

**INTERNET USE FOR SEARCHING ETHICAL HEALTH  
INFORMATION IN PORTUGAL: A CROSS SECTIONAL  
STUDY**

Anabela Cruz Ferreira Garcia

Dissertação apresentada como requisito parcial para a obtenção do grau de Mestre em Gestão de Informação, especialização em Marketing Intelligence.

**Instituto Superior de Estatística e Gestão de Informação**  
Universidade Nova de Lisboa

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**Orientador/Coorientador:** Diego Costa Pinto, PhD

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## ABSTRACT

The abundance of health information available online provides users with excellent access to information pertinent to the management of health conditions. This is particularly important given the increasing drive for user-focused health care models globally, especially in the management of chronic health conditions, and in recognition of challenges faced by lay consumers with finding, understanding, and acting on health information sourced online. Although there are already some studies that focus on a more qualitative approach, it is still necessary to understand this type of behaviour through a quantitative approach, i.e., studies that focus on the quantification prevalence and the pattern of information related with health searched online in Portugal. This study aimed to investigate the use of Internet for searching information on medicines and diseases, establishing the following objectives and collecting information about: the proportion of people using the Internet for health information; where and what type of health information search on the Internet; the association between the uses of the Internet for health information with socio-demographic characteristics; and the needs/behaviours of the users regarding online health information about prescription medicines. We carried out an anonymous survey design online to collect data, among the active Portuguese population. The survey was carried out from May to June of 2019, and its diffusion was made through social media channels. A convenience sample of 288 people of active Portuguese population completed the questionnaire. The total of respondents (288), 186 (64,4%) participants were women and 102 (35,4%) men. One hundred per cent of the respondents have searched health information online; however, 7,6% (others) of them does not seek any search options available for selection on the survey. Highlight that 62.3% select information on diseases and medications, 38,0% of respondents have, at some point, sought information about a specific disease or medical problem. In the group of respondents, there were a similar number of people searching for a therapeutical indication for medicines (28,2%) and those who searched for the secondary effects of medicines (25,5%). The majority of respondents, 190 (66.0%), said they did not discuss the information they sought online with their health care providers, while only 98 respondents (34.0%) discussed this information with their health care professionals. Among the studied population, 80.6% would like to have more information available on ethical medication and 74,1% find it useful to have more information available in advertising format about ethical medicines. The largest search engine was Google (98.2%), but other platforms are were used simultaneously namely Infarmed website. There is a growing demand for health information on the internet, which is in line with trends in other countries of the world. The studied population shows an apparent concern for their health (with the most search topic being "Diseases"), but there is still much concern and doubts about drug therapy, especially that prescribed by the doctor. This finding reveals that the information they get in face-to-face consultations or medicine information leaflets is scarce for an increasingly curious and informed audience on this subject. Further, research on any of these topics is not discussed later with their healthcare professional. For this reason, we can conclude the importance of providing, accessing and changing language, either by health care professionals or by the pharmaceutical industry, in order to guarantee and promote a better and more reliable health information for the general population.

**Keywords:** Seeking health information, Ethical Health, Consumers health, health behaviour.

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## LIST OF ACRONYMS AND ABBREVIATIONS

**FDA** - US Food and Drug Administration

**EMA** - European Medicines Agency

**OTC** - Over-the-Counter

**DTC** - Direct-to-consumer

**DTCA** - Direct-to-consumer advertising

**FTC** - Federal Trade Commission

**EC** - European Parliament

**US** – The United States of America

**EU** - European Union

**NHS** – National Health Service

**HONcode** - Code of Conduct for medical/health websites

**HL** - Health literacy

# 1 INTRODUCTION

Online Information is a reality and health are no different, so public, and Patients must adapt to this new reality and way of search this topic. "The internet has played a key role in this advancement by serving as an important source of health information to people regardless of their location, language or condition". (Nangsangna & Da-Costa Vroom, 2019).

According to INE (National Statistics Institute), in Portugal, three out of four people are internet users, that is, the truth is that the global trend is reflected at the national level, where 75% of residents in Portugal - among 16 and 74 years old - refer to having used the internet in the 12 months prior to the interview to the interview that was made for the survey. This number confirms the growth trend compared to the beginning of the decade, when only 53% Portuguese population, included in the age range mentioned above, used the internet. (INE, 2018)

In addition to this growth, the way in which the Portuguese consume this internet has also changed a lot, as now people access the internet from anywhere and have an increasing range of equipment at their disposal to do so. Even in the same study, it is reported that access to the internet on mobility - that is, outside the home, the workplace and on portable equipment - is mentioned by 81% of internet users in Portugal, which represents that the percentage registered in 2018 it doubled the proportion of five years ago. (INE, 2018)

For all this evolution, and although it is not the main area on which the Portuguese seek information, the truth is that research on health online is on the rise as well. This growth of the internet was an important lever for increasing the dissemination of health information, which before was almost exclusively accessible through health professionals. Nevertheless, what are the consequences of this information on the people who research it? What is the influence of these researches on the doctor-patient relationship and the demand for health services and resources?

People have become active consumers of health information, and their autonomy has increased in making health-related decisions. The Internet has become a valuable tool in supporting consumer's health information and health care needs. The client capability in healthcare decision-making is increasing. Therefore, it is essential to know the use of the Internet for health and if it is having any influence on the health practices of people (Moreland, French, & Cumming, 2015).

According to McMullan et al. (2018) that research on the Internet is usually a behavioural characteristic in a population increasingly anxious about their health, instead of an independent behaviour that directly affects anxiety. On the other hand, in individuals whose baseline levels of anxiety are low or non-existent, the study concluded that searching for health information online can be a precursor of anxiety and precipitate additional and increasingly detailed research, which in turn can generate even more anxiety; however, the relationship between information-seeking behaviour and the anxiety generated varies from person to person. All of this proves to be very important because it demonstrates that the internet is becoming very responsible, in part, for the change in the doctor-patient relationship, which has been observed over the years. After an internet search, patients resort to more informed consultations, with more questions related to their clinical situation, but also with more demands in terms of requests for complementary diagnostic tests, requests for speciality consultations and medication, sometimes without valid scientific basis, which can generate

confrontation with the doctor and lead to an increase in the consumption of health. (McMullan, Berle, Arnáez, & Starcevic, 2019).

Thus, it could be considered that access to the health information on the internet can be an advantage, but the truth is that not all available information is valid, reliable and detailed and those who read it are not always critical to assess the credibility of the information.

Some studies reveal that most consumers of health information, trust the information available on the internet, which can increase the risk of self-medication, with damage to the patient's health. In order to try to overcome this situation, a strategy such as the certification of websites could be adopted, based on criteria established by specialised entities, to guarantee minimum quality standards. (Suziedelyte, 2012).

According to Pordata, in 2018, in Portugal, 74.1% of the population had access to the Internet. In a national study on digital health literacy, 88% of respondents say they frequently use the Internet to search for health information, but only 20% find it credible. The data were revealed by the Health Information Technologies Commission, in the plenary of the Parliament of Health Portugal (Comissão de Tecnologias de Informação em Saúde, 2017).

Although the internet is currently a beneficial resource for finding health information, users must be aware of the sources of the information, and they must always validate/evaluate them. Quantity is not always a quality (National Insitute on Aging, 2018).

## 2 LITERATURE REVIEW

According to a study of University of Porto: *“The process of learning about the available information will lead to the acquisition of skills and the change of contexts, promoting health literacy, defined by “the capacity to obtain, process and understand basic health information, as well as the knowledge of the necessary services to make appropriate health options”* (Santos, Sa, Couto, & Hespanhol, 2018)

In the last few years, with the remarkable proliferation of the internet and mobile technology, research on health information on the Internet is conducted quite frequently, which becomes a potential source of health information. In some countries, there are already several studies about the prevalence of internet health information seekers worldwide. According to the Pew Internet and American Life Project, 35% of US adults turned to the internet for seeking health information (Fox, S., Duggan, 2013). Besides, the determinants of internet health information-seeking behaviours had been done among different populations (Baumann, Czerwinski, & Reifegerste, 2017).

Given the few studies in Portugal on this topic, this study was designed to explore in more detail the extent of the use of the Internet to obtain health information regarding access to information on ethical medicines and to discover its association with the sociodemographic variables of the Portuguese population.

### 2.1 Online Information

The success of the Internet and, therefore, of social networks during the past 10 years is, indeed, a significant illustration of this new online environment. Furthermore, it is assumed that users online can find information that usually it will be more challenging to obtain, like medical information (Pantic, 2014).

Access to the dissemination of information is inevitable, according to Hal Varian, chief economist for Google *“The biggest impact on the world will be universal access to all human knowledge. The smartest person in the world currently could well be stuck behind a plough in India or China. Enabling that person — and the millions like him or her — will have a profound impact on the development of humans. Cheap mobile devices will be available worldwide, and educational tools like the Khan Academy will be available to everyone. All this will have a huge impact on literacy and numeracy and will lead to a more informed and more educated world population”* (Anderson & Rainie, 2014)

New media has become an essential channel for looking for and sharing health-related information. Scholars believe that new media, especially social media, have a significant potential to support information searching and decision-making on self-care and health-related issues (Miller & Bell, 2012). A study found that one in three US adults use the online to diagnose or determine a couple of health concern (Fox, S., Duggan, 2013) (Percheski & Hargittai, 2011). This growth in internet use and increase in health information available on the web is changing the landscape of health information. Providing information is also a valuable factor that mediates the connection between status and health; the changing health information landscape could potentially help reduce social inequalities in health (Rains, 2008). However, there is also a nagging question of whether the web is reducing or perpetuating disparities in health information availability and use for creating health decisions,

especially if only those with access to alternative sources of health information are the identical ones with access to online health information". (Percheski & Hargittai, 2011), (Jacobs, Amuta, & Jeon, 2017).

Because it easy into "Google search "bad cough," it is not surprising that several people try at self-diagnosis using the Internet before waiting hours in crowded walk-in clinics or emergency departments to consult professionals. The flow of data has fundamentally changed, and physicians have less control over health information relayed to patients. Not surprisingly, this paradigm shift has elicited varied and sometimes conflicting views about the worth of the web as a tool to boost health care. (Quintana, Feightner, Wathen, Sangster, & Marshall, 2001) (Tonsaker, Bartlett, & Trpkov, 2014).

The rapid proliferation of health information on the net has resulted in additional patients turning to the net as their first source of health information and acquiring knowledge on their health conditions before seeking an expert diagnosis. Patients are feeling more empowered and are more inclined toward being involved in their health and health decision making (Tan & Goonawardene, 2017). This may thus change how patients interact and participate in consultations with their physicians and how they feel about their relationship with them.

However, the quality of online health information remains questionable, and there is a pressing need to understand how consumers evaluate this information and why they need to search for health information on the internet (Fox, 2011). The information found online shapes and influences consumer's health beliefs, intentions, health behaviours, and health care decision making (Song et al., 2016).

We have, as evidence, the amount of health information that is provided by "Dr Google" or "Uncle Google": Google Health boss David Feinberg said that around seven per cent of Google's daily searches were health-related, equivalent to 70,000 every minute. "People are asking us about conditions, medication, symptoms, and insurance questions," he said during a technology conference in Austin, Texas. "In this case, we are organising the world's health information and making it accessible to everyone."(Murphy, 2019).

Most of the literature indicated that online health information seeking is mostly used for well-established diseases. However, only few studies reported health information seeking in the absence of a doctor visit (Rice, 2006), (Shuyler & Knight, 2003), (Basch, MacLean, Romero, & Ethan, 2018), (Thomson, Siminoff, & Longo, 2012) and specifically in the context of acute symptoms (Aoun, Lakkis, & Antoun, 2019). Seeking the internet for acute complaints may lead to self-diagnosis and self-medication. Self-diagnosis and self-medication may result in a delay in treatment and incorrect choice of therapies (Bennadi, 2014), (Ruiz, 2010). This is more challenging in the context of online health information as the quality of the information of the websites is not standardised (Fahy, Hardikar, Fox, & Mackay, 2014).

Still, regarding information search, parents commonly use the Internet to learn about pediatric health problems (van der Gugten, de Leeuw, Verheij, van der Ent, & Kars, 2016) (Meadows-Oliver & Banasiak, 2010) (Sebelefsky et al., 2016). However, many websites do not present accurate, evidence-based medical information or advice (Scullard, Peacock, & Davies, 2010). Deciphering health information and verifying accuracy can be a difficult task for parents (van der Gugten et al., 2016) (Pehora et al., 2015) (Neill et al., 2015). Therefore, pediatric health care providers need to understand how families access

and use medical information obtained on the Internet (Shroff, Hayes, Padmanabhan, & Stevenson, 2017).

## **2.2 The Danger of Health Miscommunication Online**

Nevertheless, does the amount of information available always bring benefits to the consumer? And for the doctor-patient relationship? Moreover, does this information really make a difference in type and quality?

Therefore, in 2017, the Health Information Technologies Commission developed a survey among the general population, assessing the digital health literacy of the Portuguese people. The answers to this survey made it possible to draw up a set of recommendations aimed to improve health information available on the Internet, particularly in the case of the SNS (Serviço Nacional de Saúde) Portal. Of the 3,500 respondents surveyed, nearly 88% say they often use the Internet to search for health information, but only 20% find that information credible. From this 20%, only 6% is believable to a doctor or other health care professional. Occasionally only 41.3% consider believable (Gregório et al., 2017) (Comissão de Tecnologias de Informação em Saúde do Health Parliament Portugal, 2017).

However, an alarming conclusion drawn from this study is that half of the participants think that the information transmitted by doctors is not always perceptible and enlightening, and this makes them look for other information online. Especially when three out of ten respondents say they do not have the habit of checking the quality of the sites they visit, and only 29% occasionally do it (Comissão de Tecnologias de Informação em Saúde do Health Parliament Portugal, 2017).

This theme is not new, and with the proliferation of health information, much has started to raise the question of the truthfulness of the information circulating online. This concerns the scientific community and all health care professionals involved.

“Individuals can access information in various ways, including websites, support groups, listservs, newsgroups, and emails. As the internet is flooded with a multitude of online health information that lacks regulations on its contents, concerns about the completeness, accuracy, and credibility of this information appear. In order to regulate the quality of websites offering health information, criteria and principles are now developed by both commercial and academic organisations” (Yan, 2010). The Code of Conduct for medical/health websites (HONcode) established by the Health on the Net Foundation (Health on the Net Foundation, 2017) is considered as a competent standard.

However, it has still allowed the anonymity of content publishers, and low rigour in monitoring and filtering Web-based content are a number of the reported challenges from the abundance of inaccurate or misleading information (Khalil Zadeh, Robertson, & Green, 2017) (Chu et al., 2017).

That is, once again, proof that there is a vast diversity of sources of health information on the Internet, but the truth is that there is no effective and global/unified method for certification of these sources.

## **2.3 Benefits for users**

Health information-seeking relates to how individuals obtain information, including information about their health, health promotion activities, risks to one's health, and illness. Health information accessed

via the Net has enabled individuals to become more active collaborators in their health (Chu et al., 2017). “The breadth and nature of health information obtained influences an individual’s knowledge, beliefs, and attitudes toward specific health behaviour. The Internet as a medium can help change and promote healthy behaviours; yet, the quality of the information varies widely” (Webb, Joseph, Yardley, & Michie, 2010).

There are no borders on the internet. EU patients are visiting US websites, and, though the US model is harshly criticised, it does fill some of the gaps in the European model for those who speak English and is internet literate.

Internationally, increasing studies have been conducted into understanding individuals’ perceptions of Internet health information seeking (Eysenbach & Köhler, 2002). Even so, there is a scarcity of research on users’ feelings about the advantages and limitations of seeking health information via the net. There are likely to be differences among feelings of health, telecommunication infrastructure, and patterns of inequalities. The increasing use of the net has raised important questions about the link between cultures and technologies (Chu et al., 2017).

The Internet has supplied great opportunities for giving both accurate and inaccurate health information. Therefore, the quality of information is considered a widespread concern affecting human life (Samadbeik, Ahmadi, Mohammadi, & Mohseni Saravi, 2014).

One important way in which the internet has been used in connection with health is through the distribution of information throughout both industrialised and developing nations. Many of the characteristics associated with the web make it a promising resource for public health. For example, the accessibility of a wide range of information can promote benefits such as public education and empowerment through informed decision-making. (Kelly, Ziebland, & Jenkinson, 2015).

Other examples are health chat rooms, where someone posts a question about a specific disease or medicine on a medical discussion board. Here, social media are essential platforms for people seek medical advice, look for emotional support, would like to share medical information, or participate in medical discussions (Grajales, Sheps, Ho, Novak-Lauscher, & Eysenbach, 2014).

Additionally, they report being more confident in their health-care provider’s diagnosis once they discussed their online findings. Notwithstanding the potential benefits of internet health information seeking, many concerns are raised about the impact of online health information on patient outcomes and therefore, the patient-provider relationship. Online information is commonly not accurate, is also challenging to know, and interpretation of data is overwhelming (Diviani, van den Putte, Meppelink, & van Weert, 2016). Hypothesised negative effects of patient’s online information-seeking behaviour on patient outcomes include inappropriate requests for clinical interventions, higher anxiety, and higher non-adherence rates (Linn et al., 2019).

## **2.4 Online health information in the health-care provider-patient relationship**

The doctor always made decisions on treatment with little or no consultation with the patient. Nowadays, patients can access volumes of medical articles online. Therefore, people are more likely to expect to be consulted about the choices of treatment available. This has a profound impact on the

doctor-patient relationship (Deau, 2007) Therefore, in an age of the increasingly empowered patient, physicians and other public health professionals should work in tandem to improve their patients' knowledge about searching for appropriate high-quality health information. Besides, the clinician is still the most valued source of medical advice for most patients. The well-informed patient understands his condition and the reasons for adopting a healthy lifestyle (Adams, 2010). For another hand, he can interact knowledgeably about his condition; consequently, the doctor-patient relationship develops such that, the patient takes greater responsibility for their condition. Users have different ideas about what it means to 'take charge' and 'be empowered'. Some of them want to be given information about their condition, while others want to have full control over all medical decision-making (Vahdat, Hamzehgardeshi, Hessam, & Hamzehgardeshi, 2014).

The Internet also has implications for medical practice (Marcinkiewicz & Mahboobi, 2009). It allows practitioners to store, retrieve, and search for precise information by deploying sophisticated search engines, allowing real-time research at the point of care (Sim, Khong, & Jiwa, 2008).

The technologies in real-time, mobile communication, patients, and health organisations, have empowered patients to seek health information independently in on-line libraries, support groups, and seek second opinions, creating knowledgeable and value-conscious consumers (Kim & Lehmann, 2003).

The internet is effectively a treasure trove of health information. "Health seekers" can be inundated with different opinions; they can join chat rooms, support groups or surf Web sites. Inevitably the quality of this information can vary so that some information might be misleading or misinterpreted compromise health behaviour and ultimately harm the patient. At worst, it can lead to requests for inappropriate clinical interventions, and at best, it can forge a partnership between doctor and patient (Wald, Dube, & Anthony, 2007). On the other hand, some medical specialists are challenged by informed patients and might employ strategies to reinforce traditional passive patient roles (Marcinkiewicz & Mahboobi, 2009).

Percentages of patients discussing online information with their health care provider vary between 10% and 75%. This can mean that up to 90% of the patients do not discuss online health information with their health-care provider. When talking about online information, patients can use direct or indirect references. Facilitators to debate online health information include having a friend present during the consultation and an open communication style. Barriers include the patient's fear of how the health-care provider would react and a closed communication style (Sanders & Linn, 2018).

## **2.5 Importance of health literacy**

Health literacy (HL) is defined as "the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand, and use essential information in ways that promote and maintain health (Nutbeam & Kickbusch, 1998). People need more than general literacy skills to be able to navigate the complexities of a health system (Kickbusch, 2001). Although there is considerable overlap between general literacy and HL, it is documented that even well-educated people can have limited HL (McCarthy et al., 2012) (Karl & McDaniel, 2018). Health literacy requires reading, listening, analytical, and decision-making skills and the ability to apply these skills to situations related to health

(Rudd, 2007). Thus, asking patients only about their education level will not be sufficient to determine their HL status and accordingly modify one's communication with them (Rudd, 2007), (Güner & Ekmekci, 2019)

Health literacy is a stronger predictor of an individual's health status than are income, employment status, education level, and racial or ethnic group (Weiss, 2009). People with low HL demonstrate decreased compliance with medical information and drugs, increased but ineffective health system use, more hospital room visits, higher medication use, and the next risk of death (Sørensen et al., 2015).

"According to a study conducted in the United States, 36% of adults have limited HL, and only 12% of the population demonstrates proficient HL (Andrus & Roth, 2002). In another study that extracted 22 599 samples from the Medical Expenditure Panel Survey, 77.6% of the population was found to have intermediate HL, 20.9% had primary HL, 1.5% had below basic HL level, and none had proficient HL (Rasu, Bawa, Suminski, Snella, & Warady, 2015). The European health literacy survey (HLS-EU) demonstrated a similar result, with 47% of the population reported having limited (insufficient or problematic) HL. Limited HL is more frequently found in groups with low financial and social status, lower education, or older age (Sørensen et al., 2015). Low HL is a global problem that affects other countries besides the United States and countries in the European Union" (Güner & Ekmekci, 2019).

Low health literacy, or reduced capacity to understand, evaluate, and act on health information, is associated with worse self-management (Stellefson et al., 2019).

Furthermore, prior research indicates low health literacy levels and lack of disease-specific knowledge also contribute to the elevated emergency room and hospital visits, whereas higher levels of eHealth literacy result in more excellent patient knowledge of their diagnosis and better self-management behaviours. Limited health literacy can also compromise patient-provider communication about medication management, which interferes with a patient's ability to acquire and use prescribed medications. (Stellefson et al., 2019) (Güner & Ekmekci, 2019).

A prerequisite for one's health management is an adequate level of knowledge about how to manage his or her diseases, conditions, and lifestyle. Therefore, eHealth literacy becomes essential for patients to be in charge of their health. (Alhuwail & Abdulsalam, 2019).

On the other hand, "technology and especially the internet do have a central role to play in helping citizens to manage their health better. According to the US National Assessment of Adult Literacy (U.S Department of Health & Human Services, 2010), 88% of adults lack medical skills to manage their health and prevent diseases. In Europe, the situation is similar: an EU Health Literacy Survey (Sørensen et al., 2015) found that almost one in two people, across the participating eight European countries, including Ireland, presents a low or problematic health literacy. As a consequence, people with limited health literacy skills do not know about their illness or their medicine and are less likely to engage in preventive programmes and actions (Deasy, Fitzgerald, Kennedy, McGuane, & O'Brien, 2009). Moreover, they do not have the chronic disease under control and are more likely to be hospitalised" (Alfano, 2019).

One question that may be asked is whether the population have the right level of health literacy to understand all the information found. Portugal shows a higher percentage of people with a health

literacy problem (38,1%) compared to the European average (35,2%). With an inadequate level, it presents a lower value (10.9%) than the European average (12.4%). The ILS-PT study identified very vulnerable groups in the countryside. Health Literacy in the Portuguese population: 60% of people have "problematic" literacy levels, or "inadequate", representing more than or equal to 5% in a sample (Direção-Geral da Saúde, 2018).

## **2.6 Therapeutical Adherence**

Medication adherence involves a process in which three phases can be distinguished: the initiation (the patient determines the need for medication and takes the first dose), the implementation or execution phase (the patient's behaviour corresponds with the prescribed treatment), and the discontinuation phase (the end of the regimen is marked). During these phases, different information needs are expected to emerge. In particular, the internet may serve as a natural, accessible source to satisfy these information needs. How the internet affects adherence might differ per phase. For example, patients in the initiation phase may use the internet to read stories about the efficacy of the medication or about fellow patients' experiences before they decide whether to start taking the medication. In the implementation phase, patients might start evaluating the prescribed treatment online and decide whether they still believe it is necessary to take the medication (Linn et al., 2019).

It is increasingly recognised that medication adherence is an important but complex behaviour. In total, 200 determinants of medication adherence have been studied, but none of them has been consistently related to adherence. Research on the impact of the internet on medication adherence is rare. A recent study showed that almost all chronic patients use the internet to make decisions about their medication (Linn et al., 2019).

On the other hand, research on health medicines, even when done by users whose first language is Portuguese, is done in English. We assume they believe that a search in English is more likely to generate relevant information, especially when browsing for drug prescription. Moreover, the regulation for information release among EMEA and FDA is different (Sorenson & Drummond, 2014) (Van Norman, 2016) (Kashoki et al., 2019).

"This can lead to situations of non-adherence, and even distrust of the patient vs the doctor say there is an FDA-approved non-EMEA-approved medication that can halt the illness of an informed patient; This can have consequences for state, medical and patient" (Schlegel & Leray, 2018).

### **3 OBJECTIVES**

We aim to investigate the use of the Internet for searching for information on medicines and diseases.

Based on that, we established the following objectives:

- To collect information about the proportion of people using the Internet for health information;
- To collect information about where and what type of health information was sought from the Internet;
- To collect information about the association between the uses of the Internet for health information and socio-demographic characteristics;
- To collect information about the needs/behaviours of the users regarding online health information about prescription medicines.

## **4 METHODOLOGY**

As mentioned before, there is a dearth of studies related to this theme made for the Portuguese population. Moreover, although there is a 2017 study on health literacy in Portugal, few studies have explored the use of the Internet for health purposes in this country. For all these reasons, it remains unclear where and what kind of health information the Portuguese population searches on the Internet.

For this cross-sectional study, exploratory and descriptive research was conducted and was performed only in the active Portuguese population.

The questionnaire was conducted online between May and June 2019 and broadcast on two social networks, namely Facebook and Instagram.

A convenience sample was used, and the natural environment was a direct source of data. The decision to make this type of online questionnaire was by assuming that could be better understood and adopted if observed in their natural environment of occurrence, i.e., online research with spontaneous responses.

### **4.1 Collected data**

For the specific case of this study, it was decided to create a questionnaire that provided descriptive information about the type of population and other types of information. A structured and non-disguised questionnaire was used for the study. The Web-based, self-administered, voluntary, and anonymous survey consisted of different parts, devoted to the collection of the following data: sociodemographic; Internet use, searching about diseases, medicines, blood and other organic sample results and health institutions.

#### **Sociodemographic characteristics**

For this research, the questionnaire was divided into the following age groups: 18-25; 26-35; 36-45; 46-55; 56-65 years old. Besides, the bookshelf's sociodemographic data also included in the questionnaire questions were: gender, degree of education, area of residence in Portugal, and type of household.

#### **Level of confidence in the information collected on the Internet**

The questionnaire also included a question that would help to understand the level of confidence in the information collected on the Internet. By asking if the user confronts his physician about the information collected online, we can evaluate the level of confidence in the collected information.

We could also evaluate what type of information did they sought, namely: Pathologies, Health institutions, Medicines, blood and other organic sample results, and Others.

## **Medicines**

Besides, and due to existing regulations on the dissemination of information on prescription medicines, questions were also included that would make it possible to understand the type of information most sought by users, regarding various topics related to these medicines, namely: Side Effects; Therapeutic dosage; Therapeutic indication; Innovative new therapies/medicines; Price of the drug.

Still, on prescription medicines, it was asked if users feel the need for more information available online, in advertising format, like what already happens in the United States and New Zealand (Ventola, 2011).

## **Communication**

As the Internet is Global, was decided to include a question that would allow us to understand which language is preferred when searching for information.

After understanding the type of information, most sought, users were asked about the sources of information they use preferably, trying to understand where they do their research, preferably: Google, Facebook, Instagram, Infarmed, and Others. For this question, the “Infarmed” was also included as an option because it is the official platform for approved medicines in Portugal.

## **Sample:**

### *Inclusion Criteria:*

- Individuals who agreed to participate and answer the questions posed;
- Individuals who understand the Portuguese language and lives in Portugal;
- Individuals aged >18 years and <65 years old.

### *Exclusion Criteria:*

- All population aged <18 and > 65 years old;
- Individuals who understand Portuguese, but do not live in Portugal;
- All questionnaires with unanswered questions.

## **4.2 Analysis**

Collected data were recorded in Qualtrics. A statistical approach was based on the distribution of responses, with categorical, nominal, and ordinal, data.

Analyses were performed using commercial software (Microsoft Excel).

## **Data Analysis**

Data were analysed using frequencies and percentages. Descriptive statistics were calculated for the following: sociodemographic, Health information accessed online, type of information related to Medicines, Internet search, and Doctor-Patient relationship.

Because it was considered appropriate, it was done an interpretive approach with analysing trends and their causes using a set of data. This approach was introduced by Jonathan Smith in his seminal paper in 1996, as an alternative for other qualitative approaches such as grounded theory, conversation analysis, narrative psychology, and others (Smith, 2004).

## 5 RESULTS

For the purpose of this study, only internet users were recruited, and we had a total of 294 responses. The survey had 288 usable responses drawn to identity, demographics, geographic factors.

The answers from people with ages < 18 and > 65 years old are not considered, because they are not part of the active population in Portugal. Because of this, six answered questionnaires were not considered.

The data analysis, including results, will be discussed below.

### General characteristics of the study population

The characteristics of the sample are showing in Table 1.

Item	Female (%)	Male (%)	Total (%)
	186 (64,6)	102 (35,4)	288 (100)
<b>Age distribution</b>			
18 - 25	20 (10,8)	15 (14,7)	35 (12,2)
26 - 35	38 (20,4)	13 (12,7)	51 (17,7)
36 - 45	58 (31,2)	23 (22,5)	81 (28,1)
46 - 55	60 (32,3)	46 (45,1)	106 (36,8)
56 - 65	10 (5,4)	5 (4,9)	15 (5,2)
<b>Level of education of respondents</b>			
Postgraduate	131 (70,4)	50 (49)	181 (62,8)
Ungraduate	55 (29,6)	52 (51)	107 (37,2)
<b>Area of Residence, Portugal Regions</b>			
Area Metropolitana Lisboa	147 (79)	81 (79,4)	228 (79,2)
Centro	21 (11,3)	10 (9,8)	31 (10,8)
Norte	13 (7)	8 (7,8)	21 (7,3)
Alentejo	5 (2,7)	2 (2)	7 (2,4)
Algarve	0	1 (1)	1 (0,3)
<b>Type of Family</b>			
with Kids	112 (60,2)	67 (65,7)	179 (62,2)
No Kids	74 (39,8)	35 (34,3)	109 (37,8)

Table 1 – Resume of Demographic data details of respondents

The total of respondents (288), 186 (64,4%) participants were women and 102 (35,4%) men.

Most of the sample was distributed into age groups 36-45 years old, where 28.1% (81 respondents) are included; and in the 46-55 years old range, including 106 (36.8%) (figure 1).

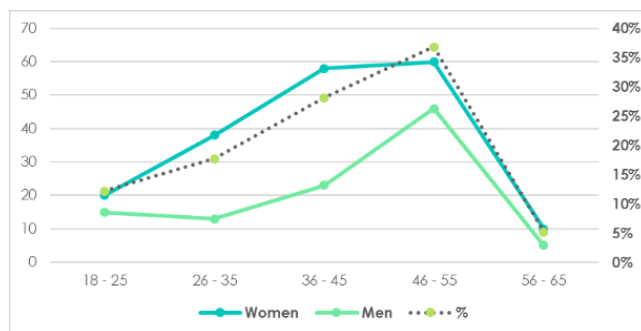


Figure 1 - Age vs Gender group of respondents

Most respondents were Postgraduates with 181 (62,8%) and Ungraduated with 107 (37,2%) as evidenced in figure 2.

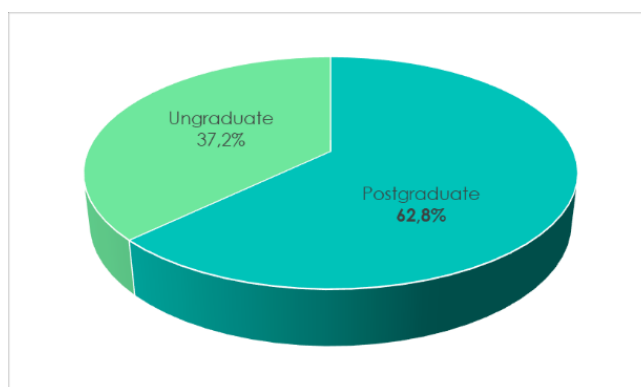


Figure 2 - Education level of respondents

Many respondents belong to an urban area (Metropolitan of Lisbon area), as we can see in figure 3.

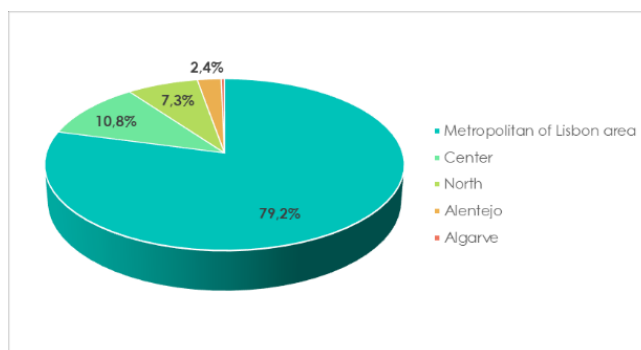


Figure 3 - Area of Residence, Portugal Regions

Analysing the different areas of residence and associating them with the degree of academic education, it is clear that is in the metropolitan area of Lisbon, where most respondents with postgraduate degrees were found (147 respondents). (table 2).

	Postgraduate	Ungraduate	Total
Area Metropolitana Lisboa	147	81	228
Centro	16	15	31
Norte	14	7	21
Alentejo	4	3	7
Algarve		1	1
<b>Total</b>	<b>181</b>	<b>107</b>	<b>288</b>

Table 2 – Education level vs Area of Residence

In traditional families with children, 62,2% mentioned that they use the internet to try to find health information (figure 4).

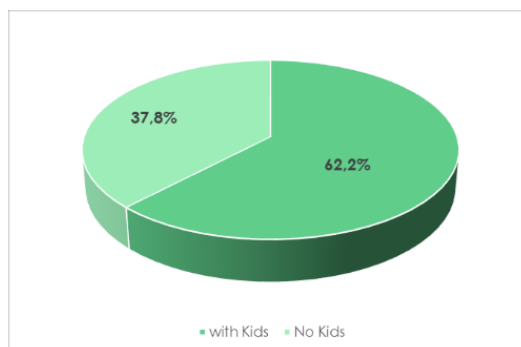


Figure 4 – Forms of Family Diversity

### Perceptions of Searching Health Information on the Internet

One hundred per cent of the respondents have searched online for health information online. However, 7,6% (others) of them does not seek any of the search options available on the survey. Highlight that 62.3% select information on diseases and medications, 38,0% of respondents have, at some point, sought information about a specific disease or medical problem (figure 5).

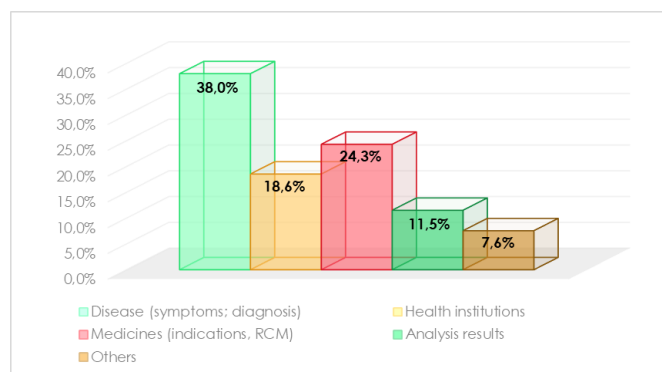


Figure 5 - Health information accessed online

Women searched more information (67.7%) than men (32.3%) when we talk about health information. This can be illustrated in the chart below, where we can see that the topic "Disease" is sought by 139 women and 72 men, which illustrates well the difference in research in terms of demographic groups.

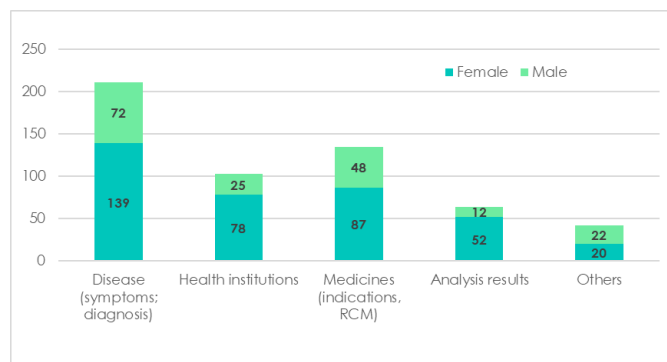


Figure 6 - Health information accessed online by gender

Another finding in this study is that people with higher education level are the ones who performed more research on health information online.

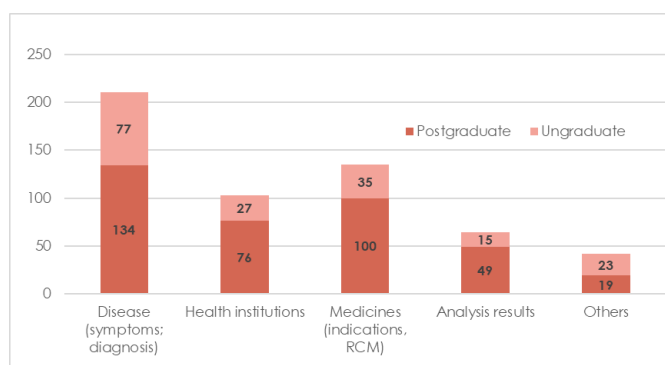


Figure 7 - Health information accessed online by education level

## Medicines

The second most sought topic is "Medicines". That said, it was possible to understand which type of drug information is of most interest to users who responded to this survey, removing the results shown in the figure below (figure 8).

In the group of respondents, 28,2% seek about the therapeutical indication for medicines; however, with a similar number of answers, 25,5% search for secondary effects of medicines. Still, a considerable per cent have doubts about posology (22,2%).

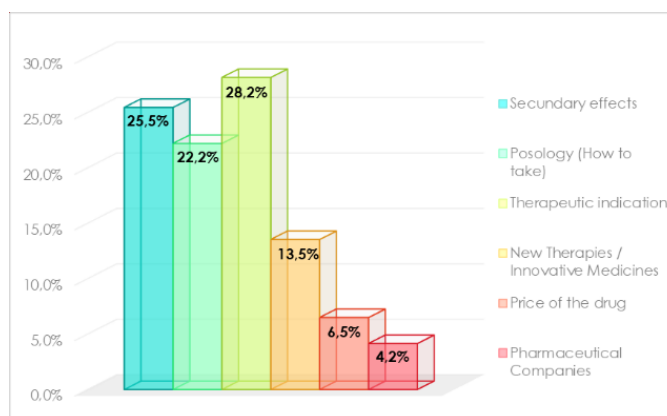


Figure 8 - Type of information access related to Medicines

Once again, the Postgraduate population seek more medicines-related information (figure 9).

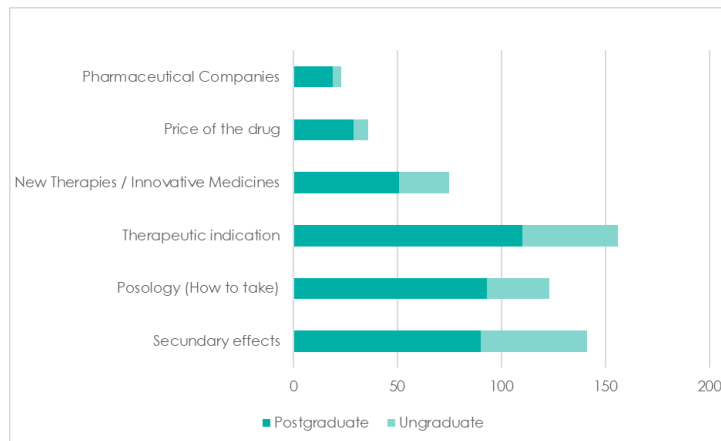


Figure 9 - Type of information access related to Medicines vs level of education

### Discuss the information with a healthcare provider

The majority of respondents, 190 (66.0%), said they did not discuss the information they sought online with their health care providers. While only 98 respondents (34.0%) discussed this information with their health professionals (figure 10).

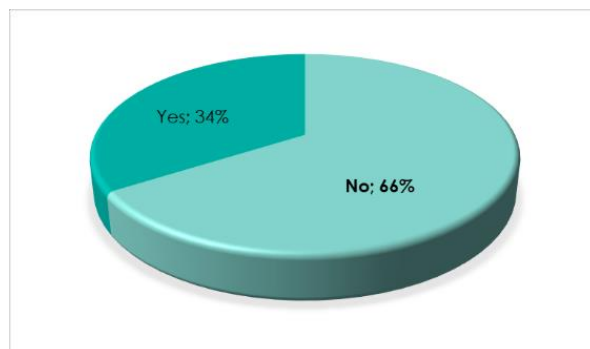


Figure 10 - Discuss the information with a healthcare provider

### The information available on ethical medicines

Notwithstanding the respondents, 80.6% (Very useful and Useful) would like to have more information available on ethical medication. Of this segment of the population, it is essential to mention that, once again, the undergraduate degree did not have significance, because 61.2% are postgraduate. Of the entire sample, only 19.4% report that they do not need more information (figure 11).

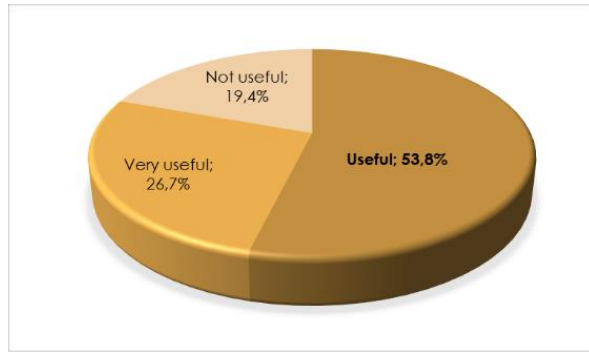


Figure 11 - It is useful to have more information available on ethical medicines?

	Postgraduate	Ungraduate	Total
Useful	95	60	155
Very useful	47	30	77
Not useful	39	17	56
<b>Total</b>	<b>181</b>	<b>107</b>	<b>288</b>

Table 3 - Information available on ethical medicines by Education level

It is interesting to note that 74,1% (Yes and Maybe) find it useful to have more information available in the advertising format about ethical medicines (figure 12).

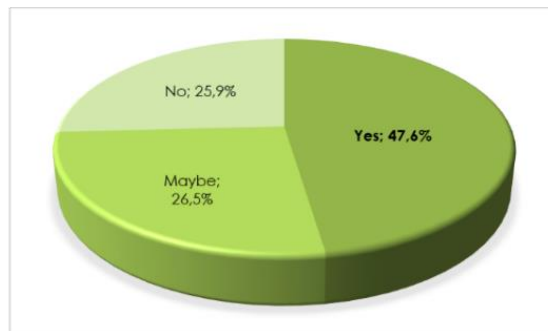


Figure 12 - It is useful to have more information available in the advertising format about ethical medicines?

### Preference for using platforms and language

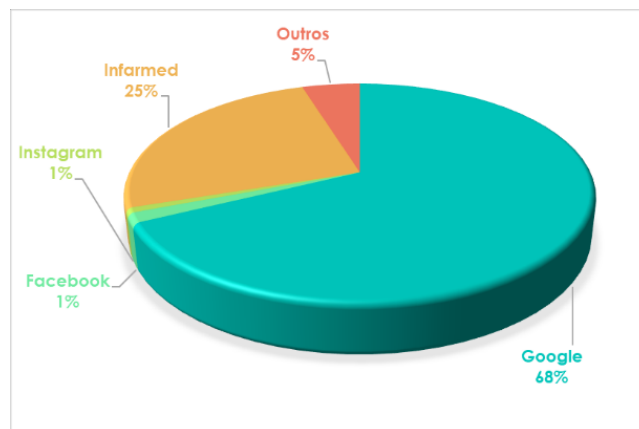


Figure 13 – Preference for using platforms

Although the largest search engine used is Google (98.2%), it is important to note that also other platforms are used simultaneously, namely Infarmed (figure 13).

It should be noted that 41.7% answered that they also searched for health information in English (table 4).

	<b>Postgraduate</b>	<b>Ungraduate</b>	<b>Total</b>
<b>English</b>	<b>29</b>	<b>12</b>	<b>41</b>
Portuguese	96	71	167
Portuguese,Spanish,Others	1		1
Portuguese, <b>English</b>	52	22	74
Portuguese, <b>English</b> ,Spanish	2	2	4
Portuguese, <b>English</b> ,Spanish,Others	1		1
<b>Total</b>	<b>181</b>	<b>107</b>	<b>288</b>
Seeking in English	84	36	120

Table 4 – Search by language

It was also consistently found that are those with higher education who research English information.

## 6 DISCUSSION

The internet has become an essential tool for dissemination of knowledge in health, and the results of this study suggest that among the study population, which consists entirely of the active population in Portugal in 2019, Internet use is extensive, and the search for health information online is highly prevalent. 92.4% of the population studied in this survey responded that they seek health information on the Internet, which goes completely in line with the European trend where around six out of ten respondents have used the Internet to search for health-related information within the last year. Of these, over half say they did so at least once a month. However, the age of those who most seek this type of information was different when compared with the European trend, and in this study, most people are in the 36-45 age group, and the European study mentioned above, the highest percentage was in the 25-34 years age group and then decreased steadily (European Commission & TNS Political & Social, 2014).

This is consistent with other similar studies done in other countries of the world. Indeed, numerous studies have examined the prevalence of Internet use as a source of health information (Mcdaid & Park, 2011), (Andreassen et al., 2007), (Peer-to-Peer Health | Pew Research Center, 2011). In the United States, 80% of Internet users use it for health information (S. Fox, 2011).

The study also revealed that most respondents researched symptoms and diseases (38.0%), and the second-highest percentage in research is about medications (24.3%). This shows that the use of the Internet to search for drug and disease information is widespread.

Another entrancing result of this questionnaire concerns the search for information from parents or guardians. This study showed that in traditional families with children, 62.2% mentioned that they use the internet to try to find health information. This goes according to another study which reports that a total of 769 questionnaires were returned (response rate 30%). Nearly all parents (91%) used digital media for seeking information on their child's health and development, and the main reason for using was indicated as being the 24/7 availability of information (Jaks, Baumann, Juvalta, & Dratva, 2019).

It also showed that, despite the considerable difference between the Internet search for diseases and medicines, the profile of information searchers was similar: searching for health-related information on the Internet was more common among women compared to men in the age group 36 to 55 years old, being higher in those with a college degree.

### **Type of information access related to medicines**

In this study, respondents most often sought information on the following: Therapeutic indication (29.3%), Side Effects (26.6), Dosage (How to Take) (23.1%), New Therapies / Innovative Medicines (23.1%), Drug Price (6.8%). These results are also in line with the European trend where More than half of respondents who used the Internet to find specific information about a medical treatment or procedure looked for information on pharmaceuticals (58%) or the potential risks of medical treatment or procedure (54%) (European Commission & TNS Political & Social, 2014).

It is well known that many consumers use the Internet to find information about their medicines. However, this health information is of varying quality, and therefore, users search, and assessment

skills are essential for selecting and advising this information. The way consumers choose and evaluate drug information on the Internet is significant because it has been shown that written drug information can influence attitudes and drug use.

In this case, and concerning the Portuguese population, a study could be suggested in which could inquire if the Product Characteristics Summary (SPC) does have a clear and accessible language. Or are we facing self-medication phenomena? Further study would be very pertinent, as the information found on the web cannot be validated and not perceived. Therefore, it would be essential to understand the reasons why the Portuguese continue searching to obtain this type of information.

### **The importance of having more information available about ethical medicines?**

Ethical criteria for the promotion of ethical medicines should lay the foundations for appropriate behaviour about the promotion of therapeutic medications, consistent with the pursuit of truthfulness and honesty. Requirements should, therefore, help to judge whether drug-related promotional practices comply with accepted ethical standards.

The use of drug information by consumers is an important issue as it has been shown that written drug information influences consumers' attitudes towards their medicines and affects their drug-taking behaviour. In addition, medicines, unlike general health problems, have openly commercial imperatives that may influence the available information.

Our study has shown just that. A significant percentage of respondents (80.6%) say they find it useful to have more information available on ethical medicines, 74.1% answered that it might be helpful to have advertising information about them.

FDA research also shows that increased DTC advertising promotes dialogue between doctors and consumers (Aikin, 2004), which leads to a stronger relationship between doctors and consumers (Murray et al., 2003) People who are highly aware of advertising may not order specific medications because of concerns that this would bother their physician (Adams, 2010).

### **Discuss the information with a health care provider**

Many times, the patient does not apprehend what the doctor indicates about a specific prescription drug or is curious to know more about the medicines they are taking. Sometimes Summary of Product Characteristics (SmPCs) information may also not be immediately readable to patients, and sometimes, then he seeks clarification in a more accessible language.

However, in many studies in various countries, this topic is often addressed, and the general population does not comment to the doctor about the research they did on the web. Patients are often ashamed or afraid to admit to a doctor that they have sought information on the Internet (Segrelles-Calvo, 2016).

This study revealed that the sample questioned has precisely the same feeling of doubt, as 66.0% do not comment with their health care providers on the information searched on the Internet. The small

percentage that reports this information to the doctor (34.0%), 24% are postgraduate, which also reveals that the academic degree has been associated with greater confidence in the doctor-client relationship.

However, worse than not talking to their doctor about seeking information is actually seeking the doctor's help but then going to confirm/validate the therapy/advice the doctor prescribed at the consultation and this seems to be another trend in Europe because roughly three quarters (74%) of people who used the Internet to get a second opinion after visiting their doctor, looking for information on a specific disease or illness. Approximately half of the respondents also say that they looked for information on their prescribed treatment (52%), or on other possible treatments (50%). Over four out of ten people (43%) looked for testimonials or experiences from other patients, and over a third say that they looked for information on the results of medical tests (36%), or on healthcare professionals or healthcare centres (34%). Around a sixth of respondents looked for information on pregnancy or childbirth (17%), or for emotional support in dealing with a health issue (15%), (European Commission & TNS Political & Social, 2014).

This is what also is observed in the Internet Health Information Study seeking, and the Patient-Doctor Relationship: "The Systematic Review says that the Patient-Doctor relationship can improve when patients talk about research on the Internet. From the various studies consulted, the evidence showed that patients had a better doctor-patient relationship when they had the opportunity to discuss their health information online with their doctors, and they were receptive to discussing the information online. However, if patients experienced resistance from their doctors to discuss information online, patients would be frustrated and anxious, as would discussion. Conflicts between doctors and patients with different interpretations of online information, and when patients valued this information also had adverse consequences for the doctor-patient relationship. In general, we find more evidence of positive than negative implications in discussing health information online" (Tan & Goonawardene, 2017).

"The Internet has the potential to dramatically change the doctor-patient relationship as it provides an opportunity for patients to increase their knowledge, become more informed, and increase their involvement in the health decision-making process" (Carmo-Fonseca et al., 2002).

Because Portugal is at the beginning of this process, it would be very pertinent to have to a study done in Portugal that included the opinion of health professionals. This would be useful to understand this health professional-patient relationship in Portugal better.

### **Preference for using platforms**

The majority, 283 of 288 (98,2%) of respondents in this survey said they search for information on Google, and this is consistent with the published literature available on this type of behaviour. When we analyse the results for the Portuguese population, Google is the winner (97.5%) ("Market Research in Portugal | StatCounter Global Statistics," 2019).

Google is by far the most popular search engine, any site or study found gives us the same results (1 | Google | 1,800,000,000- Estimated Unique Monthly Visitors | Last updated September 1, 2019) ("Top 15 most popular search engines"2019).

We did not investigate factors such as visits to the general practitioner, presence of illness or disabilities, or subjective perception of one's own health. Comparison of results shows, however, that although some factors may exert similar roles (e.g., female gender, higher education), others may differ depending on the specific context, further supporting the need for focused research.

## 7 CONCLUSIONS

The present research provides information on the use of the Internet for searching for information on medicines and diseases among the Portuguese population. The Internet is among the primary sources of health and medical-related information, with an increasing number of Internet users searching for health-related information in the absence of any medical or expert supervision or advice. It is, therefore, of paramount importance to assess information searching behaviours and patterns, as well as the relevant associated factors, to allow the promotion of safer use of the Internet for health purposes.

People's ability to search, evaluate, understand and apply the health information, is routinely included among the skills needed to be considered health literate. Low health literacy is associated with less frequent searches for health information, a more difficult understanding of the information and to apply health-related instructions (Olney, Warner, Reyna, Wood, & Siegel, 2007).

Although the sample of this study is not representative of the Portuguese population, we can conclude that there is a growing demand for health information online, which is in line with trends in other countries of the world. What is important to realise is that the studied population shows an evident concern for their health (with the most sought after topic being "Diseases"), but there is also much concern and doubts about medicine therapy, especially that prescribed by the doctor, which reveals that the information they get in face-to-face consultations or medicine information leaflets is scarce for an increasingly curious and informed audience on this subject. Further, research on any of these topics is not discussed later with their healthcare professional. For this reason, we can conclude the importance of providing, accessing, and changing language, either by health professionals or by the pharmaceutical industry, in order to improve communication between both and users, enhancing confidence in the information available and on adherence to the recommended therapy.

## 8 RECOMMENDATIONS

Health information sought through the Internet has a significant impact on searchers, physician-patient relationship and health resource consumption, so it is urgent to adopt quality certification methods. This is of great importance so that on health websites, the information contained therein can be considered useful and complementary to the medical consultation.

Health care organisations, professionals, and government agencies providing health care services need to play a more active role in monitoring, evaluating, and curating online health information. There is a need to establish policies and guidelines that ensure the credibility and quality of information (Alhuwail & Abdulsalam, 2019).

Several health plans and medical groups have been exploring ways to channel consumers and patients to useful and reliable sources of information on the Internet. This strategy is meant to help address the demand for immediate information and to build on and reinforce the relationship of trust that health care organisations have with patients and members. While the information on the Internet should not be a substitute for direct communication with personal care providers, it is a useful way to augment information sources for patients, especially when direct access to clinicians is not available (Tonsaker et al., 2014).

However, is not only the quality of the information important but also the suitability of the information to the target audience. Quality and quantity of information do not have, as a direct consequence, greater accessibility and guarantee of understanding. In a study at the Portuguese University, students conclude that the Internet is the primary source of information on health issues. However, this source is not associated with improved literacy. On the contrary, literacy worsens with the Internet and improves when there is good access to health care, although we cannot affirm the causality between them. In the age of virtual communication, physicians must be able to adapt their organisational behaviour to provide effective channels for providing affordable and reliable health education that can truly improve their ability to process and understand health information (Santos et al., 2018 )

To better understand the behaviour of the Portuguese population, it would be essential to conduct more studies with larger, more representative samples, and chosen at random with subjects such as: examine consumer attitudes to the availability and quality of Internet-based information on medicines; explore consumer reasons for seeking this information; explore consumer experiences in searching for and appraising information on health/medicines; investigate the self-reported impact and application of this information.

The relationship between Internet use and health outcomes is an area for research development, including examination of the role of user empowerment. Health service providers should aim to harness the potential benefits of health-related Internet use, rather than see it as a burden or challenge (Powell, Inglis, Ronnie, & Large, 2011).

Given the perceived delay in health literacy in Portugal and its direct relationship with health information research in Portugal, it would be expected that there would be openness by the bodies responsible for participating in projects that would improve this situation. Thus, Portugal's participation in studies such as the **IC-Health study** that is a Horizon 2020 Project would be very productive and advantageous to help improve the digital health literacy of European citizens. However,

once again Portugal fell behind with this study being pilot countries Spain, Italy, Belgium, United Kingdom, Netherlands, Sweden, Germany, and Denmark. The project will assess the impact of an improved digital health literacy on groups with very diverse features in terms of social, cultural background, level of digital literacy and health literacy: children (aged from 6 to 11 years); adolescents (aged from 12 to 18 years); pregnant and lactating women (PLW); elderly (aged over 60); citizens affected or susceptible to be affected by diabetes (type 1 and 2) (EHMA, 2019).

For all this, and although Portugal is not a pilot country, it would be important to be included in this study even if it was after its start to understand the impact that an intervention of this gender would have on the population.

## 9 LIMITATIONS OF THE STUDY

This study has several limitations related to recruitment users, a low sample size, and lack of a representative sample.

Despite the size of the sample, it can show a behavioural tendency, but a more extensive study is recommended, assessing the population both quantitatively and qualitatively. This type of approach has an advantage when compared to this cross-sectional study involving a convenience sampling method. The majority of the respondents were from an urban population in southern Portugal.

In the future, more experimental studies are required to measure actual eHealth literacy performance and develop a more reliable self-assessment instrument. Also, the results may have been influenced by the voluntary bias of the participants who were already interested in using the internet to search for information online. It may also be informative in future efforts to ask how often participants sought the health information for themselves versus for others, such as a child or an older person (Giudice et al., 2018).

**10 CONFLICT OF INTEREST STATEMENT**

Nothing declared.

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## 12 ANNEXE



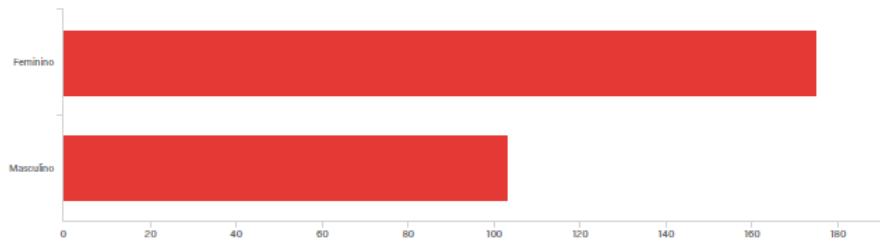
Resp\_Survey\_22041  
9.pdf

### ANNEXE 1 – Report of Survey

## Default Report

*Ethical Health Information*  
April 22, 2019 2:50 PM MDT

Q1 - Qual o seu sexo?



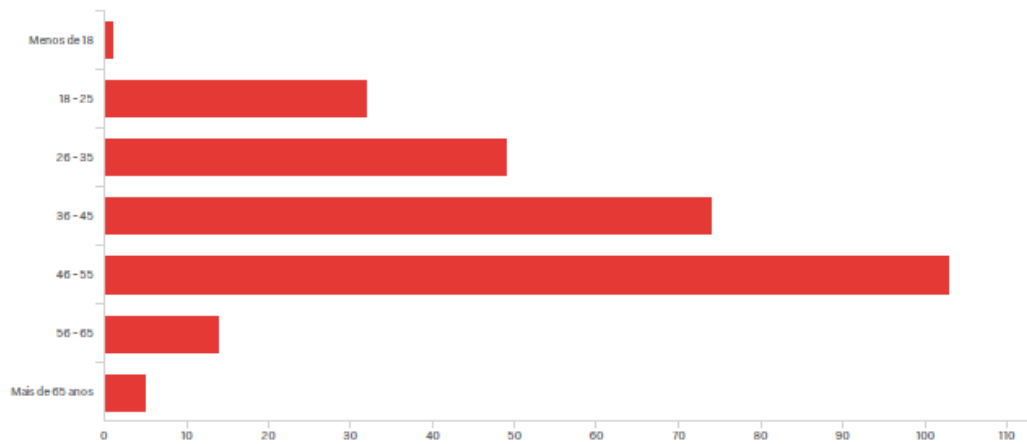
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Qual o seu sexo?	1.00	2.00	1.37	0.48	0.23	278

#	Field	Choice Count
1	Feminino	62.95% 175
2	Masculino	37.05% 103

278

Showing rows 1 - 3 of 3

## Q2 - Qual a sua Idade?

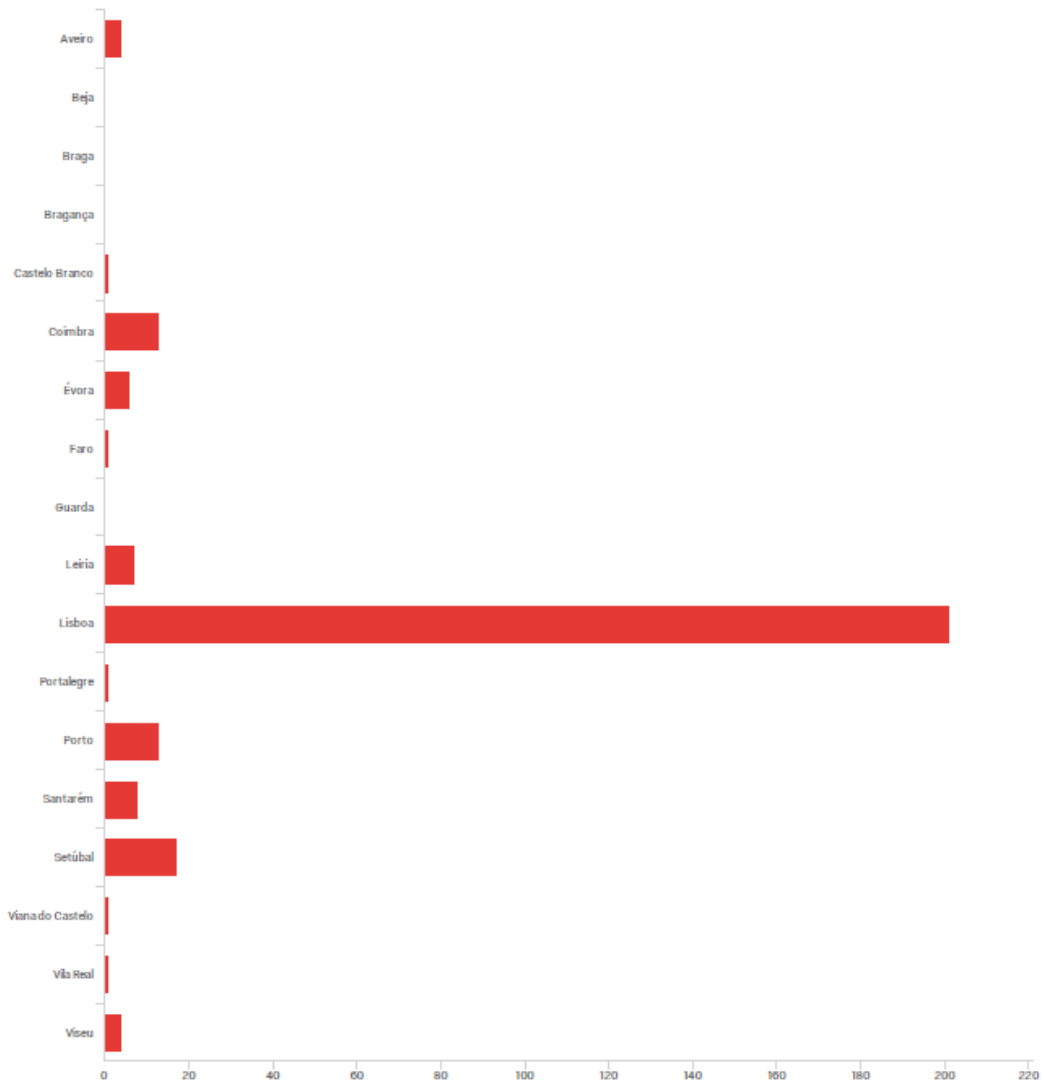


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Qual a sua Idade?	1.00	7.00	4.11	1.18	1.39	278

#	Field	Choice Count
1	Menos de 18	0.36% 1
2	18 - 25	11.51% 32
3	26 - 35	17.63% 49
4	36 - 45	26.62% 74
5	46 - 55	37.05% 103
6	56 - 65	5.04% 14
7	Mais de 65 anos	1.80% 5
		278

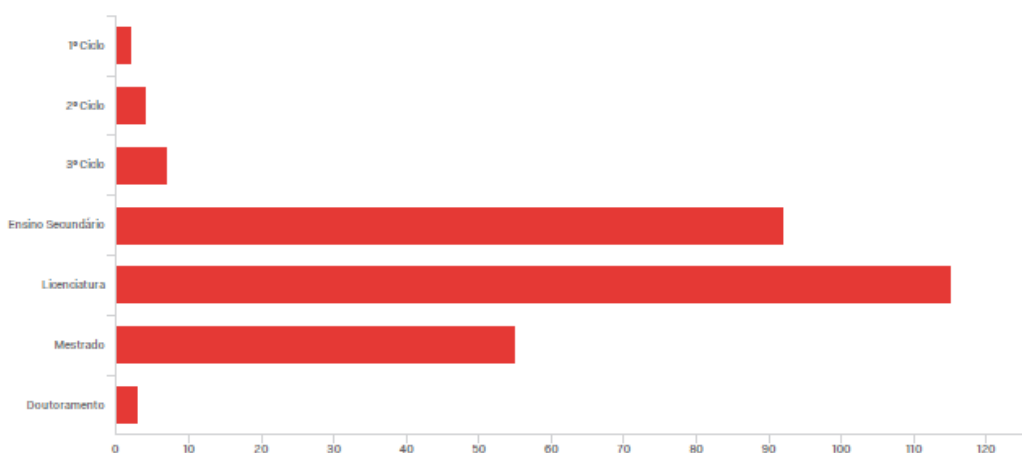
Showing rows 1 - 8 of 8

### Q3 - Qual o seu distrito de Residência?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Qual o seu distrito de Residência?	1.00	18.00	11.05	2.34	5.49	278

#### Q4 - Qual a sua formação?

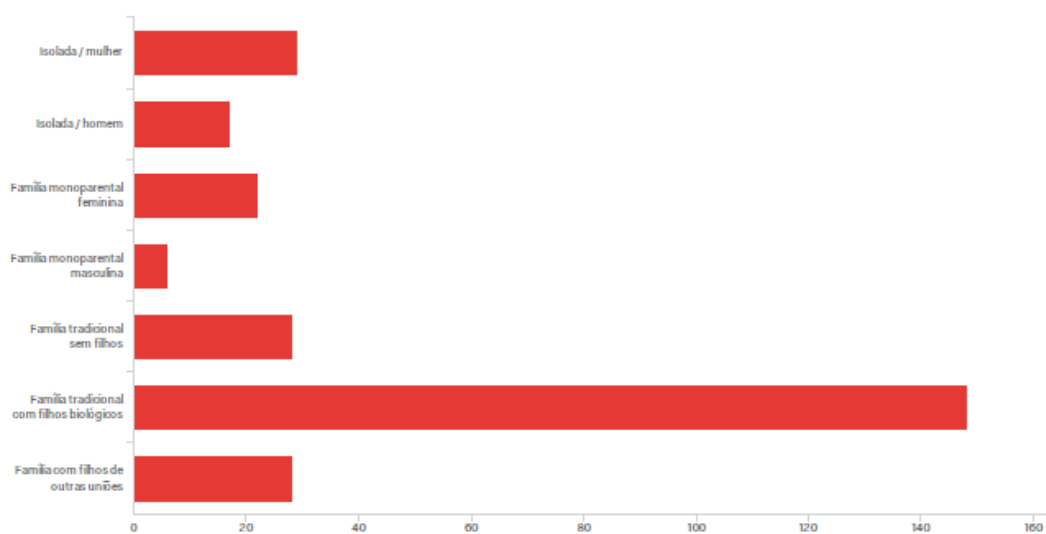


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Qual a sua formação?	1.00	7.00	4.77	0.93	0.86	278

#	Field	Choice Count
1	1º Ciclo	0.72% 2
2	2º Ciclo	1.44% 4
3	3º Ciclo	2.52% 7
4	Ensino Secundário	33.09% 92
5	Licenciatura	41.37% 115
6	Mestrado	19.78% 55
7	Doutoramento	1.08% 3
		278

Showing rows 1 - 8 of 8

## Q6 - Qual o seu tipo de família?

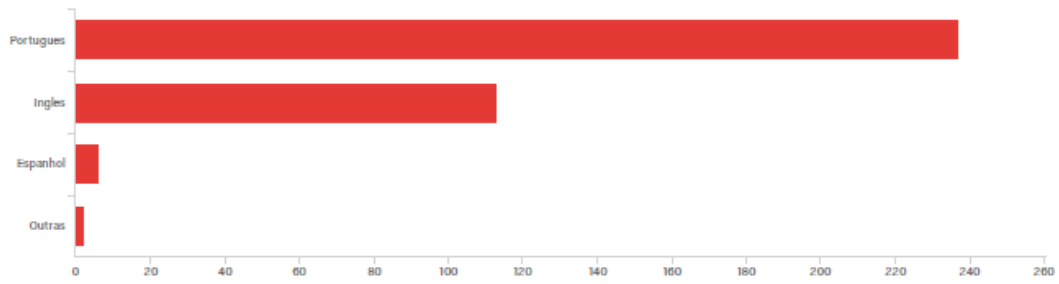


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Qual o seu tipo de família?	1.00	7.00	4.95	1.87	3.49	278

#	Field	Choice Count
1	Isolada / mulher	10.43% 29
2	Isolada / homem	6.12% 17
3	Família monoparental feminina	7.91% 22
4	Família monoparental masculina	2.16% 6
5	Família tradicional sem filhos	10.07% 28
6	Família tradicional com filhos biológicos	53.24% 148
7	Família com filhos de outras uniões	10.07% 28
		278

Showing rows 1 - 8 of 8

### Q16 - Quando pesquisa qual o idioma que prefere?

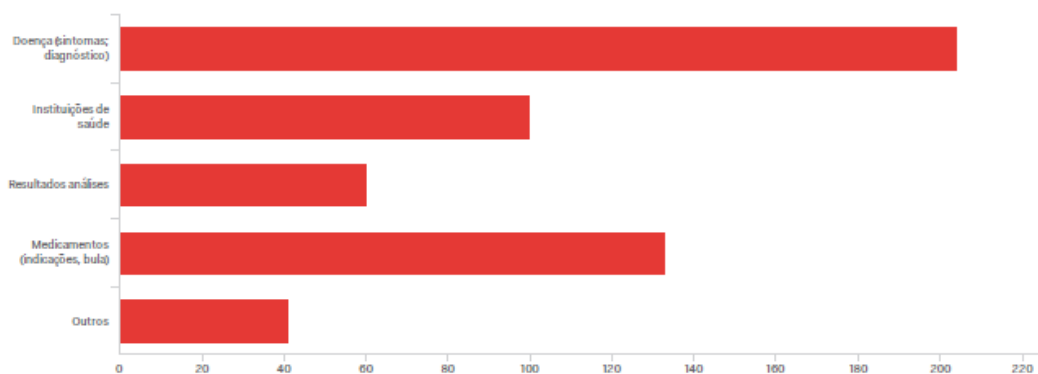


#	Field	Choice Count
1	Portugues	66.20% 237
2	Ingles	31.56% 113
3	Espanhol	1.68% 6
4	Outras	0.56% 2

358

Showing rows 1 - 5 of 5

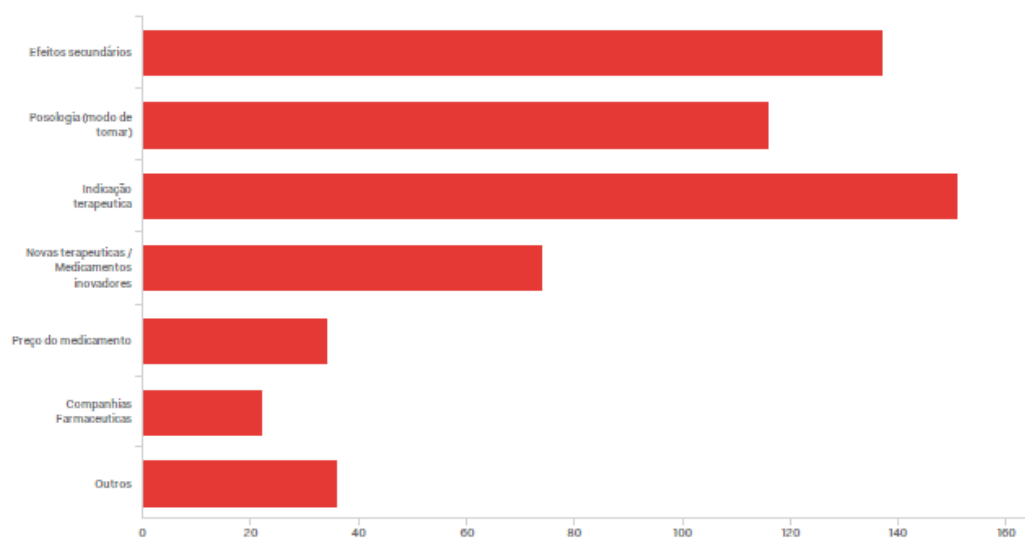
### Q9 - Quais as áreas que costuma pesquisar?



#	Field	Choice Count
1	Doença (sintomas; diagnóstico)	37.92% 204
2	Instituições de saúde	18.59% 100
3	Resultados análises	11.15% 60
4	Medicamentos (indicações, bula)	24.72% 133
5	Outros	7.62% 41
		538

Showing rows 1 - 6 of 6

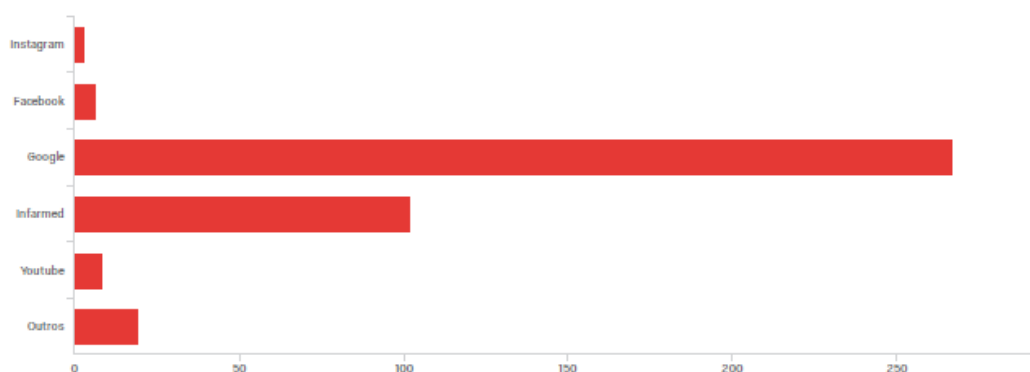
## Q10 - Quando pesquisa medicamentos, o que pesquisa?



#	Field	Choice Count
1	Efeitos secundários	24.04% 137
2	Posologia (modo de tomar)	20.35% 116
3	Indicação terapêutica	26.49% 151
4	Novas terapêuticas / Medicamentos inovadores	12.98% 74
5	Preço do medicamento	5.96% 34
6	Companhias Farmacêuticas	3.86% 22
7	Outros	6.32% 36
		570

Showing rows 1 - 8 of 8

### Q11 - Onde efetua as pesquisas?

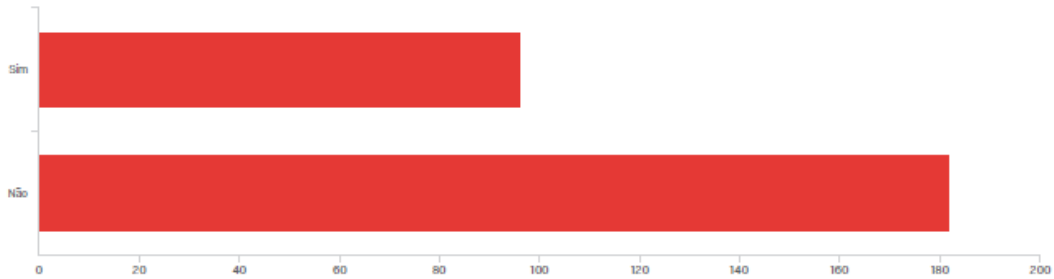


#	Field	Choice Count
1	Instagram	0,74% 3
2	Facebook	1,48% 6
3	Google	65,93% 267
4	Infarmed	25,19% 102
5	Youtube	1,98% 8
6	Outros	4,69% 19

405

Showing rows 1 - 7 of 7

Q12 - Quando vai ao médico refere as suas pesquisas anteriores (informação obtida na internet) sobre saúde?

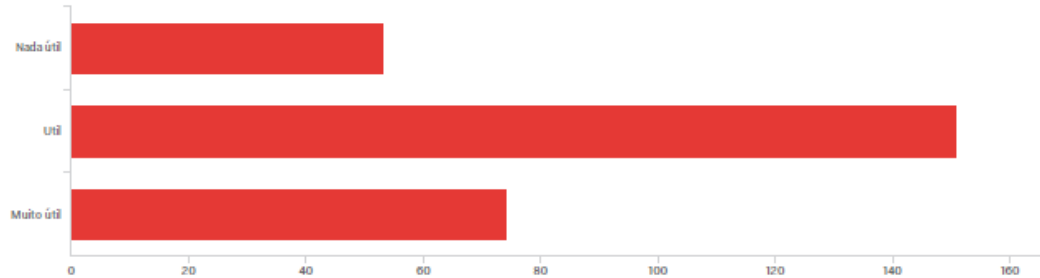


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Quando vai ao médico refere as suas pesquisas anteriores (informação obtida na internet) sobre saúde?	1.00	2.00	1.65	0.48	0.23	278

#	Field	Choice Count
1	Sim	34.53% 96
2	Não	65.47% 182
		278

Showing rows 1 - 3 of 3

Q13 - Considera útil ter mais informação disponível sobre medicamentos éticos (sujeitos a prescrição médica) nas redes sociais?

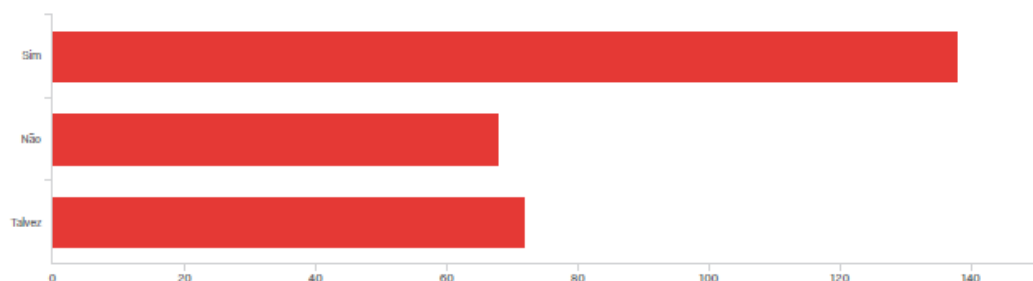


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Considera útil ter mais informação disponível sobre medicamentos éticos (sujeitos a prescrição médica) nas redes sociais?	1.00	3.00	2.08	0.67	0.45	278

#	Field	Choice Count
1	Nada útil	19.06% 53
2	Útil	54.32% 151
3	Muito útil	26.62% 74
		278

Showing rows 1 - 4 of 4

Q14 - Acha que seria útil ter mais informação em formato de publicidade sobre medicamentos éticos (sujeitos a prescrição médica) na Internet em Portugal?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Acha que seria útil ter mais informação em formato de publicidade sobre medicamentos éticos (sujeitos a prescrição médica) na Internet em Portugal?	1.00	3.00	1.76	0.84	0.70	278

#	Field	Choice Count
1	Sim	49.64% 138
2	Não	24.46% 68
3	Talvez	25.90% 72
		278

Showing rows 1 - 4 of 4

**End of Report**

