Managing difficult interactions with patients in neurology practices

A practical approach



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t some point in their careers, most neurologists encounter patients who they find difficult to help. 1.2 This experience may arise as a natural reaction to the challenging diagnostic and therapeutic work that so often is a part of work in the clinical neurosciences. Reports of the physician's reactions to difficult patient encounters appear infrequently in the neurology literature but, when offered, are informative and useful. 3 Their publication cuts through the sense of being the only one to face such difficult experiences and provides an opportunity to learn from them both personally and in discussion with colleagues.

Other patients are experienced as difficult because the neuropsychiatric sequelae of their neurologic conditions, comorbid psychiatric problems, and/or other challenging behaviors provoke strong reactions in the neurologist and his or her staff. Physician reactions in these encounters run the gamut of emotions, but frequently include aver-

sion, anxiety, hopelessness, and anger, and may sometimes even include feelings of malice.⁴ These kinds of reactions to patients, and sometimes to their caregivers, complicate and can compromise one's ability to provide neurologic care.^{1,2,5}

In the midst of a strong negative reaction to a difficult encounter with a patient or caregiver, one may be tempted to consider dismissing that patient from one's practice. There are circumstances in which such dismissals of patients from neurologic practices are necessary.¹ However, patient dismissals are logistically complicated, stress and strain an already damaged physician–patient relationship, and may result in legal and regulatory penalties for the physician if done improperly. Most importantly, the dismissal itself is rarely in the patient's best interest: it fails to address the cause of the patient's behaviors, results in the transfer of a highly upset patient to an entirely unsuspecting or unprepared colleague, and almost ensures that the patient will repeat an aggravated and aggravating process with that physician. With this in mind, patient dismissal is the response of last resort to a difficult neurologist–patient interaction.¹.6

A more practical and productive response to difficult interactions with patients requires the neurologist first to reflect on the potential causes. In most cases, the problem is not most correctly or usefully framed as an encounter with a "difficult" patient. Instead, the problem generally arises out of a set of challenging health care system factors, patient factors, and physician factors.⁶

HEALTH CARE SYSTEM FACTORS Patients that physicians label as "difficult" tend to be more functionally impaired, higher utilizers of health care systems, and less satisfied with the care they receive than patients who physicians rate as "less difficult." Concurrently, system-wide pressures to decrease health care costs and

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increase physician productivity lead physicians to spend less time with patients; so doing inadvertently reinforces patients' reliance on nonmedical sources of education, support, and treatment and thereby diminishes further their confidence in physicians and the health care system.⁶ Inevitably, some patients manifest their frustration and dissatisfaction by becoming demanding, hostile, and even threatening, and, consequently, are experienced and labeled by those caring for them as "difficult."

Identifying and acknowledging to patients the role that health care system factors may be playing is a useful first step toward less difficult neurologistpatient relationships. So doing allows physicians and patients to defend jointly their neurologist-patient relationships against the untoward effects of external health care system factors. It also may reduce anger and frustration in these relationships—or at least more appropriately direct some portion of such feelings at their true cause—and to tolerate better those external stressors.

When presented with a difficult neurologist-patient interaction, it is important to consider the role that health care system limitations may be playing

A simple and practical solution to the experience of untenable time pressures on the neurologistpatient relationship is to schedule additional time with patients. Contrary to popular misconceptions, it is permissible under public and private insurance plans in the United States for physicians to bill for clinical service based solely on the amount of time spent in face-to-face encounter with a patient, provided that >50% of the encounter is spent providing education and counseling of the patient and that documentation of the encounter states this clearly. Additional telephone or staff time may not be reimbursable; however, a modest investment of nonbillable time may obviate the neurologist's need to spend many multiples of it managing consistently difficult interactions with an unhappy patient.

PATIENT FACTORS Carson et al.,2 in a survey of neurologists with outpatient practices in the United Kingdom, report that 15% of patients in these settings were regarded by their neurologists as "very or extremely" difficult. This figure approximates that reported by primary care physicians in the United States.7 "Symptoms less explained by organic disease" was identified the most significant predictor of neurologists' perception of patients as difficult. However, the proportion of variance accounted for by this variable was ~16%, suggesting that other types of patient factors also contribute to the creation of difficult neurologist-patient interactions.

Neuropsychiatric manifestations of neurologic conditions. Among the most common of these other patient factors are neuropsychiatric manifestations of neurologic conditions, including disturbances of comportment and interpersonal conduct, affect dysregulation, irritability, aggression, and disruptive behaviors,8 especially when these are subtle or unrecognized as such.5 A first step toward reducing the disruptive effects of these problems on the neurologist-patient relationship is recognizing that they are no more volitional than the patient's elemental neurologic impairments, thereby diminishing physician and staff tendencies to personalize a patient's challenging behaviors and allowing empathy for the patient's predicament to develop. Thereafter, efforts may be more easily directed toward treatment of those neuropsychiatric problems and education of clinic/ward staff on their nature and management. Concise reviews of the evaluation and management of the neuropsychiatric manifestations of neurologic disease may be found in Yudofksy and Hales.9

Psychiatric conditions. Psychiatric conditions, including psychiatric disorders, personality disorders, and maladaptive coping styles, are not uncommon among patients with neurologic conditions; indeed, these sometimes are the causes of symptoms for which patients seek neurologic consultation.^{2,10,11} Many physicians, including neurologists, experience patients with such conditions as challenging to manage. For example, Hahn et al.,7 assessing a cohort of 627 adult patients and their physicians' perception of difficulty in caring for them, observed that physicians' experience of patients as difficult increases most significantly when patients present with somatoform disorders, panic disorder, dysthymia, generalized anxiety disorder, major depressive disorder, and alcohol abuse or dependence. Accordingly, high index of suspicion for one or more of these problems is prudent when a patient is experienced as "difficult" by a physician. This, however, should not be misunderstood as an occasion for attributing the entirety of the patient's clinical presentation to a psychiatric condition. Psychiatric disorders may complicate neurologic disorders, and improvement in either type of problem requires their concurrent management.

When a patient's psychiatric diagnosis is clear and its management straightforward, initiating treatment for that condition in the neurology clinic is likely to be the most practical, useful, and acceptable solution for the patient: the neurologist will be experienced as engaged in, rather than rejecting of, this aspect of the patient's needs. This, in turn, may allow the patient to receive more easily the neurologist's subsequent recommendation for consultation or concurrent treatment with a psychiatrist or psychotherapist.

Some psychiatric conditions require primary management by a psychiatrist or mental health specialist (e.g., somatoform disorders, bipolar disorder, refractory mood or anxiety disorders, psychotic disorder, alcohol abuse or dependence). Patients with such problems are more likely to accept referral for psychiatric treatment from the neurologist if they are offered regular follow-up visits in the neurology clinic as well, even if the symptoms for which they sought neurologic care appear attributable to their psychiatric condition. So doing allows the patient to avoid feeling rejected or humiliated by the neurologist and, therefore, to avoid rejecting referral for psychiatric care. These follow-up visits should be brief, focused on education and counseling regarding the neurologic features of patient's symptoms, and coordinated with the patient's psychiatric care provider. A time-based billing method can be employed to make this a viable option for the neurologist.

Some patients are willing to receive basic psychiatric care from a neurologist but remain unreceptive to psychiatric consultation or "split therapy" between psychiatrist and neurologist. In such circumstances, neurologists may find it helpful to secure formal or informal consultation with or supervision from a psychiatrist in managing the psychiatric aspects of care within the neurology clinic. Peer-to-peer consultative relationships of this sort between neurologists and psychiatrists are supported by the structure of some academic and private practice settings. Where they do not yet exist, we encourage their development before a problematic clinical situation arises. So doing allows, in an unharried circumstance, the neurologist to identify a psychiatrist whose knowledge and style complement his or her own and for this pair of peers to develop effective methods and styles of communication for use in more challenging circumstances.

Personality disorders. When personality (the enduring pattern of perceiving, relating to, and thinking about oneself and the environment) deviates markedly, pervasively, and inflexibly from the expectations of one's culture and is disruptive personally and interpersonally, then that personality merits description as disordered. However, it is important to bear in mind that the personal and interpersonal function of patients with untreated or decompensated major psychiatric disorders (e.g., bipolar disorder, depression, substance use disorders) may resemble that of

an individual with a personality disorder. Only after establishing that the patient's maladaptive personality traits are 1) present in all, or most, contexts in their lives and 2) not solely a reflection of another psychiatric conditions, is it appropriate to diagnose a personality disorder and to attribute a patient's difficult behavior to it.

Patients with personality disorders generally require psychiatric management but, unfortunately, are often are highly resistant to it. In our experience, the psychiatric care of this type of patient is delivered most effectively by a psychiatrist or psychologist embedded in the neurology clinic. Providing psychiatric service within the neurology clinic ensures that both the patient and staff, including the neurologist, receive the consistent support and assistance needed to manage this type of patient effectively. When colocated psychiatric treatment is not feasible, a "split therapy" model may be necessary. In order to be effective, it is imperative to avoid patient-driven splitting of the treatment team into "good" and "bad" camps of caregivers. The team of professionals involved must 1) communicate frequently about the patient and the treatments they are providing; 2) maintain a consistent and united therapeutic approach to the patient; and 3) actively identify and mitigate the interpersonal and interprofessional chaos that many personality disordered patients will unconsciously or consciously create. As noted earlier, we encourage neurologists to establish peer-to-peer relationships with psychiatrists before the need to undertake comanagement of such patients arises and, once established, to maintain those relationships in anticipation of their inevitable future necessity.

Maladaptive coping styles. In response to the stress of a neurologic illness or other life events, some patients develop a coping style that is highly maladaptive and that provokes strong emotional reactions in their neurologist. Groves⁴ described 4 prototypical forms of patients of this sort: dependent clingers, entitled demanders, manipulative help-rejecting complainers, and self-destructive deniers.

The dependent clinger. Patients with this maladaptive coping style make unreasonable and insatiable demands on the neurologist both during and after regular clinic hours. Patients of this sort initially offer the neurologist highly gratifying feedback and praise; this serves to engage the neurologist in a "special" relationship with the patient. This leads to reciprocations in which the neurologist offers the patient "special access" to his or her cell phones, home phones, e-mail, or other methods of contact, including permission for after-hours communications. The patient's gratitude for and praise of the neurologist soon wane and are replaced by increasing demands

for the neurologist's time and attention. The intensity and frequency of these demands are proportional to the patient's (often unconscious) feelings of powerlessness and fears of abandonment. The behaviors driven by this type of patient's intense affect and insatiable neediness are often experienced by the neurologist as a wholly undeserved kind of low-level torture (death by a million little cuts), prompting feelings of dread in anticipation of or response to contact with the patient.

Managing this type of patient requires the neurologist first to recognize the unconscious motivations for the patient's behaviors; this facilitates reframing the relationship with the patient and establishing the firm interpersonal boundaries that this type of patient requires. Next, it is helpful to reassure the patient that he or she will not be abandoned, even if the problems that prompted the patient to seek neurologic care abate. Toward that end, establishing a regular schedule of brief follow-up visits at predictable intervals is encouraged. Providing the patient with handwritten instructions or visit reminders at each clinic and encouraging the patient to review them regularly between visits is also suggested; these notes function as transitional objects that provide the patient with a sense of contact and security (object constancy, in psychological terms) between clinic visits. These interventions de-escalate the patient's anxiety, allowing him or her to become less intrusively needy and to adhere more consistently to limits on the frequency, method, and circumstances of contact with the neurologist. They also may facilitate the patient's acceptance of referral for concurrent supportive therapy with a psychiatrist or psychologist.

The entitled demander. This type of patient orders the neurologist to perform diagnostic tests, prescribe medications, make referrals, and perform other services, and to do so while claiming that it is his or her right to have any and all of these orders carried out without question. When the neurologist questions, resists, or refuses these demands, the patient becomes hostile, devalues the neurologist, threatens legal or administrative actions, and may attempt to bully his or her way into control of the neurologist-patient relationship.

This maladaptive coping strategy employs an aggressive and narcissistic reaction to an underlying sense of helplessness or powerlessness. While it is normal to feel angry or hurt by these patients, it is counterproductive to argue openly or fight actively with them. Instead, it is more useful to play to the patient's sense of entitlement and to encourage its statement as the patient's "right to the best medical care possible." This reframing of the neurologistpatient interaction is accomplished most usefully using a supportive-empathic-truth statement.¹³ The neurologist communicates clearly that he or she wants to provide the patient with the best medical care possible (supportive) and acknowledges that neurologic illnesses are very stressful for those affected by them (empathic). The neurologist follows with a gentle but clear statement of truth regarding the manner in which he or she is willing to work with the patient: "In order to provide you with the best possible medical care, we must work together in a respectful and collaborative manner. Let's discuss how we can do this most effectively." The patient then is invited to partner with the neurologist in a form of "collaborative empiricism" in which they both 1) objectively evaluate the types of assessments or interventions that will be most useful, 2) agree on a plan of action and a method for evaluating it, and 3) establish a structure for constructive and respectful communication. Patients of this type rarely accept referral for psychiatric evaluation and treatment; however, if the patient endorses feeling "stressed" by his or her illness, the patient may consider entering "stress evaluation and management" (i.e., psychotherapy) into his or her treatment plan.

The manipulative help-rejecting complainer. Patients with this maladaptive coping style are chronically unsatisfied with the efforts of their neurologist and the treatment they receive. Nonetheless, this type of patient insists that the neurologist make all possible efforts to help. Like the dependent clinger, this type of deeply needy patient first engages the neurologist using an idealizing, ingratiating, and unconsciously manipulative style. The patient then maintains engagement through endless cycles of help-seeking and help-rejecting: each of the neurologist's efforts is followed quickly by complaints that they are not helpful, or that the neurologist does not work hard enough or care enough, or that the treatment prescribed is intolerable, impractical, or too expensive.

This passive-aggressive interpersonal style is often borne of prior traumatic or abuse experiences with persons of trust through whom the patient came to harm but from whom he or she could not disengage, leading him or her to act out anxious and angry (i.e., aggressive) feelings about that dependency with subsequent individuals in positions of trust, including the neurologist, in a passive, that is, help-rejecting, style. Attempting to care for this type of patient is often demoralizing for physicians, and leads to feelings of ineffectiveness, pessimism, and anger.

Explicitly identifying the patient's dependency needs or passive-aggressive behavior is unhelpful to the patient and unlikely to serve well the neurologist. A better approach is to calmly and empathically voice genuine disappointment over and frustration with the patient's difficult clinical course. This establishes a shared experience of frustration between patient and physician and to view that frustration as opportunity for collaboration: "We're in this together and we need to work together to help you as much is as possible." While maintaining this stance, the patient is offered conventional assessments and interventions, and only those that are absolutely necessary. Adherence to mutually agreed-upon empiric trials of those interventions is recommended, as is encouraging the patient to begin adapting to those symptoms that are truly treatment-refractory. Patients amenable to counseling for additional support or assistance with adaptation to irremediable symptoms should be so referred. When this entire approach is applied consistently, the patient, perhaps for the first time in his or her life, may find him- or herself in a relationship with a person in a position of trust who is able to be affectively genuine while still maintaining appropriate interpersonal boundaries and setting reasonable limits on behavior, allowing the cycle of help-seeking/help-rejecting behavior to abate and the patient to receive more effective care for his or her neurologic condition.

The self-destructive denier. This type of patient engages knowingly and purposefully in behaviors that are likely to worsen his or her health or that are frankly dangerous: the patient with liver failure who continues to drink alcohol, the patient with endstage emphysema who continues to smoke daily, or the patient with intractable complex partial epilepsy who refuses to take anticonvulsants. For those providing their care, these patients' disregard for the consequences of their behaviors and apparent intent on suicide by treatment nonadherence is infuriating. However, the self-destructive behaviors of many such patients reflect, at least in part, a profound sense of hopelessness and, often, an untreated depression or anxiety disorder. Understanding this may allow caregivers to redirect their interventions away from the behaviors themselves and toward their root causes: depression, anxiety, or hopelessness. Concurrent treatment of substance abuse/dependence, cognitive impairments, or other neuropsychiatrically mediated contributors to treatment nonadherence may permit the neurologist to engage with the patient in a more effective and less frustrating manner and, in some cases, may provide the patient with the treatment needed to break the cycle of self-destructive denial.

The difficult caregiver. Sometimes it is not the patient but instead a patient's caregiver whose behaviors create an untenable clinical situation. Caregivers of persons with neurologic disorders may bring their own psychiatric conditions and personality disorders into that role, and the stress of caregiving it-

self may produce or exacerbate psychiatric problems.^{14,15} Distress and feelings of helplessness will lead some caregivers to adopt one of the maladaptive coping styles described in the preceding section, and to create very difficult clinical situations.^{1,5,14} When working with a difficult caregiver, reviewing and applying the differential diagnostic considerations and management strategies presented above is suggested.^{14,16-18}

PHYSICIAN FACTORS Physicians also are encouraged to consider their own contributions to difficult physician-patient interactions. Even the most psychiatrically skilled neurologist may not be well-suited to work with some types of patients.19 Acknowledging such personal limitations may reduce the chances of finding oneself in predictably difficult physicianpatient relationships. Additionally, the qualities of some physician-patient relationships or the individual personal characteristics of a patient may provoke unexpectedly strong reactions in the physician. This phenomenon is referred to as countertransference: just as patients transfer feelings and styles of interaction from previous, often parental, relationships to their physician, so too do physicians sometimes respond to patients in ways that are influenced by their past. It is important to be aware of these unexpectedly strong reactions as they occur, whether positive or negative, and to regard them as signals of a neurologist-patient relationship that is at risk for complication or deterioration.

As Groves⁴ notes, however, physician-specific interpersonal idiosyncrasies are not the principal contributor to difficult physician-patient encounters. Instead, physician overwork and/or burnout, relative clinical inexperience, intolerance for diagnostic ambiguity, and a tendency to become easily frustrated in the face of limited therapeutic effectiveness may all lead physicians to experience patients as "difficult."6 Physicians also tend to respond to unpleasant or uncooperative patients in a manner that predictably exacerbates difficult physician-patient interactions: by leaving requests unmet²⁰ and, most often inadvertently, leaving patients feeling rushed or ignored.21 These are not simple matters to address, but they are essential to recognize as contributors to difficult neurologist-patient interactions. When so recognized, seeking advice or guidance from a trusted colleague on the best methods by which to address them or, instead or additionally, from a mental health professional that specializes in the treatment of physicians is strongly encouraged.

CONCLUSION Difficult physician—patient relationships will occur during a clinical career in neurology.

Although it is common to speak of the "difficult patient," it is more accurate and useful to frame the problem as difficult physician-patient interactions. These difficulties arise from the interactions among health care systems, patients, and physicians under stress. While some of these factors are not amenable to modification, or at least not easily so, understanding the ways in which they contribute to difficult physician-patient relationships may allow the neurologist and his or her patient to change usefully their experience of and approach to these difficult clinical experiences. Aided by that understanding and all that it entails, the neurologist then can attend to his or her core mission: improving the quality and effectiveness of the care provided to patients and families affected by neurologic conditions.

DISCLOSURE

Dr. Arciniegas serves as an Associate Editor for Journal of Neuropsychiatry and Clinical Neurosciences and Neuropsychiatric Disease and Treatment, serves as an Editorial Board Member for The Open Psychiatry Journal, Brain Injury, Neurotrauma Letter, serves as Guest Editor for NeuroRehabilitation, and serves as International Editorial Board Member for Archivos de Neurociencias; receives publishing royalties from Neuropsychiatry: An Introductory Approach (Cambridge University Press, 2001), Clinical Manual for the Management of Adults with Traumatic Brain Injuries (American Psychiatric Publishing, Inc., 2010-prepublication royalties), and Brain Injury Medicine, 2nd edition (Demos Medical Publishing, 2010prepublication royalties); receives research support from Orasi Medical, Inc.; receives research support from National Institute of Mental Health (NIMH R01 MH081920-01A1 [Coinvestigator]), National Institute of Child Health and Human Development (NICHD R01 HD047242-04 [Site Principal Investigator], NICHD R01 HD047242-04S1 [Site Principal Investigator]), Department of Defense (W81XWH-08-2-0652 [Consultant]), National Institute on Aging (NIA R21 AG028609-01 [Coinvestigator]); and receives research support from Henry M. Jackson Foundation. Dr. Beresford served as editorial board member for Alcohol & Alcoholism; received royalties from publishing Neuropsychiatry: An Introductory Approach, Cambridge University Press; received honoraria from speaking engagements or educational activities from Bristol Meyers Squibb; and receives research support from Department of Defense [A-15306 (Principal Investigator)] and National Institute on Alcohol Abuse and Alcoholism [5R21AA016294 (Principal Investigator)].

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REFERENCES

- Brody BD, Haut SR. Ending the doctor-patient relationship in neurology practice. Neurologist 2009;15:277–281.
- Carson AJ, Stone J, Warlow C, Sharpe M. Patients whom neurologists find difficult to help. J Neurol Neurosurg Psychiatry 2004;75:1776–1778.
- Ringel SP. Reflections for July: restraints and constraints. Neurology 2010;75:189–191.
- Groves JE. Taking care of the hateful patient. N Engl J Med 1978;298:883–887.

- Ferrando SJ, Okoli U. Personality disorders: understanding and managing the difficult patient in neurology practice. Semin Neurol 2009;29:266–271.
- Haas LJ, Leiser JP, Magill MK, Sanyer ON. Management of the difficult patient. Am Fam Physician 2005;72:2063–2068.
- Hahn SR, Kroenke K, Spitzer RL, et al. The difficult patient: prevalence, psychopathology, and functional impairment. J Gen Intern Med 1996;11:1–8.
- Lyketsos CG, Kozauer N, Rabins PV. Psychiatric manifestations of neurologic disease: where are we headed? Dialogues. Clin Neurosci 2007;9:111–124.
- Yudofsky SC, Hales RE. Essentials of Neuropsychiatry and Behavioral Neurosciences, 2nd ed. Washington, DC: American Psychiatric Publications; 2010.
- Brousseau KM, Arciniegas DB, Carmosino MJ, Corboy JR. The differential diagnosis of Axis I psychopathology presenting to a university-based multiple sclerosis clinic. Mult Scler 2007;13:749–753.
- Kenfield MC, Arciniegas DB, Anderson CA, Howard KL, Filley CM. When cognitive evaluation does not disclose a neurologic disorder: experience of a university behavioral neurology clinic. Cogn Behav Neurol 2010; 23:112–118.
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR. Washington, DC: American Psychiatric Association; 2000.
- Kreisman JJ, Strauss H. I Hate You, Don't Leave Me: Understanding the Borderline Personality. New York: Avon Books; 1989.
- Campbell P, Wright J, Oyebode J, et al. Determinants of burden in those who care for someone with dementia. Int J Geriatr Psychiatry 2008;23:1078–1085.
- 15. Schulz R, O'Brien AT, Bookwala J, Fleissner K. Psychiatric and physical morbidity effects of dementia caregiving: prevalence, correlates, and causes. Gerontologist 1995;35: 771–791.
- Hoskins S, Coleman M, McNeely D. Stress in carers of individuals with dementia and Community Mental Health Teams: an uncontrolled evaluation study. J Adv Nurs 2005;50:325–333.
- Burns R, Nichols LO, Martindale-Adams J, Graney MJ, Lummus A. Primary care interventions for dementia caregivers: 2-year outcomes from the REACH study. Gerontologist 2003;43:547–555.
- Coon DW, Evans B. Empirically based treatments for family caregiver distress: what works and where do we go from here? Geriatr Nurs 2009;30:426–436.
- Dupont J. Ferenczi's madness. Contemporary Psychoanalysis 1988;24:250–261.
- Jackson JL, Kroenke K. Difficult patient encounters in the ambulatory clinic: clinical predictors and outcomes. Arch Intern Med 1999;159:1069–1075.
- Levinson W, Gorawara-Bhat R, Lamb J. A study of patient clues and physician responses in primary care and surgical settings. JAMA 2000;284:1021–1027.



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