"Doctor Google" in Family Health: Its Influence on the Day-to-Day Dynamics of the Doctor-Patient Relationship

Doutor Google na Saúde da Família: a influência no cotidiano das relações médico-paciente

Sheila Pires Raquel[a]
https://orcid.org/0000-0002-7463-5450
Email: sheila.raquel@saude.gov.br

Kelen Gomes Ribeiro[b]
https://orcid.org/0000-0003-0870-1971
Email: kelengomesr@yahoo.com.br

José Maria Ximenes Guimarães[c]
https://orcid.org/0000-0002-5682-6106
Email: jose.ximenes@uece.br

Ivana Cristina De Holanda Cunha Barreto[d]
http://orcid.org/0000-0001-8447-3654
Email: ivana.barreto@fiocruz.br

Luiz Odorico Monteiro De Andrade[e]
https://orcid.org/0000-0002-3335-0619
Email: odorico.monteiro@fiocruz.br

Andrea Caprara[f]
https://orcid.org/0000-0002-8725-4710
Email: andrea.caprara@uece.br

[a] Universidade Estadual do Ceará (UECE), Programa de Pós-graduação em Saúde Coletiva (PPSAC), Fortaleza, Ceará, Brazil.
[b] Universidade Federal do Ceará (UFC), Programa de Pós-graduação em Saúde Pública (PPGSP), Fortaleza, Ceará, Brazil.
[c] Universidade Estadual do Ceará (UECE), Programa de Pós-graduação em Saúde Coletiva (PPSAC), Fortaleza, Ceará, Brazil.
[d] Fundação Oswaldo Cruz (Fiocruz), Departamento de Saúde da Família, Fortaleza, Ceará, Brazil.
[e] Fundação Oswaldo Cruz (Fiocruz), Departamento de Saúde Digital, Fortaleza, Ceará, Brazil.
[f] Universidade Estadual do Ceará (UECE), Programa de Pós-graduação em Saúde Coletiva (PPSAC), Fortaleza, Ceará, Brazil.

Correspondence:
Sheila Pires Raquel
Email: sheila.raquel@saude.gov.br
Av. Dr. Silas Munguba, nº 1700 - Campus do Itaperi, Fortaleza, CE, Brazil, Zip code: 60.714.903.

Abstract

Google is an important digital technology for accessing knowledge and has been increasingly used by healthcare professionals and patients within the Family Health Strategy (ESF). This study aims to analyze how the practice of consulting Google about health-related topics affects the doctor-patient relationship in the ESF context of Eusébio, Ceará. This is an exploratory study guided by the qualitative tradition of social research in health. Participants included 21 ESF physicians and 20 patients linked to the teams. Data were produced through semi-structured interviews with physicians and three focus groups with patients. The information was organized using NVivo software and analyzed through a hermeneutic-dialectical approach, thereby encompassing contradictions that emerge from the subjects and their contexts. Physicians highlighted risks related to premature diagnosis and self-medication. Patients expressed confidence in their online searches and a desire to take an active role in their care plan. The findings show that the quality of communication between physicians and patients influences treatment adherence, reducing the need for internet searches. The influence of Google and other technologies may be optimized through investments in patient and professional education.

Keywords: Health Communication; Family Health Strategy; Physician-Patient Relations; Fake News; Digital Health.

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Resumo

A plataforma Google é uma importante tecnologia digital de acesso ao conhecimento, cada vez mais utilizada por profissionais de saúde e pacientes no contexto da Estratégia Saúde da Família (ESF). Neste estudo, tem-se por objetivo analisar como a prática de consultar a plataforma Google sobre temas de saúde interfere na relação médico-paciente, no âmbito da ESF do município de Eusébio, Ceará. Trata-se de estudo exploratório, orientado pela tradição qualitativa de pesquisa social em saúde. Participaram 21 médicos da ESF e 20 pacientes vinculados às equipes. As informações foram produzidas por meio de entrevistas semiestruturadas com os médicos e de três grupos focais com os pacientes. Procedeu-se à organização das informações com auxílio do *software* NVivo, analisando-as à luz da hermenêutica-dialética, abrangendo, assim, contradições que emergem dos sujeitos e seus contextos. Os médicos alertaram para risco de diagnóstico precoce e automedicação. Os pacientes se mostraram confiantes com as suas pesquisas na internet, desejando ser parte ativa do seu plano de cuidado. Evidencia-se que a qualidade da comunicação entre ambos interfere na adesão ao tratamento, com redução das consultas à internet. A influência do Google e de outras tecnologias pode ser otimizada com investimentos na educação dos pacientes e profissionais.

Palavras-chave: Comunicação em Saúde; Estratégia Saúde da Família; Relações Médico-Paciente; Fake News; Saúde Digital.

Introduction

Virtuality is not a false or imaginary world, but a space of existence from which both truth and falsehood may emerge. Different conceptions of the virtual are possible; beyond being a threat, it can also be inclusive and hospitable (Levy, 2010). Some openings to be occupied by communication and education are available within the interstices of cyberspace, and these are precisely the spaces that institutions guided by science must explore before they are colonized by other forces that can restrict or exclude the infinite possibilities of this powerful communication environment (Santaella, 2010).

In the virtual space, the Google platform has become an important digital information and communication technology. It is increasingly accessed in the context of health services, including the Family Health Strategy (ESF). It is regarded as a kind of "oracle" of this technological world. A Datafolha survey showed that "Doctor Google", as the platform is referred to throughout this article, is the resource most frequently used by Brazilians to seek answers to health-related questions, according to 47% of respondents. Another 42% chose to consult a doctor or visit a health facility. However, when asked which source they considered more reliable, 38% preferred to seek medical care, whereas 19% chose to consult Doctor Google (Fernandes, 2023).

The relevance of the present study is justified given this reality, in which the internet has become established as a powerful tool for aggregating knowledge. In this context, the ESF stands out as a setting conducive to building bonds, as it represents the highest degree of decentralization and reach within the Brazilian Unified Health System (SUS), with the role of facilitating access (Queiroz et al., 2021).

The ESF is a setting in which the doctor-patient relationship tends to be more horizontal, requiring doctors to recognize the social determinants that influence their patients' health-disease process. Achieving this understanding requires close engagement between these professionals and

the community, which in turn demands mastery and daily use of communication skills (Pimentel; Sousa; Mendonça, 2022).

This perspective on the ESF, aimed at understanding new forms of relationships among its stakeholders, underscores the novelty and importance of the present study, which originated from research conducted for a master's thesis and aimed to analyze how the practice of consulting the Google platform about health topics affects the doctor-patient relationship within the ESF in Eusébio, Ceará.

Methods

This exploratory study was guided by the qualitative tradition of social research in health from a critical-reflective perspective and examined the influence of internet use on the doctor-patient relationship within the ESF. The municipality of Eusébio, located in the Metropolitan Region of Fortaleza, Ceará, was selected as the empirical setting. It has a population of approximately 50,000 inhabitants and 22 well-structured, fully staffed ESF teams serving residents – and, thus, ESF patients – with diverse socioeconomic profiles.

Table 1. Summary of the methodological organization.

	Research	Collection	Instruments	Analysis
Qualitative approach	21 Doctors from the ESF Eusébio	21 Semistructured interviews	Exploratory visits	Content analysis with three categories: **access, information use, and communication skills**. Use of NVivo software to organize the content.
			Roadmap with guiding questions	
	20 Patients from the ESF Eusébio	3 Focus groups	Roadmap with guiding questions	
	Articles, theses, dissertations, news items, and book chapters	Literature review	Searches in the SciELO, Scopus, PubMed, and Google Scholar databases	

Source: Research conducted by the authors (2021).

Fieldwork was conducted during the second half of 2021 in 18 PHC Units (UBS) located in three territories – Lagoinha, Timbu, and Jabuti – through which the ESF is organized in Eusébio. This period coincided with the resurgence of the second wave of the COVID-19 pandemic and the beginning of the vaccination campaign against the disease, which, on the one hand, generated intense activity at the units and, on the other, made the population apprehensive about leaving home and going to the UBS.

Even so, and with all health precautions observed, 20 patients participated in focus groups (FGs). They were selected by convenience sampling and represented the municipality's three territories: six lived in the first territory, six in the second, and eight in the third. Participants were invited in the UBS waiting rooms. All were over 18 and had been registered at a UBS in Eusébio for at least six months.

Regarding doctors, the aim was to interview all professionals belonging to the municipality's 22 Family Health Teams (ESFs). Thus, 21 semistructured, in-depth interviews were conducted with 21 of the 22 doctors working in the Eusébio ESFs, as only one doctor declined to participate.

The interviews with doctors were held in their own offices at the municipality's UBSs, between patient visits, following an interview guide that, although established in advance, allowed new questions to arise from the responses. This situation provided greater flexibility and enriched the pursuit of knowledge (Minayo, 2014).

Bourdieu's (2011) guidance regarding the importance of situating readers in relation to the social position from which participants speak and are prompted to speak was also observed. Accordingly, several questions were asked to establish a brief socioeconomic profile of the participants. Users were asked about gender, household income, and length of affiliation with the ESF; doctors were also asked about time since graduation and the institution from which they graduated. The confidentiality of all information was emphasized.

Table 2. Socioeconomic profile of the research participants.

Categories	Doctors	Patients	Total
Collection method	21 interviews	3 focus groups	24
Gender	F 66.7% M 33.3%	F 72.7% M 27.3%	100%
Household income	+ 10 MW 100%	1-3 MW 81.8%	100%
Length of affiliation with the ESF	42.9% – 2 years 38.1% – 1-5 years 9.5% – 6-15 years 9.5% – + 16 years	1-5 years – 27.3% 6-10 years – 45.4% + 11 years – 27.3%	100%
Time since graduation	1-5 years – 71.4% 11-20 years – 4.8% + 21 years – 23.8%	-	100%
Graduation institution	Public 57.2% Private 42.8%	-	100%

Source: Research conducted by the authors (2021).

Socioeconomic profile of the study participants

The research instruments included common discussion prompts for doctors and users, designed to address the study objective of analyzing the influence of Google searches about health topics on the doctor-patient relationship within the ESF. These prompts focused on the circumstances in which ESF patients consult Google about health; how doctors and patients address this form of access to information; and how it influences the care process. The circumstances in which the platform is classified as an ally or a villain from a health-promotion perspective were also analyzed (Arruda et al., 2025; Folgosi et al., 2023).

After full transcription, the information obtained from the interviews and FGs was organized with the support of *NVivo* software. The material was initially read in an exploratory manner, followed by the creation of codes (keywords) representing ideas, meanings, and patterns identified in the participants' statements. The following codes emerged: internet, symptoms, medication, trust, dialogue, insecurity, education, and *fake news* (Allsop et al., 2022).

In this process, the codes were organized into node structures, and their relationships with analytical categories were identified. These categories were defined by combining the discussion prompts in the interview guides with content that emerged from the participants' statements. The categories were access to information, communication skills, and use of information (Allsop et al., 2022; Freire et al., 2022).

NVivo software was used as a tool to organize the data and visualize the relationships between codes and categories. Notably, its role was limited to systematizing and managing the textual material. The researchers performed the interpretive analysis (Freire et al., 2022).

The composition of this analytical *corpus* was guided by dialectical hermeneutics (Minayo, 2014), understood as the art of interpreting texts and other forms of human communication, including the hidden meanings and contradictions that emerge from individuals and their contexts. The analysis of the textual *corpus* thus revealed an interpretive network composed of thematic categories designed to address the study objective. These categories were organized according to the procedures proposed by Minayo (2014).

To safeguard participants' anonymity, their statements were presented according to their respective FGs and identified by FG and numbers from 1 to 3, referring to the territories. Doctors were likewise identified by numbers according to the

order in which the interviews were held. The study followed the standards of Resolution N°510/2016 of the Brazilian National Health Council (CNS). It was submitted to and approved by a Research Ethics Committee (REC), under registration number 45002721.0.0000.5054.

Results and Discussion

The influence of Doctor Google on the doctor-patient relationship

The "access to information" category showed that expanded internet access does not necessarily entail the democratization or appropriation of knowledge. The exercise of symbolic power remains centered on the doctor as an authority figure who, according to patients' statements, continues to have the final word on health matters, even when patients are equipped with information obtained online. Patients do not challenge biomedical knowledge; at most, they seek confirmation of what they have found through validation by that body of knowledge.

> *The doctor explains things better, talks about what we actually have, while Google gives you something more general* (FG1).

> *I think the idea is to trust the doctor, you know? Doctors studied, put in the effort - they're the one who know* (FG3).

However, access to information on the internet has clearly produced a structural change in the doctor-patient relationship. Accessing content, even when not entirely reliable, gives citizens a greater sense of confidence to ask better-informed questions in order to receive appropriate treatment and participate in the care process (Lima et al., 2024).

> *When I found out my son was autistic, I spent most of my time looking things up on Doctor Google. As I searched, I started seeing what he had. I looked up what could help him sleep - I'm not going to lie - because they get really agitated... Google isn't a villain if you know how to use it. As the mother of a child with special needs, I always prepare for appointments so I can get there with some background knowledge. I look at the medications and his reactions, and I tell them when a medication triggers some kind of behavior in him* (FG3).

> *So I went and looked it up because I was concerned. When I go back, I'm going to say that I searched, because I always tell him, "Look, doctor, you weren't clear, so yes, I looked it up"* (FG1).

The doctors interviewed responded cautiously when asked whether they believed a doctor's explanation had greater credibility than internet content. Ultimately, however, they considered trust in medical knowledge to prevail over consultations with Doctor Google, save for few exceptions.

> *They practically come in with a diagnosis, and most of the time it's wrong. Then we end up in a situation where, besides explaining what we're doing, we have to stop and start arguing why what they found doesn't make sense in light of our clinical knowledge. Clinical findings come first, because Google has the information, but it doesn't see the patient or the clinical picture* (Doctor 4).

> *Someone who has studied a little more should be able to explain better what is happening to you at that moment* (Doctor 1).

Only one of the doctors interviewed adopted a more dialogical stance regarding the doctor's influence over the patient, although this position remained centered on the hegemonic knowledge of medicine.

> *"The final word" may be too strong an expression, meaning that health professionals are not the end of the line and knowledge does not end with them. Still, they are someone who has probably dealt with that situation several*

> *times and has a more professional perspective on it. Sometimes the patient starts imagining all kinds of things based on what they read, and the health professional's role is to bring them back down to earth a little* (Doctor 12).

Regarding access to health information online, participants were also asked what patients search for on Doctor Google. The doctors reported that searches generally revolve around symptoms and are mentioned at the very beginning of the appointment. One concerning issue was that people search for symptoms and access content that facilitates self-medication, and then seek a health professional's endorsement to continue treatment initially "prescribed by Doctor Google". *"They mostly search while they're still at the symptom stage, before they've sought care, and they usually start self-medicating and then come here"* (Doctor 15).

In their statements, patients reported searching the internet to learn more about their health condition, whether out of curiosity, distress, or fear – situations that led them to seek a doctor to confirm or rule out what they had found.

> *I searched because I found out I had fatty liver disease. I panicked and looked up the benefits of mint and fennel tea, which I knew was good for that. The doctor at the health unit prescribed the treatment, and I drank the tea along with it. Thank God, I'm cured. I told her I had looked it up, and she said it wouldn't hurt. She wasn't angry or anything* (FG2).

> *Oh, doctor, I think I have rheumatoid arthritis because my hands hurt. I read that the pain is worse in this area and that it doesn't improve with this medication, but I think it gets better with this one. What do you think?* (FG2).

Patients also reported searching because of difficulty accessing a medical appointment, in contrast to their need for answers that could be obtained by consulting Doctor Google. They also stated that, when they managed to obtain an appointment but were not fully convinced by the diagnosis and/or prescribed treatment, they turned to the platform to learn more about the medications by reading package inserts or searching for alternative treatments.

> *But you know, I think people search because they don't have access to a doctor. We end up getting used to turning to Google. For example, the UBS is open until 4:00 p.m.; after that, you have to go to the Emergency Care Unit. You get there, and there's COVID, there are lots of people, the wait is long, and the doctors treat you badly. It's much easier to look it up online. I've searched before, bought medicine for a urinary tract infection, and treated myself at home. I know it's wrong, but it was the easiest option* (FG3).

> *I consulted Google because I went to the doctor and he prescribed a medication that didn't work. I went back to the health unit, and the doctor on duty said that medication wasn't appropriate for what I was feeling. The internet works as a second opinion* (FG3).

In the contest with Doctor Google, it is essential to speak the patient's language and establish a dialogue between both parties. This orientation toward an assertive relationship is precisely what patients expect from professionals, as shown in the Communication Skills category: *"When you go to the doctor, the doctor speaks in their own language, so I had to find out what it was on the internet"* (FG3).

This statement prompts reflection on communication skills as part of patients' rights: patients must be clearly informed about their health condition and given space to share their questions, including those arising from online searches. A dialogical stance on the doctor's part is therefore essential (Carmes; Tesser; Cutolo, 2024).

> *In my case, whenever a doctor writes a prescription – especially if it's for my mother, who is very allergic – I always look it up first* (FG2).

> *I also search a lot about medications. I have a son who takes prescription medication* (FG3).

Uncertainties distress patients and their families. Their statements reveal a need for support and dialogue about therapeutic processes and their repercussions. Being receptive, listening, and comforting are therefore communication skills that, together with sensitivity to values and cultural contexts, strengthen care. These forms of symbolism and affect restore the potential of health care. Being friendly and cheerful and sharing knowledge should not be regarded as a distortion of professional behavior, but rather as the ability to recognize another person's experience, listen empathetically to their questions, pain, and fears, and strengthen a relationship of trust (Caprara; Franco, 1999).

> *Like, "I'll only take it if my healer says I can." "Then let me talk to your healer." Or, "I'm not taking it because the newspaper article said I shouldn't." "Then let's read it together. If you convince me the article is right, I'll take it off the prescription"* (Doctor 14).

> *"Look, I'm going to let you keep drinking your tea, but I'm also going to do this treatment because one thing helps the other"* (Doctor 5).

Within this synchrony, the essence of communicative action becomes visible when one understands that patients should be left neither to the loneliness of autonomy nor to coercive paternalism. Solutions that foster personal closeness must be sought, and these necessarily involve developing communication skills (Forte, 2022).

> *So, when we manage to get along, the person seems to listen to what I say, nods emphatically to show they understand, and sometimes asks questions that show they trust me and are paying attention because we have established a good dialogue* (Doctor 12).

Peng et al. (2019) argue that openness to dialogue in the doctor-patient relationship regarding access to online information tends to reduce self-medication and its adverse effects. This premise is confirmed in patients' statements: *"Sometimes I say, 'Doctor, don't you think it's time to stop giving him all these medications?' Then he says, 'No, his episode was very severe, and he needs the medication.' So I just follow what he says and don't even go on Google anymore"* (FG3).

Some accounts in the study confirmed that, even with limited knowledge, patients would like the doctors who care for them to recommend websites rather than leaving them to conduct random Google searches. They said they believed the internet helps more than it hinders, but expressed insecurity about their own ability to conduct satisfactory searches: *"I'm not very comfortable using the internet, so that would be really helpful – starting with me. I'd like to know which websites are reliable and how to tell whether an article is fake news or not. That would be really great"* (FG2).

Even so, most doctors interviewed in the Eusébio ESF stated that they do not usually recommend websites to their patients because they believe that high-quality health information is concentrated in scientific articles, which most laypeople would not understand.

> *I don't recommend any because, in my view, the most reliable websites are the ones with scientific articles, and the language isn't accessible – it's full of technical terms. Usually, I tell patients that if they have a question, I'll look it up and they can ask me* (Doctor 8).

Interestingly, when the situation was reversed, patients expressed distrust upon learning that doctors also consult Doctor Google to clarify questions or explore a health topic in greater depth. Once again, patients' accounts portrayed the doctor as the primary holder of knowledge.

> *I'm not going to lie. I once went to a doctor who looked something up on Google, and I saw her doing it. I didn't want to be rude, but she came to my house for a home visit, and I saw it* (FG3).

> *I've also seen a doctor looking something up, and I even thought, "I'm not going to the doctor anymore; I'll just look it up on Google"* (FG2).

> *It's okay for a layperson to look something up on Google, but when a doctor does it right in front of us, it makes us feel insecure, you know?* (FG1).

When discussing Doctor Google as an ally, doctors acknowledged that they frequently use the platform to research a wide range of topics, clarify questions, and pursue professional development. However, they did not mention explaining this practice to patients, which could reduce patients' insecurity when they learn that the internet is also a source consulted by health professionals.

> *If you add everything up, the positive side outweighs the negative because, like it or not, access to information through the internet is very beneficial. I use it even for my own training, whether to look for an article or find important, more up-to-date information* (Doctor 7).

The study found that the internet's potential may affect the doctor-patient relationship favorably or adversely, depending on the professional's communication skills. In other words, the better doctors understand the different aspects of their patients' health, the more information they will have to build a care plan. Discussing information retrieved online between doctor and patient can be beneficial and may even become part of the clinical history, adding content and improving the relationship (Arruda et al., 2025; Dohms; Tibério; Colares, 2021; Peng et al., 2019).

> *The internet is much more of an ally than a villain. There will be times when it isn't so helpful, but that's part of life, and professionals have to be ready to deal with those situations and questions. It pushes us to stay more up to date because patients already come in with questions; they already know something. So if you don't know, you just sit there looking clueless, staring at the patient without knowing what to say* (Doctor 13).

The "expert patient" (Garbin et al., 2008) is more aware of the right to obtain information about their health from different sources and discuss the findings with their doctor. Such patients want to be seen as members of their own health care team and to be able to make decisions, provided they are given the necessary conditions (Lima et al., 2024).

> *You need to know so you can take ownership of your illness and your responsibility for it. So, if I'm sick and need to take medication, I need to know what I'm putting into my body and what effect it's going to have on me* (FG1).

The ESF and the connection between doctors and patients

The ESF has a structure that facilitates shared care. Its organization allows doctors to follow patients in the environments where they live, whether at the UBS or during home visits. This approach considers social determinants and their effects on health, encouraging a more comprehensive perspective and, therefore, fostering communicative relationships (Pimentel; Sousa; Mendonça, 2022).

> *That's also because some staff members live here, have worked here for many years, and know the families. Primary Health Care is based precisely on that - longitudinal follow-up, bonding, and knowing the families. That's how you can provide much better treatment* (Doctor 7).

A relevant issue observed in the ESF setting was the association between how long a doctor had worked at the UBS and the establishment of a trusting relationship with the patient. According to the professionals interviewed, when faced with a newly arrived doctor, patients preferred to believe what Google said. Among the doctors interviewed,

42.9% had worked in the ESF for less than two years, and 71.4% had graduated between one and five years earlier, as shown in the profile presented above.

> *With ivermectin or chloroquine, for example, they ask whether they should take it. If I say yes and the news says no, they'll listen to the news. Or if they search Google and it says they should take it, they come in asking for a prescription. The patients who haven't known me for long trust Doctor Google's opinion more* (Doctor 14).

> *Well, at least with the previous doctor here, since he was very up to date, I never had any problems. He never questioned anything. But I don't know this new doctor yet* (FG3).

The patient, who for a long time placed themselves in the doctor's hands for treatment, now seeks to become a subject in this relationship, wishing to be identified not by the disease but as the person who gives meaning to medical practice itself (Lima et al., 2024).

> *Searching helps me understand what my mother is feeling and what her disease is. That's why I always look things up. Today, for example, my doctor increased the dose of my heart medication and didn't explain why. He told me to have the tests done and said we would talk afterward* (FG1).

Understanding and agreeing on a care plan fosters commitment

Within the use-of-information axis, the study aimed to analyze the appointment's final stage in the doctor-patient relationship, when the patient has already received all the information provided by the professional in the therapeutic plan, and to reflect on how that information will be used and considered by the patient to improve their health condition. The first step in transforming information into behavior is for the recipient to understand the message.

Doctors were, therefore, asked how they ensure that patients understood the information provided during the appointment and, beyond that, how they assess patients' possible agreement with and adherence to the proposed therapeutic plan. Most doctors gave superficial answers, stating that they ask at the end whether there are any more questions. They explained that this perception cannot be fully controlled and that treatment adherence can only be confirmed at the follow-up visit.

Nevertheless, this practice at the end of the appointment is essential for fostering "patient activation", which occurs when patients are given the conditions needed to assume responsibility for managing their own health. In this regard, correctly understanding the therapeutic plan empowers and motivates patients to become active participants in the success of the care plan (Johnson et al., 2021; Zabar et al., 2019). Among those interviewed, only two doctors expressed concern about this issue, while two others made an effort to reframe the prescription and adapt it to the patient's reality.

> *I ask whether they have anything to suggest and how they're going to do it at home. Then, when they start stumbling over the explanation, I realize they didn't pay attention to the prescription. So I say, "You don't need to be embarrassed. If there's a medication you don't want to take, that's okay"* (Doctor 14).

> *We color-code the boxes if necessary. Depending on the patient's level of understanding, we call in a family member to help administer the medication. Another thing we do is ask the patient to explain to me how they're going to take the medicine* (Doctor 13).

This stage of the appointment concerns decision-making and is intrinsically linked to the concept of health literacy, defined as an individual's ability to access, understand, evaluate, and apply available health information (Peres, 2023). At this point, the doctor goes beyond the role of transmitting scientific information and becomes a health educator, promoting bidirectional dialogue so that

doctor and patient can jointly develop an effective and feasible care plan (Freire, 2013).

Most professionals interviewed recognized that, as doctors, they are also health educators and showed awareness of the importance of mastering communication skills to improve the relationship with patients and earn their trust, thereby contributing to the success of the therapeutic plan.

However, using information requires developing communication skills grounded in values related to humanization and comprehensive care, which must be learned and practiced in everyday health work. In the interviews with doctors and the FGs with patients from the Eusébio ESF, both groups clearly expressed a desire for communication training, particularly in the context of new technologies.

Although most doctors participating in the study had graduated recently, they stated that they had not been trained to develop communication skills even during medical school, particularly regarding the internet and social media. Within the ESF itself, professionals also reported that they had not received training because of the pandemic's social-distancing context (Silva; Silva, 2025).

> *During practical training in medical school, it depended on each professor and on each person's own experience – we were talking about communication skills – and, you know, depending on the appointment and whether it was appropriate, the professor would give some guidance (Doctor 21).*

Patients likewise reported never having received any training on how to access high-quality content online: *"I've never received anything. I use it very little; I mostly look at the news. I get scared, so I don't look at much"* (FG2).

Dialogue and health education: antidotes to misinformation

One consequence of the lack of investment in health education and communication initiatives for both patients and health professionals is the infodemic of false health-related information intensified by the COVID-19 pandemic. The World Health Organization used the term *infodemic* to classify an excess of false information, comparing it to an epidemic that spreads rapidly through communication channels and represents a serious Public Health problem (Freire et al., 2021; Zaracostas, 2020).

Even before the pandemic, in 2018, the report *Information Disorder*, published by the Council of Europe, presented a conceptual analysis of the topic. It considered the term *fake news* too broad to capture the complexity of the problem. It classified false information as *misinformation* when it is shared without the intention to cause harm; *disinformation*, in turn, is intended to cause harm, whereas *malinformation* consists of genuine content shared inappropriately to cause harm (Wardle; Derakhshan, 2023). Notably, the term *fake news* is retained in this study because it is more widely recognized and understood in the community and academic literature (Raquel et al., 2022).

On this topic, doctors emphasized how the avalanche of false information directly affected their relationships with patients, to the point that patients demanded prescriptions for medications that were circulating as effective against COVID-19 and believed rumors that prevented them from being vaccinated.

> *At the beginning, at the height of the pandemic, many people came in demanding medications that had already been proven ineffective. That created some conflict because patients would see information that wasn't always supported by evidence on unreliable websites and treat it as absolute certainty. Then we had to slow the appointment down a little and explain everything carefully* (Doctor 8).

Patients emphasized that false information affects only other people because they themselves can identify false content when they receive it: *"As soon as I see it, I can tell right away that it looks like fake news. So I don't forward it. I think it's absurd, but many people do forward it"* (FG1).

Studies indicate that sharing this type of information may occur as *misinformation* (Wardle; Derakhshan, 2023), more often because of factors such as inattention or a lack of careful reasoning than because of an intentional motivation to falsify information. In health, informational content is commonly shared among relatives and friends to warn them about an issue that could place them at risk (Raquel et al., 2022).

> *I share it with my family. I don't check whether it's true because I usually receive it from people I trust* (FG2).

> *I send it straight to my children* (FG3).

> *When I see something important and reliable, I post it in the family group to warn everyone* (FG1).

According to the doctors, the training gap persists from university education through everyday work at the UBSs. Even so, respondents suggested several health education and communication initiatives. Such training could include disseminating scientific information in accessible language; creatively using social media; producing podcasts, videos, and livestreams; holding workshops; and even incorporating communication content into the curricula of health degree programs (Liu, 2021).

> *I think it would be important to provide training mainly on building a good doctor-patient relationship. That's the foundation. We should learn it in college and during medical school, but many people overlook it or don't give it much importance because they think it's something simple, something trivial. If I establish a good relationship, I can get the patient to trust me. Regardless of what they did or didn't see online, they'll trust what I'm saying* (Doctor 11).

> *A question-and-answer forum where professionals could interact with one another and receive support from the appropriate authorities* (Doctor 4).

> *A platform for exchanging work experiences, bringing together the voices of all professionals to understand the reality in different places and receive general guidance from an institution* (Doctor 7).

> *Maybe teaching patients how to search the internet and find websites with more accurate information* (Doctor 20).

Regarding the conveniences afforded by new technologies, doctors' accounts confirmed that they are reflected more in using time to increase the number of visits than to improve their quality. The statements reveal an everyday reality far removed from what would be ideal (Saukkonen et al., 2022; Topol, 2019).

> *So, because of the routine, the commitments to management, and the number of visits management expects from us, we end up focusing more on prescribing than on prevention itself* (Doctor 10).

> *And besides that, I'm under pressure because I have around 20 people to see in one morning. A lot of the time, I can't let the appointment run too long* (Doctor 9).

> *I just spend a little more time on the appointment, which doesn't bother me, but the people waiting outside do get bothered* (Doctor 14).

Therefore, one should consider that quantifying situations and entering them into systems, or summarizing information on websites and applications, may be effective, but not always for providing better care – sometimes merely for providing more visits. The question that remains is how this "time savings" can be used more effectively to benefit the doctor-patient relationship.

Final Considerations

Searching for health-related content online influences the doctor-patient relationship to the point of fostering behavioral changes in both parties through the democratization of access to information, whether the information is high quality or questionable. Knowledge was previously centered on the doctor; it now reaches the other party in the relationship, also creating space for awareness of communication as a citizenship right.

When reflecting on what motivates them to search for health information online, patients emphasized the importance of being viewed no longer from below but at eye level, because they also make an effort to acquire knowledge that needs to be considered and that should elevate them to the status of members of the team responsible for their own health. Some patients also access the internet for convenience, considering it easier to consult Doctor Google and obtain a diagnosis and treatment after a few clicks than to go to a health facility and seek medical care. Reports of this practice were uncommon in this study, but they warrant attention, particularly as a warning about the risks of lay self-diagnosis and self-medication.

Doctors recognized the importance of their role as health educators and were aware that their position carries credibility that patients continue to respect. However, they cited a lack of training in communication as a discouraging factor and, for example, refrained from recommending reliable websites to patients. "Expert" patients, in turn, want guidance on where and how to access high-quality content.

Recommendations

The accounts of doctors and patients in the Eusébio ESF clearly reveal a lack of priority given to training on communication-related topics, particularly in the field of new technologies. The results evidence the need for investment in health communication policies and initiatives, both in routine work involving health professionals and users and in undergraduate medical education.

A gap to be addressed in future research is the need to critically examine communication education in undergraduate health programs, emphasizing communication from new perspectives of listening and shared care, including in virtual environments.

Limitations

Although the study achieved important results regarding its objectives, its main limitation was that it was conducted during the pandemic, when UBS activities were largely devoted to confronting COVID-19. This situation changed the units' routines, and all health precautions were adopted to ensure that research activities were conducted safely and without disrupting care.

Interviews with doctors were conducted in the intervals between appointments and were kept as brief as possible so as not to interfere with the waiting line. The FGs were held at the UBSs with the largest available spaces in each territory and followed all protocols established by health authorities. Even so, fear of infection prevented greater participation.

Despite these limitations, the strategies adopted enabled the collection of meaningful data and ensured the quality of the information obtained, allowing consistent reflections on the object of investigation and supporting future research conducted under more favorable circumstances.

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Authors' contribution:
Sheila Pires Raquel: conceptualization, investigation, methodology, formal analysis, writing – original draft, and final approval. Kelen Gomes Ribeiro: formal analysis, critical review of content, writing – review & editing, and final approval. José Maria Ximenes Guimarães: formal analysis, critical review of content, writing – review & editing, and final approval. Ivana Cristina De Holanda Cunha Barreto: formal analysis, critical review of content, writing – review & editing, and final approval. Luiz Odorico Monteiro De Andrade: critical review of content, writing – review & editing, and final approval. Andrea Caprara: critical review of content, writing – review & editing, and final approval.

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