## Overcoming Dr. Google:

## The Rise in Questionable Self-Diagnostics and Disinformation



Combatting the social media and influencers who play an outsized role in the spread of questionable or bad medical information.

BY NAREN ARULRAJAH

You may recall that back in October of 2022, the American Academy of Dermatology released an announcement about the accuracy of online symptom checkers. They cited one of the journal's research articles, which looked at the reliability of eight so-called "wellknown" symptom checkers that are a few clicks and taps away. These checkers did not exactly make the grade when exploring their ability to correctly diagnose 15 different skin rashes based on information input by three board-certified dermatologists. In fact, researchers found that:

- Only 37 out of the 120 skin rashes were correctly diagnosed as part of the study.
- · Of the less common conditions that were under the microscope, dermatitis herpetiformis was not identified correctly by any of the eight symptom checkers.
- Only one online checker correctly diagnosed other lessprevalent conditions (including erythema nodosum and lichen sclerosis).
- The highest rate of correct diagnoses was for common pediatric atopic dermatitis and shingles; those rates stood at 75% and 62.5%, respectively.

These ubiquitous symptom-checking resources can stand in the way of you seeing a patient sooner rather than later. Furthermore, by the time these patients seek appropriate care from your team, they may have made their condition worse. By inaccurately "self-diagnosing" their rash or other skin concern, they may have used products or techniques that exacerbated the condition.

The onslaught of potentially dangerous, misleading, or inaccurate health information on the web has been popular among the general public. This phenomenon transcends symptom checkers that are not equipped to accurately diagnose those problems that you and your specialty team were extensively trained to identify, manage, and prevent.

For example, a study published in March 2021 in the

**11** There are numerous opportunities to fight the erroneous information that may make its way across your socials or through your doors via patients and what they "read online" or "found while looking for the cause of that rash at 2 a.m. when they couldn't sleep."

International Society of Dermatology's International Journal of Dermatology analyzed content spanning almost 400 websites. These sites were pinpointed based on a high volume of "shares" for content related to dermatological conditions, such as hair loss, psoriasis, eczema, melanoma, rash, and rosacea. The international research team found that the majority of content shared on social was deemed as "below acceptable quality standards."

There are numerous opportunities to fight the erroneous information that may make its way across your socials or through your doors via patients and what they "read online" or "found while looking for the cause of that rash at 2 a.m. when they couldn't sleep." For starters, let's go back to those less-than-stellar-performing online symptom checkers. We know you know these checkers are not reliable, at least not a reliable tool at present. You know this because of the information that your patients present to you as "fact" or as a likely source of their itchy rash or persistent sore. However, what you may not know is exactly "why" these checkers are lacking. Fight misinformation with more information that is valid and sound.

The aforementioned researchers noted that the checkers failed primarily because they did not source relevant information about the individual's medical history. Furthermore, the algorithms that power these online checkers boasted

## >> MARKETING MATTERS

insufficient diagnoses. As the researchers put it, even when the correct diagnoses were made, the checkers' "broad differentials and low specificity" only added "significant diagnostic uncertainty."

It is helpful to present this information to patients, especially when dealing with individuals who may be frequent or stubborn seekers of the "Dr. Google" consultation. It is one thing to dismiss this common platform for healthcare consumers who are simply seeking answers, yet it is quite another thing to explain "why" these resources can be so lacking.

## **MISINFORMATION DELAYS CRUCIAL CARE**

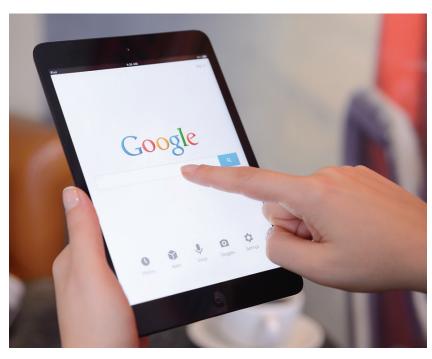
Some of the conditions highlighted in the AAD's announcement and summary about the JAMA study present those diseases, such as melanoma, whereby time really can be of the essence. As noted by

the study co-author: "[...] inaccurate diagnoses can result in delayed or improper treatment."

The notion of skin condition as symptomatic of systemic condition was also underscored in the AAD follow-up report to coincide with the study. After all, patients need to be aware of the fact that, as unsightly or uncomfortable as conditions like rashes may be, they can also be secondary to other medical conditions. These conditions may require prompt and appropriate referral to and treatment by other specialists. So, in addition to fighting online misinformation and inaccuracies with information relevant to the questionable platform, we also encourage you to reinforce the following considerations on a one-on-one, patient-to-patient basis or within your broader community.

A few suggestions:

- Empower patients and your community with frequent communication about how properly diagnosing conditions like an itchy rash can also be the first step toward diagnosing other serious underlying diseases (like kidney or liver dysfunction) in their earliest stages.
- You do not need to be "alarmist" in your content, nor must the communication be lengthy or exhaustive. Even simple, pithy posts about the skin-systemic connection can go far to make individuals think twice about passing up their visit with you and turning to Dr. Google's vague or erroneous advice.
- Additionally, the symptom checker cannot tell you about the other conditions that are associated with the likes of psoriasis or other diagnoses. As specialists, it is



vital to communicate or to remind your community about the "big picture," the additional risks (like diabetes or hypertension) associated with some skin diseases like psoriasis.

- Along the lines of the above point, do not be afraid to reinforce your expertise. You have the training and experience to correctly relieve symptoms in the short term and resolve the underlying condition appropriately over the longer term. Since you truly understand the condition and all that is associated with it, you can further work with the patient to monitor and manage for side effects and complications.
- And remember to be responsible when it comes to your own content. Do not contribute to the greater problem. Be sure that your clinicians put eyes on any technical content that may be shared in the office, on your website, or through social channels.

You should also encourage engagement with your patients and their networks. That way, they will feel confident about asking questions from your team. You want them to come to you with concerns or queries, and they need to feel like there are "no stupid questions." Otherwise, they may go elsewhere to less "intimidating" resources, who may not have the knowledge or who may have nefarious motivations to spread disinformation or "fake news." There is no place for this oft-used term anywhere, let alone when dealing with health matters of potential life and death.

Naren Arulrajah is president and CEO of Ekwa Marketing.