Navigating Medical Information on the Internet and Social Media

How to identify reliable information, spot misinformation, and engage in fact-based discussions online



Nicklaus Children's Health System



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Introduction

The internet and social media offer an abundance of healthcare and medical information. Doctors and healthcare providers offer advice on Facebook, patient and disease groups tweet about the latest treatments, and friends and family members share their opinions about medicines, physicians, hospitals, and thoughts about their own experiences with healthcare and medicine.

The problem with researching health and medical information online is that it is very difficult to determine whether that information is accurate or even true. The internet and social media are spaces where everyone can share whatever they want, with very few limitations. Internet providers and social media platforms have still not figured out how to label information as correct or incorrect.

A 2019 study² showed that about **1 in 10 health websites publish incorrect information**. What's more, trustworthy authorities in healthcare information often have fewer followers and lower engagement on social media than the websites that share false information, leading to an exponential multiplication of misinformation.

At Nicklaus Children's, we are committed to helping you navigate health information online. This brochure was designed to help you, your family, and your friends identify trustworthy health information, dispel misinformation, and engage in fact-based conversations on social media.

The Social Media Landscape

While the internet has been around for more than 40 years now, social media is a rather new phenomenon. And yet, social media has transformed how we live and talk about ourselves with family, friends, and strangers.

It has also transformed how we inform ourselves about a wide variety of topics, including medicine and healthcare. The following are social media platforms that are currently popular in the U.S.:

Facebook

Facebook is by far the most popular social media platform in the U.S., with more than 220 million American users.³ On Facebook, people can connect with other users and share posts, photos, videos, and other media. Almost all companies and healthcare organizations have Facebook accounts. Facebook is a popular platform to share health information but also misinformation. Misinformation does not automatically get deleted. It needs to be reported by a user and the deletion process can take months, if it gets deleted at all.



Instagram is a photo- and video-sharing platform with 138 million users in the U.S. It is particularly popular among people aged 25 to 34, which make up almost 60 percent of its users. The platform has been criticized for its negative impact on children and teenagers, especially their mental health. Given its focus on mostly visual media, misinformation is not as common on Instagram as on other channels.





Twitter

Twitter is the world's most popular microblogging platform, with more than 75 million active users in the United States. Posts on Twitter, called tweets, are limited to 280 characters and can include a photo or a short video of 140 seconds (though some can be longer). Twitter is a great platform to stay up-to-date on current news and events. Twitter is particularly popular among medical researchers and healthcare reporters. Misinformation is commonly shared on Twitter and hardly ever gets removed.



YouTube is a video-sharing platform and the second-most widely used search engine in the U.S. Almost 200 million Americans use YouTube each year and more than 500 hours of video content are uploaded each minute. In addition to amateur videos, people can watch TV shows, subscribe to content creators, and create their own channels. YouTube is known to publish misinformation and for their slow process to remove false and misleading information.

TikTok

TikTok is the newest of the popular social media platforms. It is a video-sharing app, where people can upload videos up to three minutes long. TikTok has more than 130 million active users in the United States, many of them teenagers and younger adults. While popular to share music and dance videos, content is not limited to home videos. Many well respected organizations share content about history, politics, and education.

Make sure you follow Nicklaus Children's on all of these channels for the latest trustworthy news about pediatric health and our activities in South Florida and beyond.

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³ <u>https://www.statista.com/topics/5323/facebook-usage-in-the-united-states/#topicHeader__wrapper</u>





Social media is very popular among all age groups to share opinions and thoughts on current events, trends, as well as health information. Who hasn't seen a post by a friend or family member, discussing their experience with a disease, condition, doctor, or hospital? But we also see a lot of information about health and healthcare topics that may be perceived as factual even though they are mere opinions. And many of these opinions are not even opinions. Instead, they are misinformation, shared under the guise of an opinion. "I believe that vaccines cause autism," for example, is not an opinion. It's a false statement. We know for certain through numerous scientific studies that vaccines do not cause autism.

According to a 2019 study⁴, health misinformation on social media focuses mostly on vaccines and infectious diseases, a trend we have seen even more prominently during the coronavirus pandemic.

But misinformation is not always shared intentionally and with malice. Many people share stories, posts, and articles on social media because they trust the person publishing the information. Very few people take the time to check whether that information is accurate and based on reliable sources. This brochure will help guide you in that fact-checking process.

⁴ <u>https://www.sciencedirect.com/science/article/pii/S0277953619305465</u>

Doctors and other healthcare professionals

Primary-care physicians, specialists, and nurses share their experience, services, opinions, and trends on social media. Misinformation and conspiracy theories are, unfortunately, quite common for these accounts.

Health systems, hospitals, and academic organizations

This could be a community hospital, children's health system like Nicklaus Children's, a regional academic health system, etc. Information shared is usually reliable and can be trusted. Misinformation is rare coming from these organizations.

Elected officials and government agencies

Government officials, including the U.S. president, secretary of health and human services, but also state agencies such as the Florida Department of Health often share social media content related to health and medicine. Overall, these posts are in line with scientific consensus but may differ based on political opinion.

Healthcare and medical websites

These websites include credible and trustworthy sources such as WebMD and MedlinePlus, but also those spreading misinformation, conspiracy theories, and propaganda. More information on how to spot unreliable sources can be found later in this brochure.

News media

This category is what we generally refer to as "the media" and includes newspapers, magazines, TV, radio, etc. The media landscape has become hyperpartisan over the past decade, a trend that is also reflected in coverage about health and medicine.

Health and medicine influencers

This group of social media opinion leaders are among the least trustworthy sources of health information. A person you follow on social media because of their music or fashion sense may not necessarily be the best source for health and medical information. There is, however, a group of influencers who are trustworthy – medical and healthcare experts.

Social Media Accounts that Share Health Information



How Do I Spot Misinformation?

Ask the following questions:



What kind of statement is it?

If it is an absolute, be careful! "This treatment never has any side effects," is an absolute statement that a medical professional would not say. "Medication X or vaccine Y gives you Z," is an absolute that a doctor wouldn't say. Be careful of absolutes. They often include words such as: always, never, in all cases, in no cases, etc. Also double-check if the information or statement is a mere opinion someone holds. Opinions are very different from statements of fact.



Can I identify the source?

Who said this? A qualified, trained, trustworthy professional? Or is this a layperson who may have heard something through the grapevine or even made the statement up? Unless the source is a medically trained, trustworthy individual, be cautious of the information provided. Also remember that sheer numbers do not equate trustworthiness or truthfulness. The majority of your Facebook friends may share opinion X and still your doctor is a much more reliable information source for topic X, even if she disagrees with the majority of your friends.



What is the information based on?

Is the statement based on hearsay? An anecdote? Always be careful when trusting or sharing anecdotal "evidence." As stated above, in medicine there are rarely absolutes, so a few exceptions from a rule do not disprove the rule or the efficacy of a treatment overall. Make sure the information you trust or share is based on a scientific study. We will tell you more about scientific studies later in this brochure.

Does the information or the statement contradict the majority of experts?

If you see a social media post by a friend or family member that goes against everything you've heard from experts, such as your doctors, be careful about its validity. Medical professionals and healthcare experts are generally much better informed than the lay public and are, therefore, much more trustworthy sources of medical and health information.

Does the person sharing the information have a personal or monetary interest in sharing it?

If you follow alternative healers who promise to cure cancer using herbal treatments only, you should be very suspicious. These individuals want you to use their services and pay them instead of going to an oncologist, who is trained in treating cancer effectively. If the source of your information personally benefits financially from you believing that information, be cautious of the information that is shared.

As a general rule, the internet and social media can be good sources of trustworthy medical information if you know how to spot misinformation and can identify reliable sources. However, we always recommend you talk with your physicians and specialists directly. At Nicklaus Children's, everyone is well trained to help you navigate medical and healthcare information.



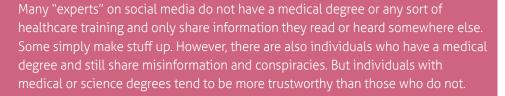




How Do I Identify a Trustworthy Expert on Social Media?

There are a myriad of "experts" in medicine and healthcare on social media and the internet. Some of them share scientific, sound, and trustworthy information. But there are also numerous others, who spread misinformation or simply want to sell you a product or service. This section will help you identify reliable and trustworthy individuals.

Does the person have a medical degree or professional background in the field?



What is the person's affiliation?

Does the person sharing medical information work for a prestigious organization such as Nicklaus Children's, Harvard Medical School, or the University of Miami? If so, they are less likely to share misinformation than those who work for ominous organizations or companies you had not heard of before.

Have other reputable experts or organizations quoted that person or reshared their content?

If experts at trustworthy organizations such as Nicklaus Children's have shared a person's content, it is more likely to be reliable information than posts from people that never get shared by reputable organizations. If government organizations such as the CDC or the NIH share an expert's content, it can generally be assumed to be reliable, accurate information.

Are there any scientific studies backing up the person's claim or information?

Anyone sharing medical or health information on the internet or social media should state where that information comes from. Pay particular attention whether they just cite media stories or actual scientific studies. A media story is hardly ever a good primary source of scientifically sound medical information.

The easiest way to identify a reliable source for medical and health information is to ask your doctor. Our physicians at Nicklaus Children's can either provide you with the information you need or point you to an expert you can trust.

Hospitals and Health Systems

- Nicklaus Children's
- Baptist Health
- Jupiter Medical Center
- NCH Healthcare System

Health Websites

- WebMD
- MedlinePlus
- Medical News Today

Examples of Reliable Sources of Medical and Health Information

Media

- Miami Herald
- NY Times
- Wall Street Journal

Government Sites

• CDC

• NIH



Scientific or academic studies are the backbone of medical innovation. Almost everything done in the medical field is backed up by scientific studies. They prove whether a drug works, whether a vaccine is safe, and if treatment options deliver real results. Scientific studies are rigorous endeavors that include numerous participants, often at study sites across the globe. These studies are the gold standard in the field and are the most reliable source of medical information that we have.

Overall, it is not your responsibility to look for scientific studies that back up a treatment, medicine, or medical approach. You can trust your medical provider to have the education, training, and expertise to recommend only the best treatment options. At Nicklaus Children's, our experts will only recommend treatments and therapies that are medically and scientifically sound.

However, if you'd like to read scientific studies to learn more about a certain treatment plan or medicine, you can visit <u>scholar.google.com</u> and search for them.

Where Can I Find Scientific Studies?







How to Engage with People on Social Media Who Spread Misinformation



First and foremost, you do not need to engage with anyone who spreads disinformation or misinformation on social media or the internet. Sometimes, it is best to ignore these people and organizations.

If you feel the urge to respond, try to be as polite as possible when confronting people about misinformation. They may simply not know better and do not mean any harm. So, refrain from attacking or insulting them. Never be rude. Try to understand their motivations and emotions behind sharing the information. Also gauge whether you are wasting your time before you engage with anyone who shares misinformation.

If you decide to respond, let the person know that what they shared is incorrect or misleading and offer the correct information, based on a scientific study or reliable source. Make sure to be clear that this is not your opinion, but factually true and accurate information. The person may then decide to delete their post or tweet, or they may decide to respond to you. They can either state that they were wrong or they may defend their stance. Be prepared for such a response and decide in advance when to disengage.

Always remember – do not waste your time arguing with people on social media or the internet who do not accept facts or the validity of commonly accepted science. Also, some conversations are better suited for in-person discussions than social media.



Social media platforms and the internet as a whole are notoriously bad at identifying and eradicating false information. Misinformation – like it or not – falls under free speech. Only when it harms others can or should you step in to report the misinformation. Only spend your precious time reporting accounts and posts or tweets when you think they are dangerous and pose a risk to health or life.

Here is how you can report a post on each social media channel:

Facebook

- At the top right of the post, click on the three dots.
- Click on "Report Post."
- Click on "False Information" and then select "Health."
- Confirm by clicking "Submit."

Twitter

- At the top right of the tweet, click on the three dots.
- Click on "Report Tweet."
- Click on "Start Report."
- Under "Who is this report for?" click on "Everyone on Twitter."
- Under "Everyone on Twitter is being..." click on "Shown misleading information."
- Under "What kind of misleading info?" select "Health."
- On the next screen, select "Yes, continue."
- On the last screen, select "Submit."

YouTube

- Below the video, all the way to the right, click on the three dots.
- Click on "Report."
- Select "Spam or Misleading" and in the drop down make the appropriate selection.
- On the next screen, explain the misinformation.
- Click on "Report."

Instagram

- Click on the three dots at the top right of the photo, image, or video.
- Click on "Report" (top right).
- Under "Why are you reporting this post?," select "False information."
- On the next page, select "Health" at the top.
- Hit "Submit Report."

TikTok

- Go to the video you would like to report.
- Press and hold on the video.
- Select report and follow the prompts.

How to Report a Person or Organization Because of Misinformation



Keep in mind that not all posts or accounts you report will get deleted. Some misinformation, unfortunately, does not go against the social media platforms' policies.



How to Share Medical and Health Information on Social Media

1. Check your source.

Don't share anything you cannot back up through a reliable source.

2. Mention your source in your post.

Either mention the source in your text or link to it directly.

3. If you expect people to disagree with you, explain why your source is credible.

Mention that it is based on a scientific study or was explained by a credible source, such as an expert in the field.

4. Make sure you mark a post as an opinion if it is indeed your opinion, not a scientific fact.

Stating something like "I didn't like this treatment because it made me feel sleepy" is very different from stating "This treatment is bad." One indicates an opinion, based on one's experience, the other one is an absolute, which we should avoid. Don't be afraid to end your post with a statement such as "But this is just my opinion."

If you'd like to learn more about misinformation on social media and the internet and how to combat it, here's a list of additional background and reading materials:

Books

- Lavorgna, A.: Information Pollution as Social Harm: Investigating the Digital Drift of Medical Misinformation in a Time of Crisis
- Zimdars, M. & McLeod, K.: Fake News Understanding Media and Misinformation in the Digital Age

Articles

- <u>Gregory, J.: Health websites are notoriously misleading. So we rated their</u> reliability
- Hannon, C.: Health Information: What Sources Do People Trust?
- Medical News Today: Why do some people believe health misinformation?
- The New York Times: Distortions

Reports and Studies

- Surgeon General of the U.S.: Confronting Health Misinformation
- <u>University of Washington: The State of the News: Confronting Misinformation in</u> <u>the Digital Age</u>
- Bode, L. & Vraga, E. K.: See Something, Say Something: Correction of Global Health Misinformation on Social Media
- Chou et al.: Where We Go From Here: Health Misinformation on Social Media
- van der Linden, S.: Misinformation: susceptibility, spread, and interventions to immunize the public
- Wang et al.: Systematic Literature Review on the Spread of Health-related Misinformation on Social Media



Further Reading



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