

Parents' use of the Internet and social media as a source of information on health and parenting

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ABSTRACT

Introduction. The Internet and social media have revolutionized access to information on health and parenting issues. Virtual consultations are spreading worldwide, are increasing, and represent a challenge for professional practice.

Objective. To characterize the use of the Internet and social media by mothers and fathers as a source of information on the health and parenting of their children.

Population and methods. A descriptive, cross-sectional study in an outpatient pediatric center in the City of Buenos Aires to determine the online consultation habits of caregivers of healthy children or children with health problems.

Results. Two hundred-one surveys were analyzed, and the answers were predominantly from mothers of healthy children; 70.6% search online for health and parenting topics; 80% consult more than once a month. Although 36% of the families use the information to complement the medical consultation, 95% would not replace the pediatric consultation with the online search. The participants are not in the habit of following official pages, nor do they tend to verify the veracity of the contents. The search topics are related to the child's age, and satisfaction with the information results are modified according to whether the child is healthy or has a health problem. Only 4.7% responded that the search always answers their questions.

Conclusions. Caregivers frequently seek online parenting and health information, but the sources are not always reliable. Although consultation with pediatricians is not displaced, we need to know the impact of online information on health decision-making. Pediatricians can intervene and guide caregivers to safe sources.

Keywords: internet access; social media; pediatrics; parents.

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INTRODUCTION

The advent of the Internet represented one of the most significant technological advances in history. Previously, doctors were the only source of reliable health information. The emergence of the Internet caused a revolution due to its ease and speed of access.¹ Worldwide, more than five billion virtual searches are performed every day. This information influences behavior and decision-making, both online and offline.²

For many adults, parenting represents a challenge for which they only sometimes have sufficient information or resources. Traditionally, guidance came from health professionals and the environment. This has changed completely. Parents consult the Internet for their health and, on behalf of others, find information and social support.³ In a sample of parents surveyed, 97.9% searched the Internet for health information about their children.⁴ In some publications, parents' search records were significantly higher than the general population's, which could result in self-medication or delay in seeking professional care.^{3,5-8}

Cybermedicine describes the application of Internet technologies to medicine and public health, while *cyberpatient* defines someone who searches for health information online or uses digital tools for health terms.⁹

According to the Pan American Health Organization, an infodemic represents "an excessive amount of correct or incorrect information, making it difficult to find reliable sources and trustworthy guidance", which generates anxiety, depression, and overwhelm.¹⁰ Authors such as Lim also add the instance of "passive exposure" to posts and advertisements on health topics that users find while searching or browsing other content.¹¹

Internet health information can contribute to informed decision-making, increasing patient autonomy and reinforcing prevention and treatment adherence messages. On the other hand, despite numerous attempts to validate online health information, there are disadvantages, such as the dubious quality of the content, the anxiety generated by the diversity of opinions, and the excessive expectations about new treatments or alternative therapies. Patients may rely on misleading or deceptive information or make decisions based on sensational or emotionally charged stories irrelevant to their context. The dangers associated with consulting social media on health issues are related to

excessive "noise" and a lack of authorized voices, leading some authors to wonder whether we are dealing with a gold mine or a minefield.^{4,12-14}

Few recent studies have explored the Internet and social media as a source of information for parents about their health and that of their children. Knowing the habits, and measuring why and how parents inform themselves and evaluate the relevance and credibility of the information will allow us to advise them to make better decisions.

An exploratory study was carried out to characterize mothers' and fathers' use of the Internet and social media as a source of information on their children's health and parenting.

POPULATION AND METHODS

A descriptive, observational study was conducted in an outpatient pediatric center in the City of Buenos Aires between September and November 2023. An anonymous, self-administered survey was applied to a convenience sample of parents of patients attending scheduled consultations (different days and times were covered to summon families attending pediatric check-ups or appointments with specialists).

The variables analyzed were socio-demographic characteristics, health conditions of the children, frequency of consultation on the Internet or social media on topics related to the health of the caregiver and the health and parenting of their children, sources of consultation, level of satisfaction with the information and verification of its integrity. Only one survey per family group was accepted.

For the survey design, bibliographic consultation and a focus group with parents were conducted. Since there is no gold standard for evaluating sources of information on parenting, the questions were validated through review by a committee of 5 experts, composed of pediatricians and specialists in medical education.

The questionnaire's comprehension was tested through a pilot test applied to 25 families outside the project.

Statistical analysis was performed using the SPSS® social science software, version 25.

The variables were described by their absolute and relative frequencies. The statistical test used was the prevalence ratio (PR) with its confidence interval (CI). All tests were performed with a confidence level of 0.95 (95%) and a significance (α) of 0.05 (5%).

The Center for Basic and Applied Biomedical

Research and Development at the Universidad Maimónides approved the study (Res. 21/23 September 2023).

RESULTS

Two hundred-one families responded out of 238 (84.4% response rate). All caregivers had social media and internet connections. *Table 1* shows the distribution of participants according to their relationship with the child, the age of the caregiver and the child, the number of children, the educational level of the caregiver, and the health condition of the child who came for consultation that day.

Of respondents, 70.6% have the habit of searching the Internet or social media for topics related to health for caregivers and health or parenting for children. Of these, 9.6% do it daily, and 14.4% do it several times per week; 7.2% once a week; 19.1%, several times a month; and

20.1%, once a month. The remaining 29.4% never search for health topics online.

On average, caregivers consult 2.5 different sources. The 201 respondents made a total of 516 consultations. *Figure 1* shows the distribution of responses according to the sources used for the consultation frequency.

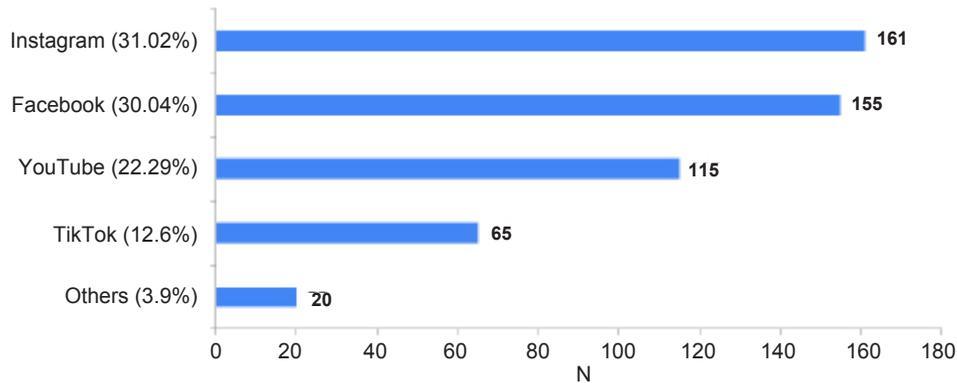
No significant difference was found concerning age among caregivers who responded that they searched for parenting or health topics on the Internet or social media ($n = 142$). Still, we found a trend indicating that the older the person, the higher the frequency of consultation ($p = 0.49$). There was also no significant association between age and preferred source of consultation.

A high-frequency pattern of searching the Internet or social media was defined as those who responded that they searched daily or several times a week, and a low-frequency pattern was defined as those who searched once a week or

TABLE 1. Characteristics of caregivers and children

Participants (N = 201)	n (%)
Relationship with the patient	
Father	32 (15.9)
Mother	159 (79.1)
Other caregivers	10 (5)
Respondent's age (years)	
20-30	27 (13.4)
31-40	108 (53.7)
41-50	61 (30.4)
>51	5 (2.5)
Level of education	
Primary completed	19 (9)
Secondary completed	80 (40)
Tertiary/university	102 (51)
Number of children	
1	59 (29.3)
2	77 (38.3)
3	48 (23.9)
4 or more	17 (8.5)
Health condition of the child attending the consultation	
He does not suffer from any health condition.	105 (52.2)
Major problem, requires multiple consultations by specialists.	26 (13)
Minor problem, requires occasional specialist consultation.	70 (34.8)
Age of the child attending the consultation	
<6 months	6 (3)
6-24 months	14 (7)
2-5 years	41 (20.4)
6-12 years old	97 (48.2)
>13 years old	43 (21.4)

Source: prepared by the authors.

FIGURE 1. Sources of consultation

Source: prepared by the authors.

several times a month. The overall prevalence of high frequency of consultation was 34%. For caregivers with children under 2 years of age, the frequency was 53%, while for the rest, it was 31%, with a PR = 1.67, a 95%CI of 1.02-2.75 and a p -value of 0.0432. No significant differences were found between the search patterns and the number of children ($p = 0.3134$).

The overall prevalence of high-frequency consultations among caregivers of children with an underlying health problem was 30%. For parents with children suffering from major problems (defined as the need for multiple consultations by specialists), it was 53%. For those with minor problems (defined as needing occasional consultations by specialists), it was 22%. The prevalence ratio was 2.38, with a 95%IC of 1.22-4.66 and a p -value of 0.0112.

Caregivers were asked to weigh on a scale of 1 to 5 (1 being “not at all” and 5 being “to a great extent”) the usefulness of each social media in providing information about children’s health and

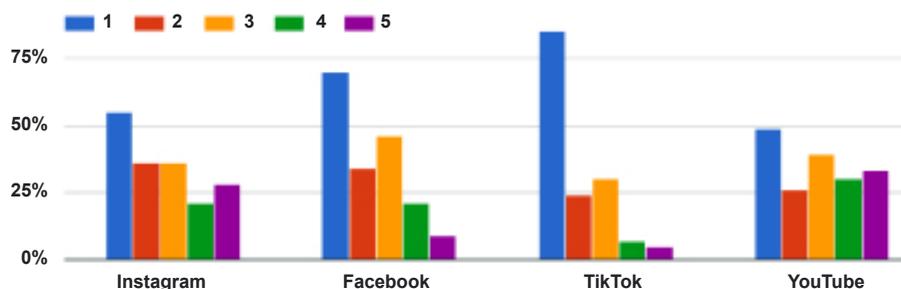
parenting. The results are shown in *Figure 2*.

Of respondents, 97% do not replace consultations with their pediatricians with online consultations. However, 36% often supplement the information received at the consultation with details from the Internet or social media.

As to whether they follow any social media of pediatricians who give health and parenting advice, 122 (60.7%) do not follow any, 69 (34.3%) follow between 1 and 5, and 10 (5%) follow 6 or more. Only 33.3% of the respondents follow the official pages of scientific societies or ministries.

The topics consulted vary according to the age of the children; between 0 and 24 months, “safe travel” (53%) and “symptoms and diagnoses” (33%) predominate; parents of preschoolers (2-5 years) consult more on “diets and healthy eating” (22%) and “disease prevention” (18%). *Table 2* shows the frequency of consultation by topic.

Of the caregivers, 26.1% always check the integrity of the content they find, while 39.4% do so occasionally, and 34.5% never check it. Most

FIGURE 2. The usefulness of sources of consultation on health and parenting issues

On the scale, 1 represents “not at all” and 5 “greatly”.

TABLE 2. Frequency of consultation by subject matter

Topic	Very frequently	Occasionally	Very rarely	Never
Breeding	25	56	11	50
Symptoms/diagnosis	24	75	12	31
Interpretation of studies	17	63	8	54
Disease prevention	22	71	7	42
Vaccines	12	61	11	58
Diet/healthy food	47	67	4	24
Safe travel	13	48	8	73
Adverse drug effects	29	57	8	48
Psychology/behavior	28	58	6	50
Sexuality	13	40	16	73
Sleep habits	18	44	7	73

Source: prepared by the authors.

caregivers who check the information are parents of children with health problems. In caregivers of healthy children, the prevalence of verification was 38%, while for those with a major health problem, it was 65%. The PR resulted from 1.69 with a 95%CI of 1.06-2.69 and a p -value of 0,026.

They were then asked to indicate on a scale of 1 to 5 their satisfaction with the health/parenting consultations they received. On the scale, 1 represented "I never find what I am looking for" and 5 represented "They always answer my question". Regardless of age, educational level, or number of children, the level of satisfaction was distributed as follows: 14.9% of respondents answered 1; 27.9% answered a value of 2 on the scale; 38.8% answered 3; 13.7% responded 4, and 4.7% responded 5.

DISCUSSION

This study analyzes the characteristics of access to online parenting and health information by a group of caregivers by assessing frequency, satisfaction, prevalent topics, credibility, relationship with parents' and children's age, educational level, and presence of health problems. In our sample, more than 70% of caregivers (mainly represented by mothers of healthy children or children with minor health problems) have the habit of searching the Internet or social media for topics related to parenting and health. Although the percentage is similar to that described by authors from different parts of the world, compared to the 46% prevalence in Melamud's report in Argentina in 2007, an apparent increase is noted.¹⁵ As in Kubb's study, we did not find differences between the search by caregivers for themselves and their children.²

The high search frequency is striking (80%

consult more than once a month). Instagram and Facebook were the sources that were consulted the most. However, users rely more on the information they find on YouTube. The present study does not know the cause of this dissociation. TikTok was the social media with the lowest levels of trust.

Fierloos et al. found that the older the parents and children, the lower the search frequency.¹⁶ In our sample, there was a trend of higher search frequency as the caregiver's age increased.

The presence of major health problems in the child determined a higher frequency of consultations by the caregiver and higher levels of dissatisfaction with the results found. A study conducted in Australia in 2022 concluded that all parents searched for health information online, with no differences according to age, education, or socioeconomic status. Parents of chronically ill children were more likely to join support groups and social media.¹⁷

Alsem studied a group of parents of children with disabilities who, despite being advised by their primary care physicians to avoid seeking information online, had found support and encouragement from others with similar problems.¹⁸

Likewise, regardless of their age, number of children, or educational level, parents of children under 24 months old use the Internet and social media more for health issues.

Similar to Benedicta's report,¹⁴ although parents do not replace pediatrician consultations with online searches, they use the information to complement consultations with health professionals. Future analysis is needed to evaluate how parenting or healthcare habits are modified. Studies have shown that, although

parents trust their child's doctor more than online information, their decisions can be modified after accessing the web.^{3,19,20} In this regard, Marín Torres¹ found in a sample of young people and adults that up to 53% reported that the Internet had changed their way of thinking about their health, and 30% made behavioral changes.

In the USA, Bryan et al. explored 258 parents' perceptions of the Internet as a source of health information for their children. More than 90% searched for information online, but less than 50% verified it or discussed it with their pediatrician.⁸ Yardi's group in Australia reported that 61% of users understood the information they found, and 57% checked whether the sites were reliable.²¹ We found that one-third of the caregivers never verified the information, and only 25% always did. The habit of verifying the integrity of information was significantly related to the presence of a baseline disease in the child.

One-third of our sample follows official sites for information on health and parenting, somewhat above that reported by Pehora, where parents preferred open search engines as a source and used fewer child-specific sites run by health professionals.⁴

While the topics of interest and searches varied significantly by the children's age, diet, and healthy eating, disease prevention, symptoms, and diagnoses were the most common and the most consulted, while safe travel, sleep habits, and sexuality were among the less consulted.

The almost unlimited availability of information offered by the Internet and social media represents a new challenge for our professional practice. Internet use for parenting and health issues is installed in all ages and educational levels. Although it does not replace consultation with the pediatrician, we have yet to determine its final impact on decision-making.

Far from competing against such an established habit, we can open the conversation about the importance of accessing quality information without making families feel judged from a paternalistic point of view. Understanding caregivers' online information-seeking patterns can help us generate recommendations for accessing safe sources when asking for help or making decisions. The Sociedad Argentina de Pediatría site or the Ministry of Health could be good channels for accessing information for these families.

CONCLUSION

We found a high frequency of caregivers searching for themselves and the children in their care. This habit was not related to following official accounts, which implies amounts of information coming from unreliable sources and taken as valid without prior verification. ■

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