, current affair news, social networks and literature. This is followed by historical events and health and healthy habits. It is, therefore, a dominant consumption of contents that promote role models, products that have a great influence on the way in which young people and adolescents build their social reality. We can say that, in this sense, the consumption of content has not changed too much in relation to what was consumed in media such as television. The difference is only in the change of the rigid traditional platform by the new more flexible medium which is adapted to the needs of each user.

In terms of what young people are looking for exactly, and that is not related to the previously mentioned aspects, they point out mainly sources for homework and, in general, data to corroborate information and content. For this purpose, they look for articles, essays, bibliography, photos and information in news media, definitions or clarifications. Therefore, once again, young people highlight the choice of a flexible platform to find out information that used to be searched for in television news shows and programmes, with rigid airing schedules. To all this, we must add the search for articles, reviews, stores, offers and purchase of hard-to-find products, forums, videos and games, among others.

Finally, in this aspect it is necessary to highlight the results presented in Figure 2 regarding searches for health and healthy life by young people, which presents a very poor result: 0% use the internet

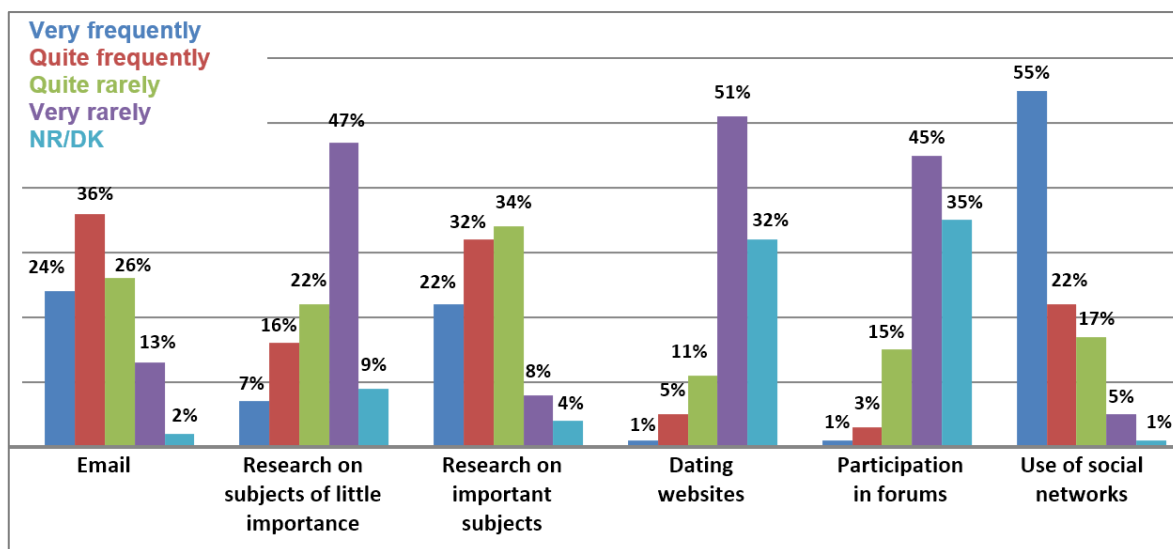
‘very frequently’ or ‘quite frequently’. In this area, 8% claim they search for topics related to health and healthy living ‘quite rarely’ and 67% say they do it ‘very rarely’. 26% fell in the category ‘No Response/Don’t Know’.

Figure 1. Internet uses among 18 to 24-year-olds



In a recently published study (Ronco *et al*, 2016), we wondered whether young people worry less than they should about their health. In that study, 44% of males agreed that they worry less than they should, while 39% of females thought so. This indicates that there are two types of young people: those who care about their health and those who care little about it because health is not within their concerns, given that young people are at an age in which they rarely suffer from disease. However, it was shown that they are interested in knowing healthy eating habits, aesthetics, skin, sexuality, alcohol, drugs and physical or psychological disorders. They are also looking for information about the diseases suffered by close family members or friends.

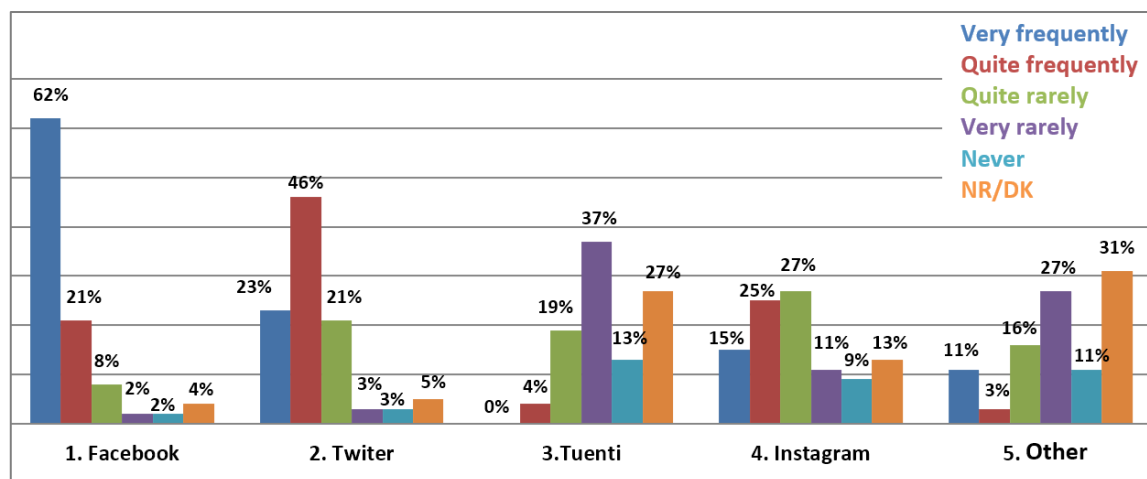
Figure 2. Most common activities among 18 to 24-year-olds



As we can see in Figure 3, regarding the actions that are performed more frequently, social networks occupy the first position, followed very far behind by email and research on important subjects. In this sense, we must understand the choice of social networks as a platform that offers all of the previous

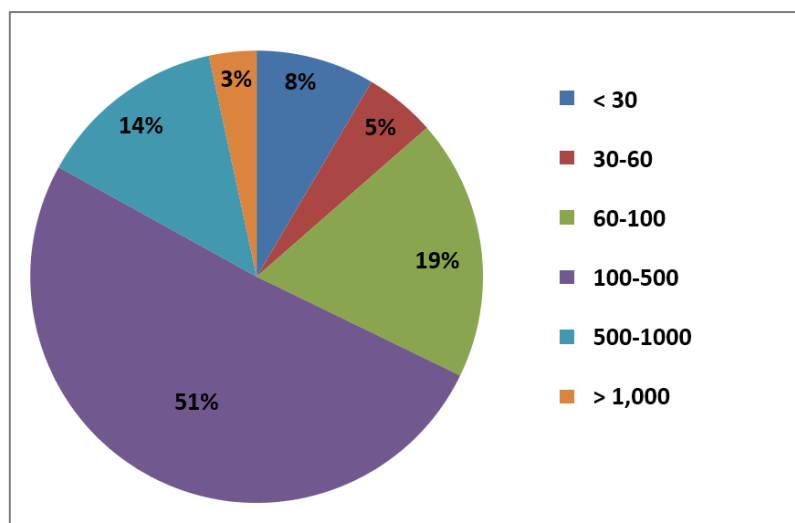
options. In other words, the use of email is not necessary when using social networks and research on topics of interest can also be conducted in them, or by clicking on the content that other people share in these networks. This way, social networks determine what content will become news and the object of social debates, stealing the spotlight from other digital spaces.

Figure 3. Use of social networks among 18 to 24-year-olds



The most popular and most used social networks are those that have a greater impact and social recognition such as are Facebook and Twitter. There are others that are gaining notoriety, like Instagram, and those that are losing importance to some extent, such as Tuenti. When the answer was 'other', the most cited were, in decreasing order: WhatsApp, Google+ and Pinterest. This occurred in the survey carried out in the Basque Country and Navarre. Participants also indicated more sporadically the existence of profiles on networks like Snapchat, Flickr, Blogger, LinkedIn, Tumblr, Spotify, Hotmail, Telegram, WordPress, Skype and YouTube. In a particular case: Vine, LinkedIn, LINE and Viber. Differences in gender issues or the language used for the search, Spanish or Basque, have not been significant, although people who use Basque as a first language have occasionally mentioned other networks such as: Berriketan, Ask, Series.ly, Habbo and Meetic. When the user is bilingual, information is sought mainly in Spanish. This is the case of 85% of males and 90% of females.

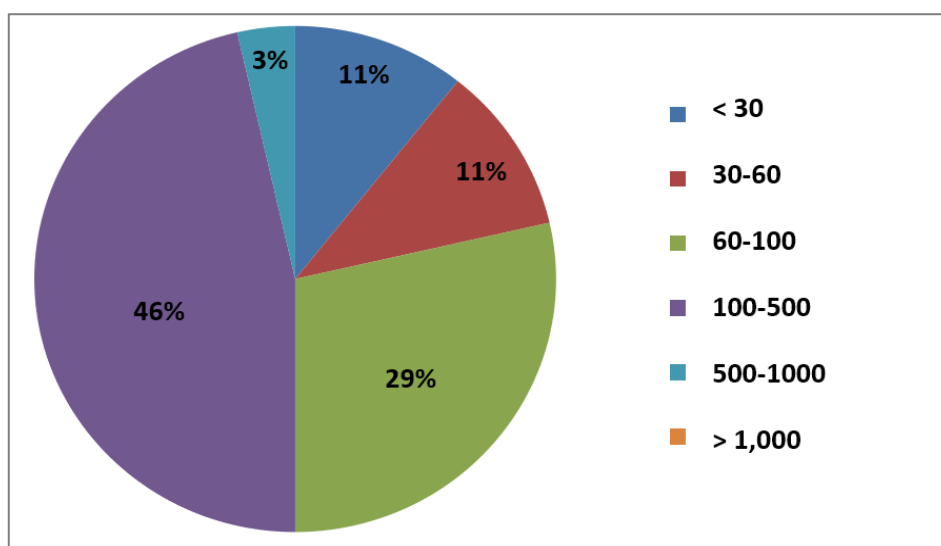
Figure 4. Number of friends that young men have on the internet



On the other hand, young people do not visit blogs regularly. Only 32% claim to be followers of online blogs. The percentage is similar in males and females. In case they do visit blogs, the follow-up is limited to a single case. In general, they are interested in blogs that deal with specific issues. However, the low infrequency of use, coupled with the diversity according to needs and issues, make participants incapable of recalling the names of these blogs. It is understood that the choice of blogs depends on the key words introduced in the search engine and the results provided by Google. Thus, the interest lies not in a brand but in the treatment of a subject and hence the difficulty to remember the name of the blog that was visited.

The majority of respondents, 51% in the case of males and 46% of females, claim to have between 100 and 500 friends on the internet, followed by those who claim to have between 60 and 100, which represent 29% of females and 19% of males. Only 14% of males and 3% of females claim to have more friends in the internet, between 500 and 1,000.

Figure 5. Number of friends that young women have on the internet

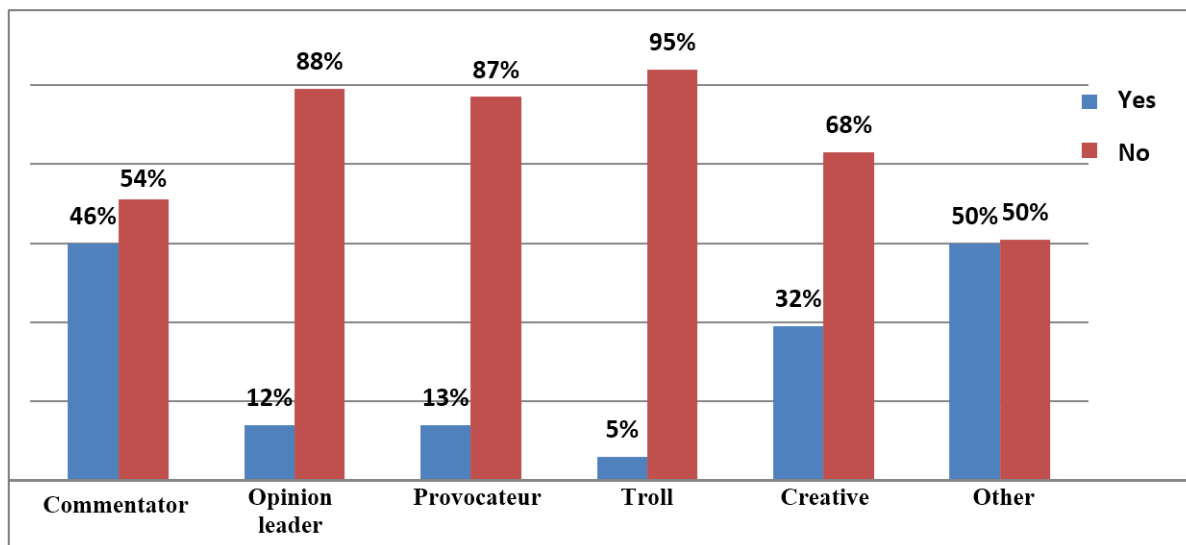


In relation to the way participants define their role in the internet, respondents could choose between commentator, opinion leader, provocateur, troll, creative user or ‘other’, which was an open category. Participants who chose the latter category defined themselves as: “I am normal” and “I am me”, which are trends that are repeated on several occasions. This definition itself, as opposed to those offered on the list, opens a door to the reflection on an environment in which people seems to need to play a role that justifies their presence and their participation. The mere acceptance of some kind of role makes the user a person with dedication, behaviour, personality and, ultimately, the implementation of practices imposed by tacit rules. Answers such as ‘I am me’ and “I am normal”, not only express some rejection of the adoption of roles, but also upholds the idea of the natural behaviour of the person in accordance with his or her own personality.

It is important to add that in some cases participants selected more than two options, or even more than three, which could mean that they play a role depending on the circumstances. In addition to these options, participants also mentioned: Simple, Discreet, Absent, Opinionated, Informant, Passive, User, Observer, Gossiper and Ghost. Those terms that need a definition are *Gansta*, derived from the American racial fashion and is represented by N.Y. caps, t- XXXL shirts and sweatshirts. The self-definitions in Basque language do not differ too much from those offered in Spanish: *Irakurlea* (reader), which was mentioned on more than one occasion; *Edantzailea* (drinker, absorber) and

Positivoa (positive). There are also those who defined themselves as troll, opinion leaders, and provocateurs, both males and females, and in the same order. They also perceive themselves as creatives. The least selected option was commentator.

Figure 6. Participants' definition of their role on the internet



It is a constant for females to define themselves as observers. They rarely offer explanations of why they define themselves this way. And, in fact, when they offer explanations, they do not define themselves but explain their position on the internet. This is the case of open responses that read: “Your interests and concerns always dictate what you post or comment / I like to use social networks to share interesting content, read different opinions, make comments and discuss new things / I do a proper use of the network. I see what is of interest to me and sometimes make comments when I think my comment may be useful”.

4.2. Risks for internet users

“If you’re healthy, you’re happy and cheerful. If the internet is healthy, it is safe and private”

This is the slogan of the advertising campaign of a well-known internet platform. Although internet allows users to perform many activities, it also has its risks. Young people, as consumers of health information on the internet, are likely to bump into associated risks, many of which are collected in the article titled “Young people and the internet”, which was produced by *Mapfre Salud* (no date). This article highlights the huge amount of unverified, little reliable or false contents that exist on the network and generate over-stimulation and dispersion of attention. Another risk is related to the excessive time or dedication required to search for specific information; the ease of access to pages with dangerous or harmful information, such as images of a sexual, pornographic or violent nature or texts and stories that can encourage drug consumption or medication.

Other risks include ideological, racist and sexist contents and even texts that promote affiliation to certain sects. There are unwanted email advertising messages that invite users to do illegal business or contain viruses, or invite people to participate in chats, forums, or certain social networks to facilitate unwanted contacts with people who use false identities, and seek for victims for sexual, violent or criminal acts, for example. This opens the possibility to get involved into situations of online abuse or harassment. The anonymity afforded by the internet makes it easier for users to make bold comments

or adopt attitudes that would be hard to adopt in face-to-face relationships with others. Another risk is the loss of privacy involved in filling in forms of access to some webpages, which can provide personal information to unknown companies or individuals.

To defend themselves from these attacks and privacy violations, young men and women adopt security measures to protect their privacy: 60% of males and 83% of females do so. Over 90% of young people indicate that they have not had security problems on the web, but 11% of women have experienced or perceived higher risks.

In the aspect of security, participants were asked, through an open question, about the measures they adopt to protect themselves from online attacks. For a better understanding of the results, we include the age of participants, because we believe that the issues of internet security are acquired with age and responsibility. Participants gave the following answers:

Table 1. Safety measures

	Age
Making profile private	20
Privacy	20
Passwords	23
Approved profile	20
Hidden tab	19
Care	18
Protection profile for strangers	21
Accounts must be private	20

In general, young people take security measures to control who can contact them: people they have previously accepted. They do not allow public access to their account, do not post too personal stuff, and do not share location or address information. In any case, they sometimes activate notifications on their mobile phone to alert them when someone access their accounts. In this regard, there is an awareness of the need to select those contents that should and should not be shared in social networks. In this way, it seems that young people have reflected on the need to separate their public and private spheres when publishing content; a line that until now had not set the tone of publication in social networks and had brought different kinds of problems, always related to security. Almost all respondents claim they have never had a security problem in the web. The few people who claimed to have suffered online security problems mentioned the following:

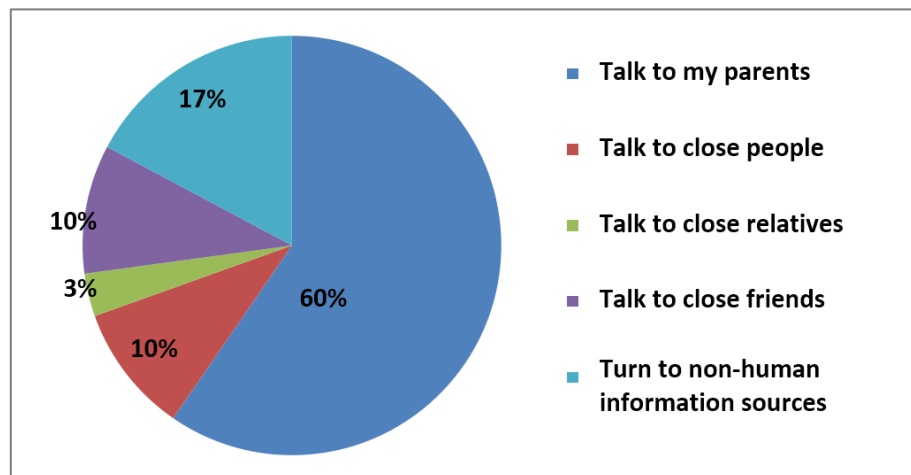
Table 2. Online security problems

Porn virus
Hacking attempt to my email
Hacking attempt to my email from China
Trojans, spam
Google and Facebook notified me that someone tried to gain access to my accounts and recommend a password change. I did it.

4.3. Young people's attitudes and motivations in relation to health problems

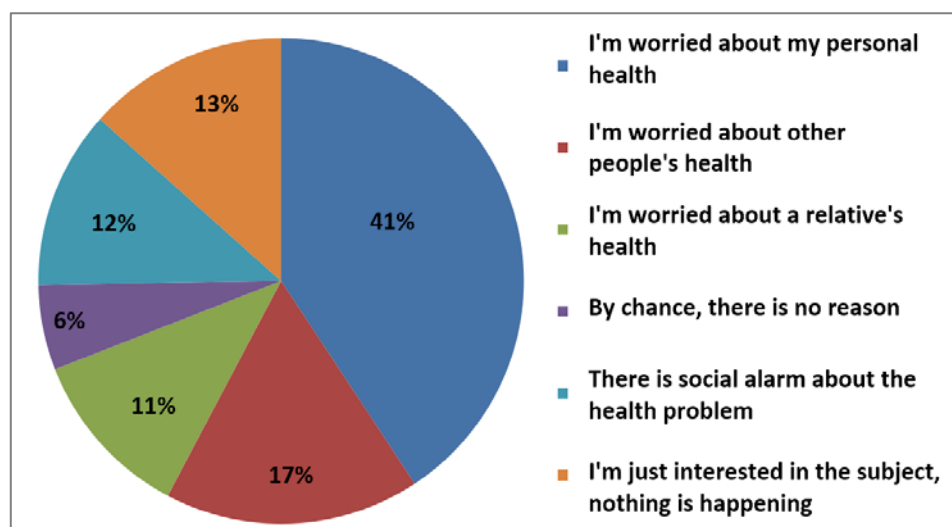
When young people worry about a health problem, the first thing they do, mostly, is talking to their parents (60%), secondly, they turn to online or offline written or audiovisual information sources (17%). This opinion does not vary across genders; i.e., both males and females proceed in the same way. Consultation with friends is the third option. I.e., although young people use the internet daily and like to do research on this medium, when it comes to their health they prefer to talk face-to-face with their parents and friends.

Figure 7. Things young people do when they have a health problem:



Within the same research, the stage dedicated to the focus group confirmed that the internet is not the concluding or the most valid source, since they invariably trust more on friends and family and grant more professional reliability to their doctor.

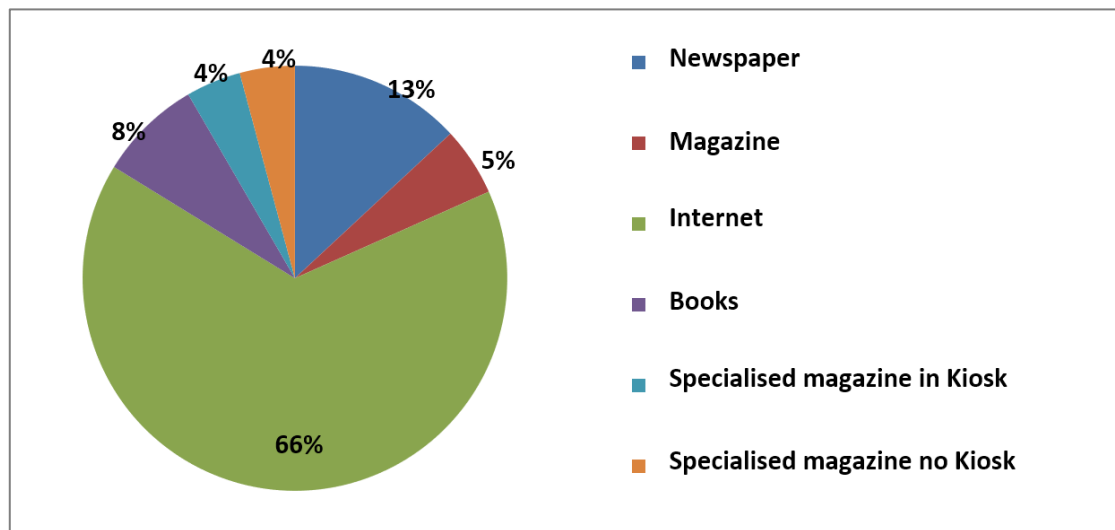
Figure 8. Reasons why young people do research on health issues:



When asked to select from six types of motivations to make such consultations, respondents pointed out that what makes them search for information on health issues is mostly personal health problems, but also the health problems affecting family and friends. The third most common motivation is just curiosity or interest in certain health topic what leads them to start the research; it is usually health

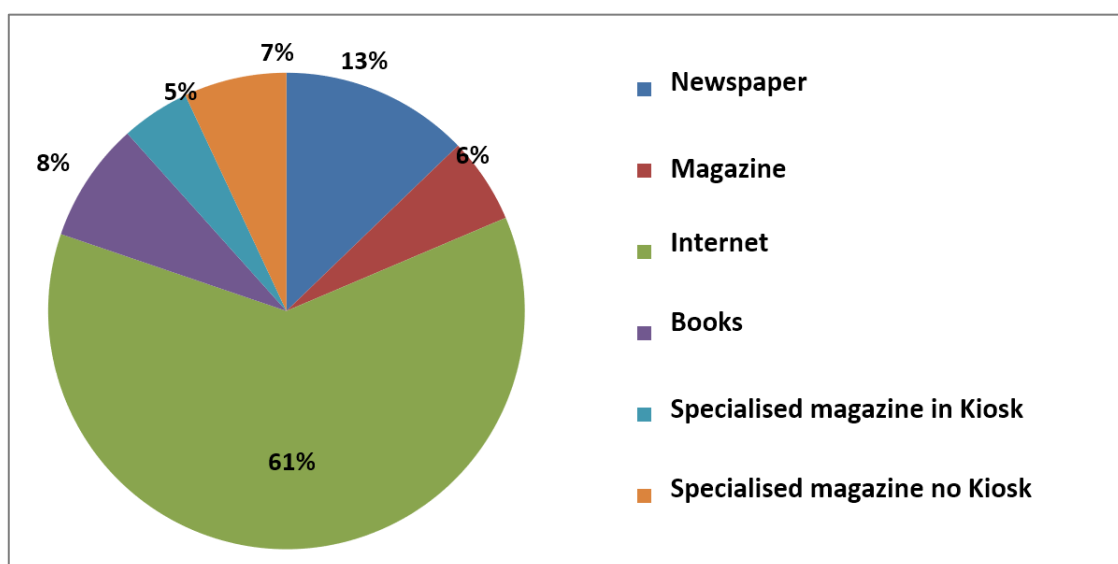
issues that arise social alert and issues in which a minimum of knowledge is required. The least common answer is that sometimes health information is accessed by chance, for no reason.

Figure 9. Sources used by young people to obtain health information:



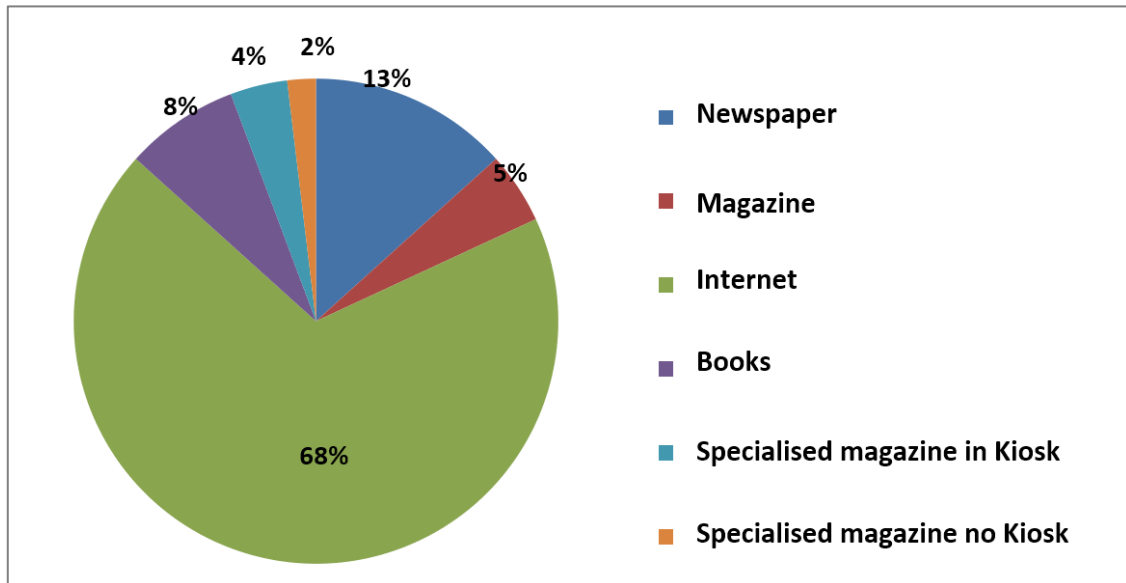
However, information searches are also carried out in what might be called traditional media such as newspapers, magazines, books and specialised magazines in kiosk and journals. The data is inconclusive in this case and reaffirm that the most commonly used source is the internet, where searches are made in a disorderly way. 66% of respondents gave this answer first, followed at an enormous distance by newspapers (13%) and books (8%). The least used source is journals/specialised magazines. In general, the internet is perceived as a medium that can provide a first information, a sort of first contact with reality, but young people do not actually trust that information, and do not take it for granted until they consult a specialist. These data provide a first idea on the degree of credibility given to health information depending on the platform that provides it. In this sense, books are best considered in terms of the degree of credibility, followed by specialised magazines despite none of these two options are used frequently.

Figure 10. Sources used by young men to obtain health information:



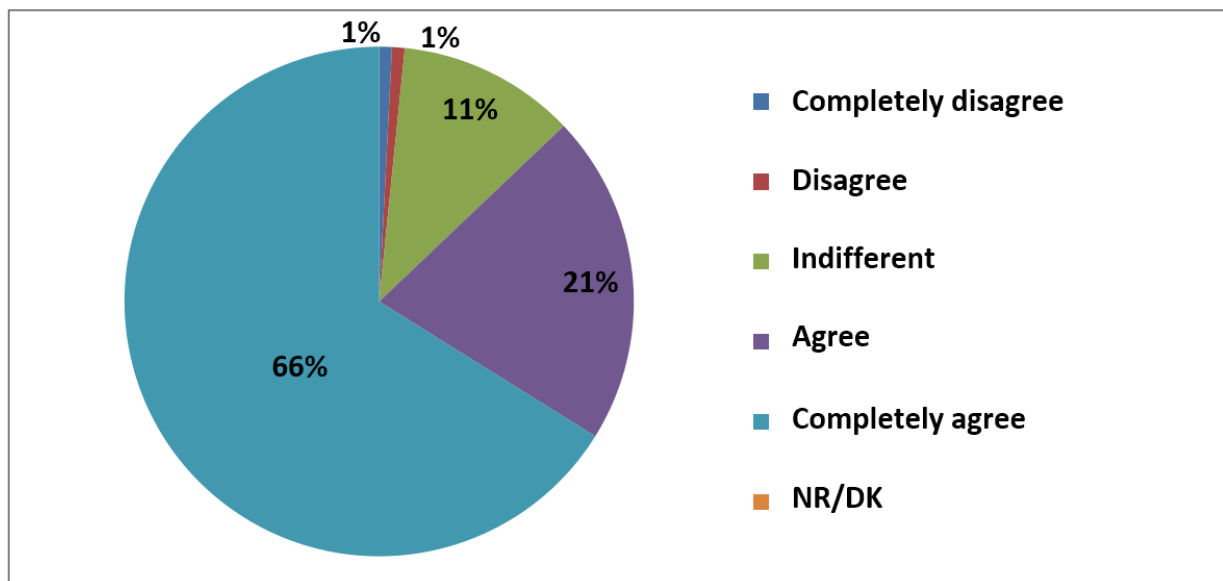
In this question the percentages between males and females are somewhat different although they maintain the same order.

Figure 11. Sources used by young women to obtain health information:



Bilingual participants who speak Spanish and Basque carried out searches mainly in Spanish (95%). In this aspect, the percentages of males and females who gave this answer coincide after being assessed separately.

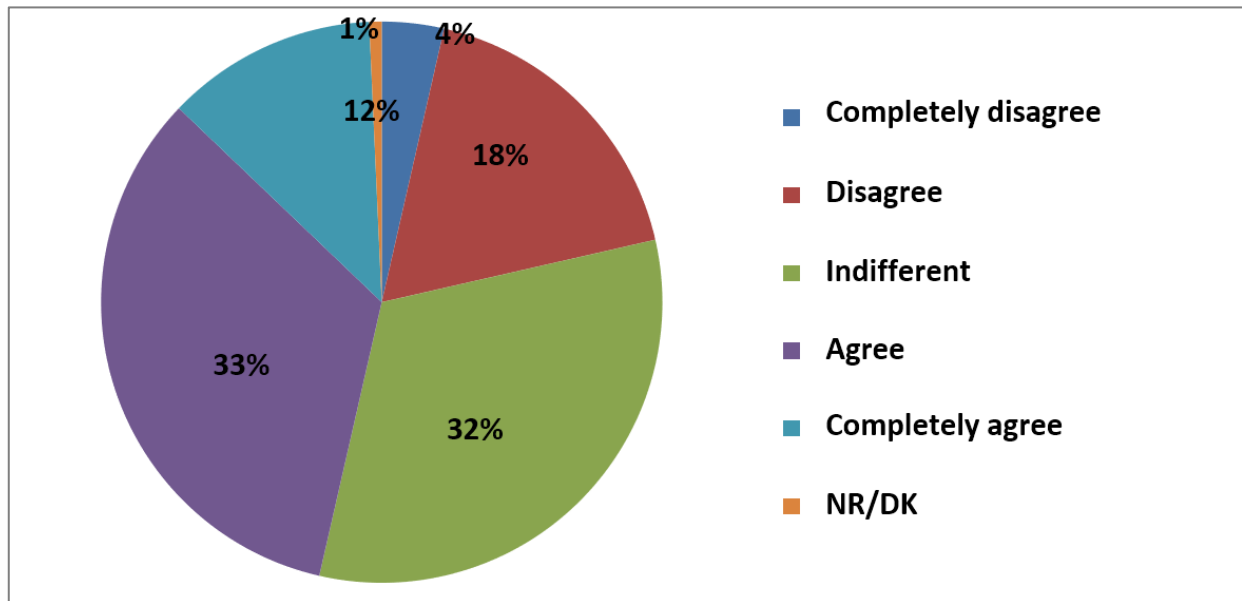
Figure 12. “Health information is important for citizens, both young and adults”



Finally, participants were asked to show their degree of agreement or disagreement with a list of statements, which yielded the following results: 66% of participants fully agree and 21% agree with the statement “health information is important for citizens, whether they are young or not”. Only 2% disagreed with the statement. Only 12% fully agree and 33% agree with the second statement: “Public institutions do enough to disseminate health information”. The problem is that 32% of participants are

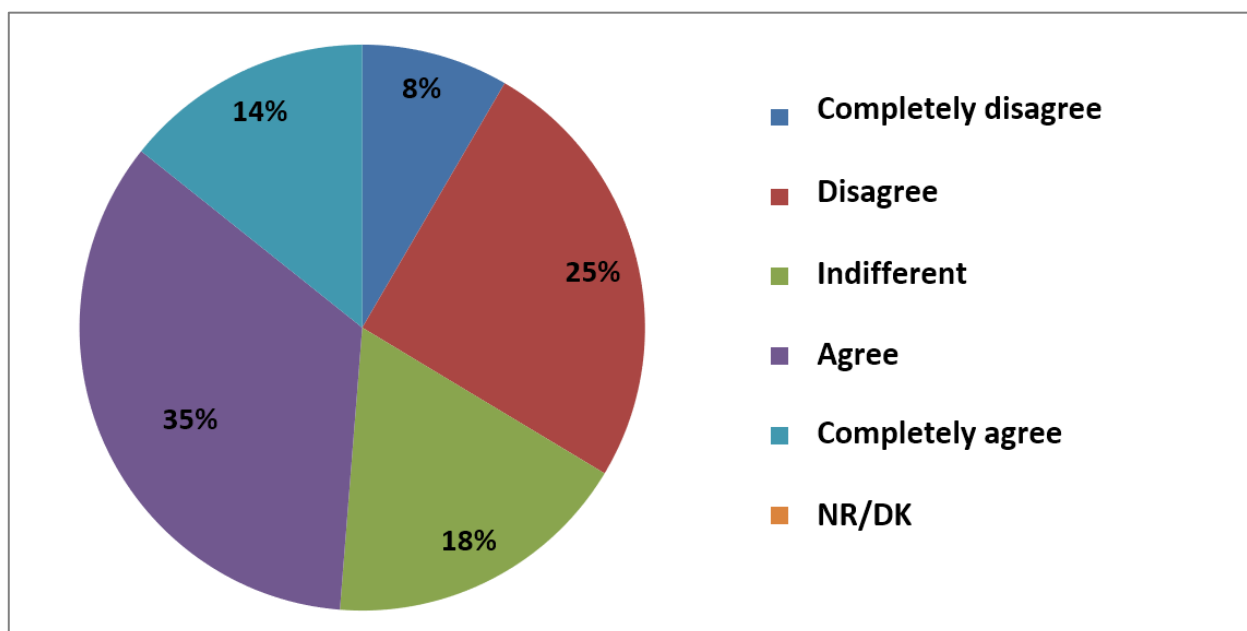
indifferent and 18% disagree with the statement, which means that the performance of institutions only convinces 48% of the participants.

Figure 13. “Public institutions do enough in the dissemination of health information”



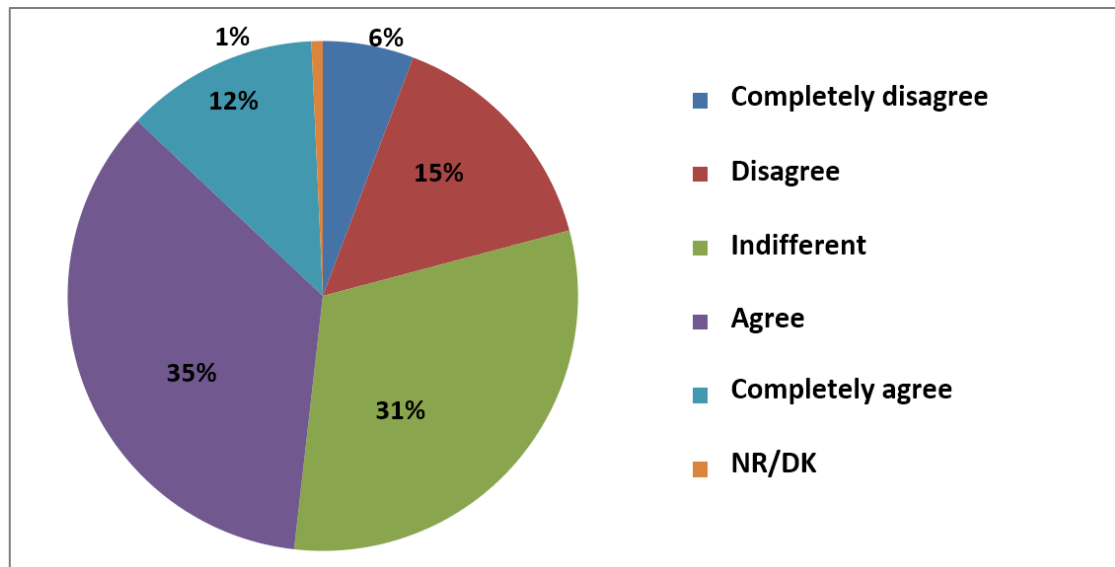
The reactions to the statement “I usually pay attention to any kind of health information” were as follows: 14% completely agree with it; 35% agree with it; 18% is indifferent to it, and 33% disagree with it. With regards to the statement “I only pay attention to health information when it affects me”, the responses were: 47% completely agree or agree with it; 31% feel indifferent and 21% disagree with it.

Figure 14. “I usually pay attention to any kind of health information”



32% of participants agreed with the statement “There are health issues that I would not talk to my parents about”, but 21% were indifferent to it and 45% disagreed with it. This is consistent with results from an earlier phase of our research, in which young people tend to trust their family the most (Peñafiel *et al*, 2015).

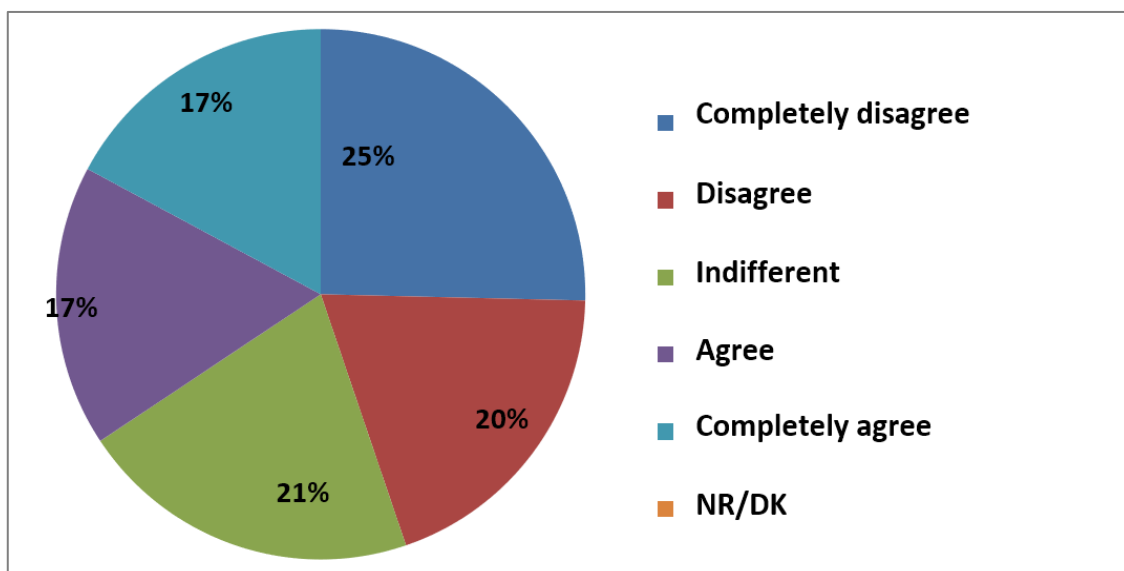
Figure 15. “I only pay attention to health information when it affects me”



77% of respondents agree with the statement “Trust and respect are essential to talk about health issues”, but 11% disagree with it.

Only 25% responded favourably to the statement “The media do a good job informing about health issues”. Most respondents are ‘indifferent’ (43%) and 32% disagree with it. These considerations are linked with the last statement “The media report about health issues in an alarmist way”. The result is that 68% of the young people surveyed agreed with it and only 8% disagreed with it.

Figure 16. “There are health issues that I would not talk to my parents about”



In a previous qualitative research project (2012) [4], based mostly on in-depth interviews journalists who regularly publish health pieces in the sample of newspapers selected for study, and health centre directors from the Basque Country and Navarre, most doctors considered that health news are generally treated with journalistic rigour in the media, but also remarked that there are plenty of news in which impact dominates over rigour (Peñafiel *et al*, 2014: 144). For their part, interviewed journalists indicated although there are newspapers that privilege sensationalism, in general, most papers approach these issues very cautiously and carefully (Peñafiel *et al*, 2014: 146).

Figure 17. “Trust and respect are essential to talk about health issues”

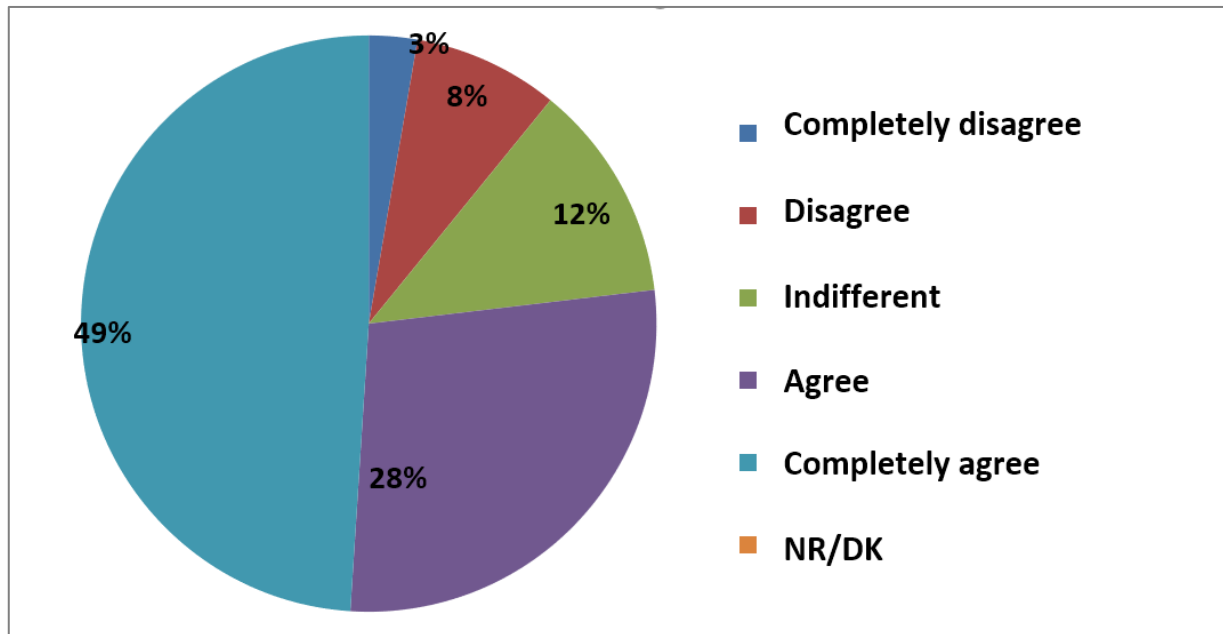


Figure 18. “The media do a good job informing about health issues”

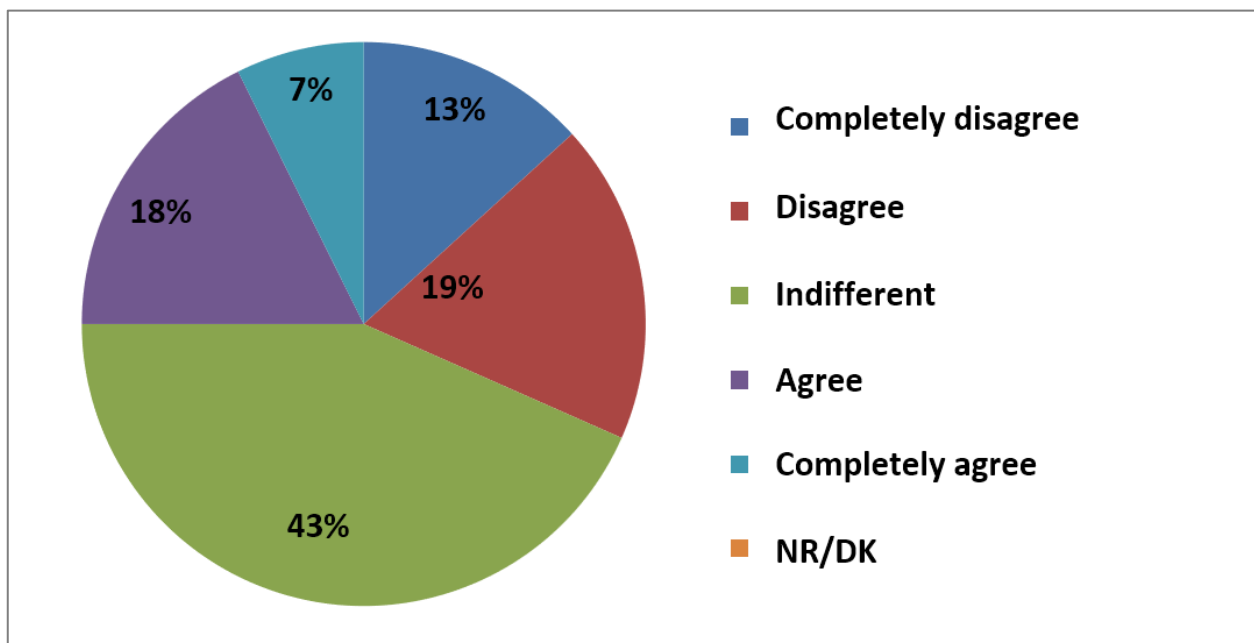
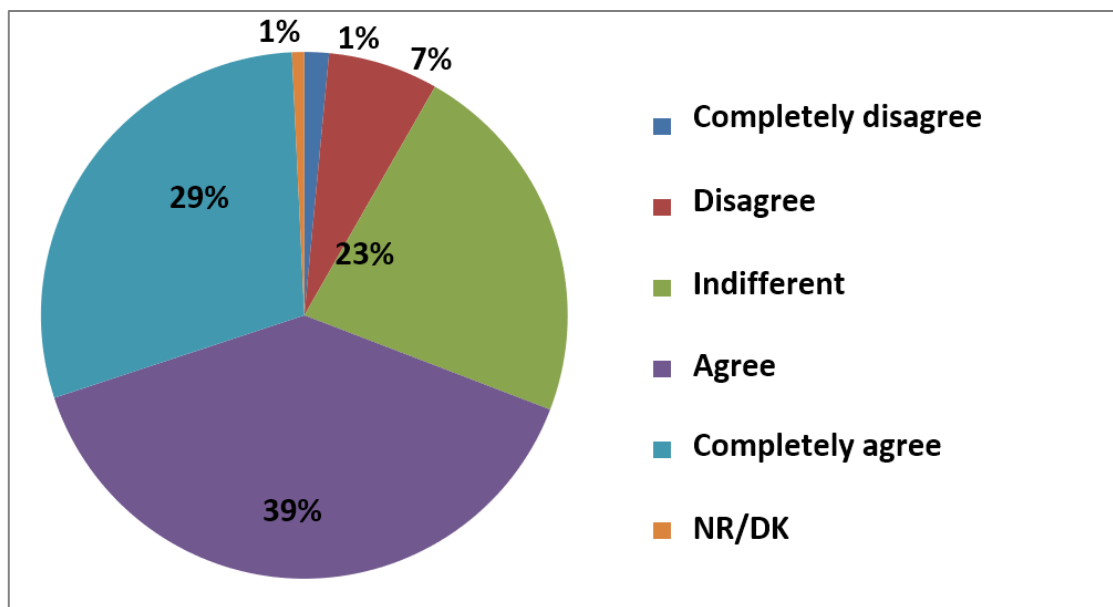


Figure 19. “The media report about health issues in an alarmist way”



5. Discussion and conclusions

The analysis of the survey results, which is the basis of the original research, in the areas of internet use and consumption for health information research and the assessment by young Basque and Navarrese people, has produced the following conclusions.

With regards to the frequency of internet use, the difference between males and females is minimal. Altogether, 96% use the internet on a daily basis, mainly to find entertainment content, use social networks, communicate with friends and to do research on school and academic aspects. Combining the main options (very and quite frequently), the main uses are entertainment (59%), contact with friends (58%), news (51%) and information about course work (42%). The use of the internet to search for information of health and healthy living has no place in this sector, with 0%. In this area, 8% of young people said they perform searches on health and healthy habits infrequently while 67% do so “very rarely”. 26% said they did not answer or know. This section of the questionnaire reflects young people’s disconnection, and we wonder whether young people worry about health or, more importantly, about the loss of health. This indicates that there are two types of young people: those who care about their health and those who care very little about it because their health is not within their scale of values, given that at their age diseases are not common.

Interest in health, in general, is not high in these age groups and so they consult very specific issues for very specific needs. With regards to the more direct questions about young people’s consideration of health issues, they were first asked what is their first reaction when they have a health problem. Although young people go online on a daily basis and prefer this medium to search for information, 26% rated the credibility given to this medium as “normal”, 24% as “low”, while 18% gave “no credibility” at all to it. When young people really worry about their health, most of them (70% overall) speak about it face to face with their parents and friends. Only a small percentage of young people (17%) turns exclusively to non-human sources.

With regards to the motivation of these consultations, the most common are personal issues (41%), followed at great distance by concerns about the health of close people (17%) and interest in a specific

matter, generally issues that arise social alert lead them to start the search. Considering different media options, they mostly prefer the internet (66%), although they do not give it credibility until they have consulted a specialist. In second place, is newspapers, which are given a ‘normal’ level of credibility (28%). Books are consulted almost in a residual manner, but are considered totally credible sources for 52%. The least consulted sources are specialised magazines which, curiously, are considered reliable despite being unknown to them.

Finally, young people were asked to indicate their degree of agreement towards a list of assumptions, and their answers were pretty determinants:

87% of males and females said they “completely agree” or “agree” with the statement: “Health information is important for citizens, whether they are young or not”. 45% “completely agree” or “agree” with the second statement: “Public institutions do enough in the dissemination of health information”, but 32% are indifferent to it and 22% disagree with it.

Only 49% said they “completely agree” or “agree” with the statement: “I usually pay attention to any kind of health information”, while 18% is indifferent to it and 33% disagree with it. Here the majority of young people are neither prone to health information.

Just 47% responded positively to the statement “I only pay attention to health information when it affects me”, but 31% is indifferent to it and 21% disagree with it. In other words, most young people (52%) do not consider health topics as something that may concern them, even if they are affected by it. Here it is important to highlight once again something that is helpful to understand the answers: youth is a healthy stage of life by definition in which health problems are not a concern as they are considered something far away, that happens to adults, or something circumstantial that might happen but is not normal.

In relation to the statement “trust and respect are essential to talk about health issues”, 77% agree with it. The issue of trust and respect is a constant since they are teenagers. With regards to the statement “the media do a good job reporting about health”, only 25% agreed with it and the majority (43%) is ‘indifferent’, while 32% disagree with it. It is obvious that young people consider that the media is not doing a good job when it comes to reporting about health. This is confirmed by the fact that 68% of young people agree with the last statement: “the media report about health in an alarmist way”.

All these possibilities for consultation have been made in Spanish and Euskera. In the questionnaires in Basque language, the result of the use of Spanish and Basque to perform searches has been, in principle, surprising. The interpretation is double: on the one hand, on the internet there is much more information in Spanish. On the other hand, young people do not use Basque as often as one would expect. This is exactly the same in both males and females.

Despite these results, we still continue to believe that the media, and especially the internet, play an important role in young people’s interpretation of health issues. Education is, more than ever, the key and information must play a preventive role. It is increasingly necessary for the educational approach involved in the media’s dissemination of information to focus on the promotion of healthy habits and warning about the most obvious risks for young people’s health.

- This article presents results of the research project titled “Study of Spanish and Basque health information websites targeting young people and teenagers”, which is funded by the University of the Basque Country/Euskal Herriko Unibertsitatea (UPV/EHU) (Code: EHU 12/12), directed by Carmen Peñafiel, with the participation of Milagros Ronco, Idoia Camacho and José María Pastor, professors

from the University of the Basque Country (UPV/EHU), and Lázaro Echegaray, from the Camarabilbao University Business School.

6. Notes

[1] More information is available at:

<https://www.mediapost.com/publications/article/170109/turning-on-the-no-collar-workforce.html#ixzz1paoMEf5A>

[2] *El País* newspaper. Accessed on 28/07/2017. Available at:

https://elpais.com/sociedad/2014/09/09/actualidad/1410246577_609240.html

[3] Research project EHU 12/12 titled “Study of Spanish and Basque health information websites targeting young people and teenagers” (2012-2015). COMSA Research Group of the UPV/EHU directed by Carmen Peñafiel, and with the participation of Milagros Ronco, Lázaro Echegaray, Idoia Camacho and José Mari Pastor.

[4] Research project EHU 10/47 titled “Health information in the Basque daily press (2000-2010)”. The project has a duration of two years (2010-2012) and has been carried out by the COMSA Research Group of the UPV/EHU: Camacho Markina, I. (Leader), Peñafiel Saiz, C.; Aiestaran Yarza, A.; Ronco López, M. and Echegaray Eizaguirre, L.

7. References

Ardévol, E., Roig, A., & Gómez-Cruz, E. (2010): “Pràctiques creatives i participació en els nous mitjans”. *Quaderns del CAC*, 34, 27–36.

Baker, D. (2006): “The meaning and the measure of health literacy”. *Journal of General Internal Medicine*. Vol. 21, nº 8, pp. 878-883

Baker, D.; Gazmaranian, J.; Williams, M.; Scott, T.; Parker, R.; Green, D.; Ren, J. & Peel, J. (2004): “Health Literacy and Use of Outpatient Physician Services by Medicare Managed Care Enrollees”. *Journal of General Internal Medicine*. Vol. 19, nº 3, pp. 215-220. Consulted on 22/08/2017.

Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1492157/>

Baker, L., Wagner, T.H. & Singer, S. Bundorf, MK. (2003): “Use of the Internet and e-mail for health care information results from a national Survey”. *JAMA*. Vol. 289, nº 18.

Basagoiti, I.; Martinez-Millana, A. & Traver, V. (2017): “El paciente en el mundo digital”. In *Comunicación y salud* (Editores: Cuesta, U.; Peñafiel, C.; Terrón, J.L.; Bustamante, E. & Gaspar, S.). Madrid. DEXTRA Editorial, chapter 40, pp. 625-641

Cuesta, U. & Menéndez, T. (2009): *Adicciones y nuevas tecnologías de la información y de la comunicación. Perspectivas de uso para la prevención y el tratamiento*. La Rioja: Gobierno de la Rioja.

Díez, Hernán (2012): “La comunicación en todas las políticas de salud”. “Communication in all

health policies”. *Revista de Comunicación y Salud*, Vol. 2 N° 2, 2012. Editado por INICyS (Instituto Internacional de Comunicación y Salud). ISSN: 2174-5323 (printed); 2173-1675 (digital).

Echegaray, L. and Peñafiel, C. (2014): “Juventud, sujeto y personismo: una reflexión teórica sobre el uso de los social media en la sociedad de consumo”. In Huertas, A. and Figueras, M. (Eds.): *Audiencias juveniles y cultura digital* (pp. 55-69). Universidad Incom UAB. Pompeu Fabra. Asociación Española de Investigación en Comunicación. Barcelona.

Eysenbach, G. (2008a): “Medicine 2.0: Social Networking, Collaboration, Participation, Apomediation, and Openness”. *Journal of Medical Internet Research*. Vol. 10, n° 3: e22. Consulted on 02/08/2017. Available at: <http://www.jmir.org/2008/3/e22/>

Eysenbach, G. (2008b): “Credibility of Health information and Digital Media: New Perspectives and Implications for Youth”. In Metzger, M.J. & Flanagin, A.J. (Eds), *Digital Media, Youth, and Credibility*. Cambridge, MA: The MIT Press, pp. 123-154. Consulted on 02/08/2017. Available at: <https://www.issuelab.org/resources/833/833.pdf>

Eysenbach, G.; Powell, J.; Kuss, O.; Sa, E.R. (2002): “Empirical studies assessing the quality of health information for consumers on the world wide web: a systematic review”. *JAMA*, Vol. 287, n° 20, pp 2691-2700. Consulted on 16/08/2017. Available at: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.15.2721&rep=rep1&type=pdf>

EL MUNDO (09/04/2014): “Los jóvenes se sienten incompletos sin internet y las redes sociales”. Consulted on 25/07/2017. Available at: <http://www.elmundo.es/salud/2014/04/09/534563deca4741434c8b4578.html>

EL PAÍS (09/04/2014): “El paro de los titulados españoles triplica la media de la OCDE”. Consulted on 28/07/2017. Available at: https://elpais.com/sociedad/2014/09/09/actualidad/1410246577_609240.html

Falcón Romero, M. & Luna Ruiz-Cabello, A. (2012): “Alfabetización en salud; concepto y dimensiones. Proyecto europeo de alfabetización en salud”. *Revista de Comunicación y Salud*, Vol. 2, N° 2, pp. 91-98. Editado por INICyS (Instituto Internacional de Comunicación y Salud). ISSN: 2174-5323 (printed); 2173-1675 (digital).

Fox, S.; Duggan, M. (2013): *Health Online 2013*. Washington, DC: “Pew Internet & American Life Project”. Consulted on 10/08/2018. Available at: http://www.pewinternet.org/files/old-media/Files/Reports/PIP_HealthOnline.pdf

Fox, S.; Jones S. (2009): *The social life of health information*. Washington, DC: “Pew Internet & American Life”. Consulted on 11/08/2017. Available at: <http://www.pewinternet.org/2009/06/11/the-social-life-of-health-information/>

Gladney, G.A, Shapiro, I, Costaldo, J (2007) “Online editors rate web news quality criteria”. *Newspaper Research Journal*, Vol. 28. No1. Consulted on 27/06/2017. Available at http://www.uwo.edu/cojo/_files/docs/24600118gladney.pdf

INE (2014). Informe Available at <http://www.elmundo.es/salud/2014/04/09/534563deca4741434c8b4578.html>

Injuve (2012): *Informe Juventud en España*. Consulted on 15/07/2017. Available at: http://www.injuve.es/sites/default/files/IJE2012_0.pdf

Instituto Nacional de Estadística (2016): *Cifras de población: Resultados Nacionales*. [Actualizado julio 2016]. Consulted on 15/07/2017. Available at: <http://www.ine.es/>

Mapfre Salud (S.F.): *Jóvenes e Internet*. Consulted on 20/08/2017. Available at: <https://www.salud.mapfre.es/salud-familiar/ninos/adolescentes/jovenes-e-internet/>

Merkley, C. (2015): “Age and Context Sensitivity Associated with Reduced Success in Finding Health Information Online”. *Evidence Based Library and Information Practice*. Vol. 10, nº 4, pp. 224-226. Consulted on 28/07/2017. Available at: <https://journals.library.ualberta.ca/eblip/index.php/EBLIP/article/view/25477/19308>

Norman, C.D.; Skinner, H.A. (2006): “eHealth Literacy: Essential Skills for Consumer Health in a Networked World”. *Journal of Medical Internet Research*. Vol. 8, nº 2, e9. Consulted on 23/07/2017. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1550701/>

OMS (2017): *Adolescentes: riesgos para la salud y soluciones*. Consulted on 22/08/2017. Available at: <http://www.who.int/mediacentre/factsheets/fs345/es/>

ONTSI (2017): *Informe 2016: Indicadores de la Sociedad de la Información por género*. Consulted on 25/08/2017. Available at: <http://www.ontsi.red.es/ontsi/sites/ontsi/files/Dossier%20de%20Indicadores%20de%20la%20Sociedad%20de%20la%20Informaci%C3%B3n%20por%20g%C3%A9nero%2028junio%202017%29.pdf>

Peñafiel, C., Ronco, M., Echegaray, L. (2015): “Estudio de la comunicación científica en salud para jóvenes y valoración de la calidad de los recursos digitales”. *Revista Latina de Comunicación Social*, 70, pp. 300-321. Available at: <http://www.revistalatinacs.org/070/paper/1048pv/18es.html> .

Peñafiel, C.; Echegaray, L. Ronco; M. (2017): “El tratamiento de la información de salud en el entorno 2.0: un compromiso ético y profesional”. *Comunicación y salud* (Ed. Cuesta, U; Peñafiel, C.; Terrón J.L.; Bustamante, E. & Gaspar, S.). Madrid. DEXTRA Editorial, capítulo 8, pp. 535-557

Peñafiel, C.; Camacho, I.; Aiestaran, A.; Ronco, M. & Echegaray, L. (2014): “La divulgación de la información de salud: un reto de confianza entre los diferentes sectores implicados”. *Revista Latina de Comunicación Social*, 69, pp. 135 a 151. Available at: http://www.revistalatinacs.org/069/paper/1005_UPV/08c.html
DOI: [10.4185/RLCS-2014-1005](https://doi.org/10.4185/RLCS-2014-1005)

Pichardo Galán, J. I. (2008): “Etnografía y nuevas tecnologías: Reflexiones desde el terreno”. En E. Ardévol, A. Estalella, & D. Domínguez. *La mediación tecnológica en la práctica etnográfica* (pp. 131–149). San Sebastián: Ankulegi Antropologia Elkartea

Portalatín, Beatriz G. (09/04/2014): “Los jóvenes se sienten incompletos sin Internet y las redes sociales”. *Diario el mundo.es*. Consulted on 23/08/2017. Available at: <http://www.elmundo.es/salud/2014/04/09/534563deca4741434c8b4578.html>

Premsky, M (2001): “Digital Natives, Digital immigrants”. *On the horizon*, MCN University Press, vol. 9, nº 5, pp. 1-6. Consulted on 22/08/2017. Available at: <http://www.emeraldinsight.com/doi/abs/10.1108/10748120110424816>

Purita, G. (2015): *Análisis de las tendencias de uso y participación en las redes sociales a nivel mundial en España*. Barcelona: Online Business School. Consulted on 18/08/2017. Available at <http://recursos.anuncios.com/files/681/25.pdf>

Ronco, M.; Echegaray, L. & Peñafiel, C. (2016): “The concept of health and the evaluation of Internet as a health information search tool of the youth of the Basque Country and Navarra”, *Actas del Congreso TEEM '16, 4th International Conference in Technology Ecosystems for Enhancing Multiculturalism*. University of Salamanca, 2-4 November 2016. New York. ACM Digital Library

Rubio, A. (2010): “Jóvenes en red, generación digital y cambio social”. In *Ciudadanía Jove 2.0. XXVIII Jornades de Polítiques Locals de Joventut*. Barcelona. Diputació de Barcelona. Consulted on 15/08/2017. Available at: <http://www.diba.cat/documents/95670/96986/joventut-fitxers-2010rubio-pdf.pdf>

Shore, Nick (15/03/2012): “Turning on the ‘No-Collar’ workforce”. In *Mediapost*. Consulted on 20/08/2017. Available at: <https://www.mediapost.com/publications/article/170109/turning-on-the-no-collar-workforce.html#ixzz1paoMEf5A>

Sørensen, Kristine et al. (2011): *Literature Review of Health Literacy for the Development of a Theoretical Model*. HLS-EU Consortium.

UNICEF (2017): *Panorama general: Adolescencia y juventud*. Consulted on 01/09/2017 Available at: <https://www.unicef.org/>

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<http://www.revistalatinacs.org/072paper/1221/71en.html>

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