How Should Clinicians Minimize Harms and Maximize Benefits When Diagnosing and Treating Disorders Without Biomarkers?

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Abstract

Ethical obligations to minimize harms and maximize benefits of diagnosis and treatment of disorders without biomarkers include navigating difficult-to-measure, perhaps clinically inexplicable, symptoms. Among potential harms are public stigma, self-stigma, label avoidance, and the negative influence these stigmas have on self-esteem, quality of life, employment, and housing. Among potential benefits are patients becoming active agents in managing their illnesses, social acceptance, and access to evidence-based treatments. Ethical complexities clinicians face when trying to develop treatment plans while heeding key details from patients’ narrative accounts prompt questions about how to best adhere to evidence in understudied domains of medicine.

Case

J sobbed in frustration in Dr R’s office. After 4 years of unsuccessful treatment with an array of anti-tremor medications from her primary care physician and then a general neurologist, J had been referred to Dr R, a movement disorder specialist, for further evaluation. Based on a history and physical examination, Dr R diagnosed J with a functional movement disorder, a form of functional neurological disorder or conversion disorder. Initial referrals for treatment—to a psychotherapist for cognitive behavioral therapy and to a physical therapist for a motor reprogramming treatment protocol—had not gone well.

J felt like her caregivers had given up, and Dr R recognized J’s feelings of abandonment. J stated, “I’ve been having this shaking for 5 years now. I lost my job, and nobody wants to hire me once they see me shaking. The judge took my kids away. My last 2 doctors gave up on me and think I just make this up, and now you’re telling me to go see a psychotherapist and a physical therapist. The psychotherapist I saw before took one
look at me shaking and kicked me out, and my insurance company won’t pay for physical therapy.” Dr R responded, “Your tremor is having a terrible impact on your life, and it feels like people who are supposed to be helping you are turning their backs on you.” Dr R sat and continued, “I’m sorry that you’ve faced stigma and poor care on top of your illness. I’m not going to give up on you. I know you’re not making up these symptoms and that the suffering you’re experiencing is real. I want to work with you, so you can get your life back on track. How does that sound?”

J replied, “I’d like that.”

Commentary

Despite rapid advances in our understanding of pathophysiology and in diagnostic techniques, there remain a wide variety of disorders for which there are no biomarkers (ie, measurable indicators of the presence or severity of a disease) available for clinical use. This category of disorders without biomarkers includes many difficult-to-measure disorders and most medically unexplained symptoms, such as functional neurological disorders, fibromyalgia, chronic fatigue syndrome, and chronic pain syndromes. These disorders together contribute to up to roughly half of primary care and specialty clinic visits, a significant fraction of emergency department visits and hospital admissions, high health care costs, and markedly impaired quality of life for patients and their families.2,3,4 In assessing and diagnosing these disorders, clinicians depend primarily upon expert history taking and examination.

The diagnosis and treatment of difficult-to-measure disorders and medically unexplained symptoms have long been complicated by individuals with these disorders being stigmatized by clinicians, the general public, and sometimes by patients themselves.5 From ancient Egypt to Charcot to the modern health care system, patients with difficult-to-measure disorders—and especially women and other marginalized populations—have been dismissed as “hysterical,” deceitful, and even dangerous.6 In part because of the lack of biomarkers, there are sometimes limitations to the amount and quality of quantitative evidence regarding the etiologies and treatments of these disorders, leaving clinicians to make important clinical judgments and to counsel patients on the basis of limited information. Here, we evaluate risks of harm and obstacles to helping people with difficult-to-measure disorders and offer recommendations for diagnosing and treating these disorders, focusing on minimizing risks of harm from stigma and maximizing opportunities for benefit through diagnosis.

Harms

Among what many regard as 4 foundational principles of modern medical ethics, the principle of nonmaleficence requires clinicians to avoid actions that harm their patients and to take action to minimize harms.7 Diagnosis of a medically unexplained symptom incurs real risk of harm to patients, most notably in the form of stigma.8,9 Stigma is the assignment of disfavor or negative moral value to a characteristic that distinguishes an individual or group from others and can be enormously damaging to stigmatized individuals, resulting in worsened prospects for employment,10 housing,11 and health care,12 and lower self-esteem and quality of life.13 The common occurrence of stigma affecting those with poorly measured disorders raises special ethical concerns for clinicians caring for these patients.

Studies of stigma in the health care system identify 3 avenues through which stigma can harm patients.14 Public stigma encompasses negative moral judgments made by
others—including clinicians, family members, employers, and the general public—about an individual or group with a specific diagnosis or other characteristic. Public stigma can lead to discrimination in multiple domains, including housing, employment, and health care.\textsuperscript{10,11,12} \textbf{Self-stigma} occurs when stigmatized individuals internalize and accept negative moral judgments about themselves, leading to diminished self-esteem, self-efficacy, and self-investment, as well as self-caused impediments to the pursuit of life goals.\textsuperscript{13} \textbf{Label avoidance} occurs when individuals avoid the health care system in order to avoid a diagnosis associated with negative moral judgments. Patients with difficult-to-measure disorders and medically unexplained symptoms are at risk for harm from stigma through all 3 of these pathways.

Clinicians heeding the ethical principle of nonmaleficence need to take the problem of stigma seriously. Addressing stigma begins with empathic, nonjudgmental patient-clinician communications and extends to active advocacy for and education of patients and family members concerning available support services and legal protections from discrimination. Empathic, nonjudgmental communications may be enhanced in some circumstances by the use of inclusive person-centered or person-first language,\textsuperscript{15} although some individuals and groups within disability communities may not endorse such language.Clinicians can better understand individual patients’ perspectives by asking them about their preferred terminology. Advocacy and educational efforts are often most effective when physicians and nurses collaborate with social worker colleagues and advocacy organizations and when patients participate in peer support.\textsuperscript{13} Interventions to enhance self-efficacy and patient-centered decision making can further reduce the negative impact of stigma.\textsuperscript{16,17}

Although stigma can cause inadequate medical evaluation and treatment, patients with difficult-to-measure disorders generally—and with medically unexplained symptoms in particular—also face significant risk from excessive testing and misdiagnosis.\textsuperscript{18,19,20} Misdiagnosis can result from false positive test results or incidental findings unrelated to a patient’s symptoms. For example, the majority of patients with functional seizures (a common form of functional neurological disorder) are misdiagnosed with epileptic seizures for multiple years and treated with antiseizure medications that provide no benefit but cause real adverse effects.\textsuperscript{21}

Rigorously evaluating patients’ symptoms and concerns, while also avoiding unnecessary and potentially harmful tests and treatments, is a difficult balance requiring significant clinical judgment. This judgment requires clinicians’ sincere attention to patients’ perspectives and also a willingness to offer strong, clear recommendations based on clinical experience and the limited but growing body of evidence concerning these disorders. Seeking interdisciplinary expertise, including from consult-liaison psychiatry and neurology, can be extremely helpful when challenging clinical judgments must be made. In the case, a specialist is consulted who elicits the patient’s experiences of her disorder and stigmatization through reflective listening. The clinical specialist and patient partner together to address instances of public stigma (the psychotherapist’s reluctance to provide treatment, the insurance company’s refusal to pay for physical therapy, the nurse’s disparaging comments), avert self-stigma, and ensure access to an interdisciplinary team.

\textbf{Opportunities}  
Providing an accurate diagnosis requires a clinician’s time, energy, and collaboration with both patient and colleagues. As clinician and patient come together to understand
the nature and implications of a patient’s symptomatology, a clinician heeds the bioethical principle of beneficence, and a meaningful patient-clinician relationship and clinical approach can emerge. Diagnostic labels disconnected from a patient’s experience and needs carry risk of stigma, unnecessary interventions, and harm. Conversely, a diagnosis that engenders understanding of a patient’s lived experience can provide benefits, including closure on a prolonged diagnostic period and an end to the risks of diagnostic inquiry. A meaningful diagnosis also engenders a strong patient-clinician relationship, in which patients feel understood and stay engaged with the medical system. Such a relationship facilitates ongoing care for all dimensions of health, both related and unrelated to a primary diagnosis (eg, routine health care screenings and preventive care). Furthermore, a diagnosis allows for evidence-based treatment when possible and, when none yet exists, for referral to experts who can optimize care using best practices, educate a patient’s other clinicians about the diagnosis, engage patients in research, and reduce isolation by connecting patients with peer mentors and community support.

Moreover, as health care systems begin to address systemic ableism, individuals with medically unexplained symptoms will be able more fully to experience the aforementioned benefits of diagnosis. Ableism is a pervasive form of discrimination based upon the assumption that life without a disability is preferable to life with a disability, and it contributes to the stigma that individuals with medically unexplained symptoms face. Acknowledging the implications of ableism may help foster opportunities for clinicians and institutions to identify and address biases in care for individuals with all types of disabilities.

Diagnoses can also create opportunities for patients to become active agents in the management of their own illness. For example, a diagnosis can allow patients and families to create or join patient advocacy organizations. These organizations serve important roles in raising awareness about disease symptoms and treatment, providing services to patients, and promoting research on cures and prevention. Clinicians involved in medical education can also empower patients as teachers by inviting them to speak about their experiences to medical students.

In addition to assigning a diagnosis, prescribing evidence-based treatments when available, and referring patients to available experts and resources, clinicians should also provide thoughtful documentation in notes and in the medical literature to foster culture change within the health care system. In their writing, as in their speech, clinicians should model person-centered language—unless a patient prefers otherwise—and an empathic, compassionate attitude toward individuals with difficult-to-measure disorders and medically unexplained symptoms. By taking these steps, clinicians can enhance patient welfare and empower patients to make meaningful health care decisions, in line with the bioethical principles of beneficence and respect for autonomy.

**Case Revisited**

Three months later, J was thriving in physical therapy and psychotherapy. Dr R had supported J’s appeal to her insurance company with a letter including references to published guidelines calling for the use of physical therapy in the treatment of functional movement disorders. J and Dr R had jointly called J’s psychotherapist to discuss her diagnosis and plans for treatment with cognitive behavioral therapy. Finally, Dr R had connected J to a patient advocacy organization through which she had enrolled in a clinical study and was leading a peer exercise group.
Caring for patients with disorders lacking biomarkers requires clinicians to be sensitive to the implications of the diagnoses they assign. When clinicians act in accordance with bioethical principles, they acknowledge and address the realities of stigma; they describe symptomatology and approach diagnoses in ways that facilitate patient engagement; they take patient-reported symptoms seriously and evaluate patients with rigorous history taking and physical examination while avoiding unnecessary tests and interventions; they consult relevant experts, including consult-liaison psychiatrists and neurologists when appropriate; they connect patients to pertinent resources, including social workers, research opportunities, and patient advocacy organizations; and they aim to strike a balance between benefit and harm associated with diagnosis. Although there is limited scientific evidence on treatment for patients with difficult-to-measure disorders and medically unexplained symptoms, it remains each clinician’s duty to help patients flourish within the health care system and beyond it.

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