



Dermatologic Disquisitions and Other Essays
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“But doctor, I googled it!”: The “three Rs” of managing patients in the age of information overload[☆]



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Abstract Managing patient interactions in the age of the Internet can be particularly difficult due to the vast amount of information available. Dermatologists should be able to identify relevant patient concerns to adequately address them. We discuss the ethical issues involved in interacting with patients who use the Internet for medical knowledge, and we suggest a method, using the “three Rs” (reassure, redirect, refer), to conduct these interactions. Appropriate evaluation and categorization of patients with regard to their concerns and needs can help guide physicians on how to use the three Rs in managing patient care and expectations.

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Introduction

With the advent of the Internet, patients and their family members have gained access, for better and for worse, to a vast amount of medical information. At least one-third of American adults use the Internet as a diagnostic tool for medical questions, and 77% percent of adults employ a search engine as their primary source for a potential diagnosis.¹ Patients research novel and often unproven clinical tests and therapeutic approaches to medical care. As a result, physicians are

frequently faced with patients requesting unfamiliar tests or treatments. Dermatologists, in particular, need to be able to navigate these unsolicited requests and determine what is appropriate to provide the best care to their patients.

We discuss a relevant patient scenario to highlight these dilemmas.

A skin test for Parkinson?

A 55-year-old woman presents to Dr. Smith’s office for her annual dermatology examination; she is accompanied by her elderly father. Her father moves slowly and has a resting tremor of his left hand. Dr. Smith learns that the patient’s father has been diagnosed with Parkinson disease. The patient

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appears anxious and complains of her own clinical manifestations of imbalance, a sudden deterioration of her handwriting, and a decreased sense of smell over the last 2 years. She discloses her fear that she, too, may have Parkinson disease. Definitive diagnosis of her father's condition took several years, which frightens her even more. After researching on Google, the patient finds a promising new diagnostic tool to diagnose Parkinson disease via a skin test.² She becomes tearful and asks Dr. Smith to perform this skin biopsy on her today to conclusively rule in or out Parkinson disease.

Categorizing patients

Physicians must understand the three types of patients who utilize the Internet for personal medical diagnoses:

1. well patients
2. the newly diagnosed
3. the chronically ill and their caregivers³

Patients who are well may search the Internet for particular clinical manifestations, epidemiologic details of conditions, or preventative strategies. Those who are newly diagnosed intensify their search for specific information regarding their medical condition, and those suffering from chronic illness perform regular searches for novel treatments, nutritional advice, and alternative therapies.³ Additionally, family members of all three of these types of patients use outside resources for information and influence patients on which questions to pose and tests to request. Physician stratification of patients into these categories is essential as each category requires a physician to take different ethical considerations into account to best advise patients.

R1: Reassurance

A patient searching the Internet for dietary advice may request screening for gluten allergy. Further questioning reveals an absence of clinical manifestations or signs attributable to celiac disease or gluten insensitivity. In this scenario, the ethical position of the physician must include **reassurance** that further tests are not indicated while carefully addressing the patient's rationale for requesting testing. Although it is important for physicians to respect patient autonomy, the principles of beneficence and nonmaleficence and the idea of reducing health care costs dictate avoidance of unnecessary diagnostic testing.

R2: Redirect

Alternatively, a patient, such as the one in our scenario with new clinical manifestations, may be burdened by the information on the Internet, causing anxiety. For our patient, it would

be easy to refuse to perform the requested test because it is not relevant to her visit; however, this lack of empathy for the patient's concern fails to **reassure** her. The physician should instead explore the patient's motivation behind the request and its relevance and appropriateness for her.

The physician's responsibility is balanced between easing worry while addressing the patient's personal health concerns. This fosters trust in the physician-patient relationship, which, in itself, can be therapeutic. Because the volume of information on the Internet can be overwhelming, physicians have a duty to **redirect** the patient to medically verified sources. This is an opportunity to build a partnership with the patient while utilizing the Internet as a resource for the patient to become more educated and claim personal responsibility for his or her health.

R3: Refer

Patients suffering from chronic illness (or their caregivers) may have intricate and complex needs that cannot be fully addressed during their appointments with their physicians. They may turn to the Internet for more answers to their questions as well as for other treatment options. Depending on the chronic disorder, the physician may be obligated to **refer** the patient to a multidisciplinary team to create a comprehensive care plan.

A referral may be appropriate in other types of patients, such as the patient in this scenario. In this case the physician could easily refuse to perform the skin biopsy because he or she is not a neurologist and is not equipped to interpret the results of the test. This refusal makes it clear that the physician is uncomfortable in agreeing to the patient's request because it is out of the scope of the physician's practice and he or she is uneasy with the implications of a positive test.

But refer only after thoroughly evaluating

The patient's scenario is similar in some ways to that of a patient requiring a biopsy for a skin concern. For a potential skin cancer, for instance, the dermatologist must evaluate the patient, perform and interpret the biopsy, and coordinate further care. For our patient, the dermatologist cannot provide all of these services but is at least capable of providing a biopsy and a histopathologic interpretation. The dermatologist should not simply write off the patient's request as being out of the scope of the practice; instead, he or she should take further steps to determine the clinical utility of the test for this patient.

The physician could agree to perform the biopsy as requested, after thoroughly investigating the indications and protocol for the procedure. The physician has the technical expertise and training needed to perform the biopsy; however, should it be performed before a neurologic consultation? A neurologist could determine that the patient's signs and clinical manifestations are related to something other than Parkinson disease—that is, anxiety regarding her father's

condition. If the neurologist determines that the patient must be further evaluated for Parkinson disease, the neurologist may determine that the biopsy does not have statistical utility in clinical practice in its current form. For example, the test may lack the specificity needed to rule out conditions in the neurologist's differential diagnosis list.

The best course of action would be for the physician to **refer** to a neurologist for evaluation of the patient after addressing the patient's concerns. With this course of action, the physician takes the most appropriate approach, because the patient should be initially evaluated by a neurologist before any further steps are taken. The dermatologist cannot determine the utility of the requested test without properly consulting with a specialist.

Multidisciplinary care: Neurology as a partner

Conversely, if the patient were referred by a neurologist to carry out the biopsy, the physician would perform it in the context of a multidisciplinary plan for diagnostic analysis and therapeutic intervention. In addition to performing the biopsy, this visit provides an opportunity for the dermatologist to evaluate the patient for skin problems that could be associated with Parkinson disease, such as seborrheic dermatitis, hyperhidrosis, and skin cancer.⁴

Alternatively, consider a scenario in which the patient has already been fully evaluated by a neurologist; however, the neurologist told her that there was no protocol to make a definitive diagnosis. The only course of action is to wait until other clinical findings emerge. Should the dermatologist in question search for a diagnosis via biopsy without discussing with the neurologist? Both a dermatologist and neurologist should be involved in the care of this patient: the physician should **refer** the patient to relevant physicians and collaborate with them as part of a multidisciplinary team.

Conclusions

As patients grow more comfortable turning to outside sources for medical advice, physicians must adapt to the changing landscape of patient care in the age of technologic advancement, social media, newspapers, and other forms of communication. Physicians must respect patients' autonomy in regard to their ability to gather information and assess their medical needs. With this in mind, physicians must also prioritize patients' best interests to adhere to the principle of beneficence and nonmaleficence, which sometimes requires adjusting patients' expectations of their personal health and desired treatment options. Appropriate categorization of patients within this construct will facilitate implementation of the "three Rs" of patient-requested care: **reassure**, **redirect**, and **refer**. With these three strategies, outside information can be an ally in educating patients instead of a potential source of confusion and contention.

Conflicts of interest

The authors have no relevant disclosures or conflicts of interest to report relating to the content of this article.

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Dr. Veronica Santini joined the Stanford neurology faculty in 2014, where she codirects the Multidisciplinary Huntington Disease and Ataxia Clinic. In her first year of directing the clinic, it received the prestigious designation as an HDSA Center of Excellence and has maintained this designation under her leadership. She has taken a similar multidisciplinary approach in the development of global neurologic programs and travels annually to provide

neurologic care to the citizens of the impoverished nation of Haiti. As a result of this endeavor, she has been named a Fellow of the Stanford University Center for Innovation in Global Health. Dr. Santini was one of only 12 international candidates selected as an American Academy of Neurology (AAN) Emerging Leader and one of 30 candidates selected as an AAN Palatucci Advocate. She also has an interest in cutaneous complications of neurologic disease.

Dr. Santini is also enthusiastic about medical education and has a responsibility in teaching Stanford medical students. She is the lead of the preclinical brain and behavior module and coclerkship director of the neurology clerkship. Dr. Santini has won numerous teaching awards, including distinctions as the recipient of the Neurology Clerkship Educator Award and the Lysa Forno Excellence in Teaching Award.