

Who is responsible for the patient's adherence to treatment?

▶CASE

Mr. S. is a 53-year-old patient in a family practice clinic. He has a 9-year history of uncontrolled type 2 diabetes mellitus with progressively worsening neuropathy, hypertension, hypertriglyceridemia, and dyslipidemia. His medical history is notable for 19 hospitalizations, including for pancreatitis, cholecystectomy, temporary left sixth nerve palsy with hemivision loss partially attributed to poorly controlled diabetes, and a right Achilles tendon partial rupture thought to be secondary to peripheral neuropathy. Both parents and two older brothers experienced significant morbidity from coronary heart disease and diabetes and ultimately died of complications of these diseases.

Mr. S. works as a senior supervisor in a large wholesale business. He has been divorced twice and has an 11-year-old daughter and a 13-year-old son. Currently, he lives alone. Until recently, he played baseball and coached the local PONY league team, but he had to quit because he could no longer run, properly grip the bat, or consistently catch the ball. He does not smoke or use recreational drugs. He drinks one glass of wine a week and one or two beers a year.

Mr. S.'s height and weight are 74 inches and 187 lbs. Vital signs at his most recent visit are as follows: temperature, 98.4°F (36.9°F); pulse, 82 beats per minute and regular; respiration, 20 breaths per minute; and BP, 164/112 mm Hg. The results of the physical examination are normal except for bilateral mild, nonproliferative retinopathy; decreased active range of motion

in the right foot; paresthesias in both lower extremities; numbness in both feet; and decreased grip strength in both hands. Laboratory readings include random blood glucose, 415 mg/dL; glycated hemoglobin, 12.1%; total cholesterol, 645 mg/dL; and triglycerides, 5,790 mg/dL. The laboratory was unable to calculate levels of HDL, LDL, and very low-density lipoprotein cholesterol because the specimen was lipemic. All other chemistry and hematology results are within a normal range.

Medications include irbesartan, aspirin, hydrocodone/acetaminophen, pravastatin, glyburide, metformin, and insulin (regular and NPH). Mr. S. does not take his oral medication reliably and has his insulin administered by medical staff at his request. For this purpose, the clinic PA walks to Mr. S.'s nearby office or the patient will come to clinic on his day off.

▶THE ETHICAL QUANDARY

The medical staff have asked each other whether Mr. S. understands the natural progress of diabetes and the consequences of his nonadherence to

treatment. They want to know whether they are contributing to his nonadherence by administering his insulin. Is it the PA's ethical responsibility to determine the reasons for Mr. S.'s lack of adherence? When can a patient be asked to leave the practice because of nonadherence?

In keeping with the distinction made in the 10th edition of the *American Medical Association Manual of Style*, *adherence* is used to refer to the degree to which a patient's behavior is consistent with medical advice and implies no judgment about this behavior. The term *compliance* is avoided since it does imply judgment about whether or not a patient follows expected rules.¹

▶DISCUSSION

Using the Jonsen paradigm described in previous columns, we can review this case.²

MEDICAL INDICATIONS Mr. S.'s chronic diseases are not curable, but they are manageable. Appropriate management would slow their progress, minimize or prevent end-organ damage, and possibly prevent an untimely death. At present, Mr. S. is not meeting the targets recommended by the American Diabetes Association for BP, LDL cholesterol, and glycated hemoglobin.

PATIENT PREFERENCE Mr. S.'s behaviors indicate a possible unwillingness to cooperate with his treatment regimen. He has stated that his needles and pills make him feel like a "guinea pig." He attributes his nonadherence to forgetfulness, his work schedule, and ennui. He says he prefers once-daily medications. In addition, he has requested random phone calls, pages, or e-mails as a way to prompt him to take his medication.

QUALITY OF LIFE Mr. S.'s health will never return to its prediabetic state, but

CONTACT US

Do you have an ethical quandary?

In future installments of this department, the editor wants to address the real-world ethics concerns and problems of PAs. These might include problems in practice that may be inconspicuous, problems related to systems of care, problems related to the process of care, and preventive ethics.⁶

Please e-mail your ethics question to jaapa@aapa.org. We will consider it for discussion in a future installment of PA Quandaries

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“Adherence is becoming more important as therapeutic regimens become more specific and often more complicated.”

he works, maintains close ties to his family, and goes to the golf course, which he enjoys. He seldom feels ill from hyperglycemia, and his paresthesias are controlled at night with hydrocodone. To Mr. S., his present situation is satisfactory. However, the medical team, including the PA, is concerned about end-organ damage such as gangrene, kidney failure, blindness, stroke, or MI from deficient treatment. Mr. S.'s future quality of life is a significant concern for the PA.

CONTEXTUAL FEATURES In this case, no cultural, religious, or financial concerns are identified. However, Mr. S. is now the oldest member of his extended family after the deaths of his older siblings and parents. This has created new responsibilities. In addition, his health care coverage will be in jeopardy if he loses his job as a result of declining health.

CASE ANALYSIS The failure of Mr. S. to adhere to the treatment plan has strained his relationship with the PA. The medical team has reached a point of considering whether to dissolve the therapeutic relationship between the clinic and Mr. S. because of his refusal to take responsibility for his health care.

Providers often view nonadherent behavior as deviant or morally deficient, claiming that “patients are ... ambivalent, forgetful, or careless.”³ However, if we look at adherence rates among most of our patients, we find that about one third adhere satisfactorily, about one third fill their prescriptions but either do not take all the medication or change the dosage to suit their needs, and the remaining third do not fill their prescriptions or take the medication at all. About 50% of patients fail to cooperate fully with the treatment regimen. Full adherence

among those with chronic diseases occurs in an even smaller percentage of patients. Not all of this can be the result of aberrant behavior. Age, gender, race, and educational status do not appear to be correlated to adherence.⁴

Clinicians also overestimate their patients' adherence. In a Canadian study of 149 patients, 75% percent reported taking their medication all the time, yet the physicians believed 95% were doing so.⁵ Further investigation showed that physicians who had known patients for years were able to predict their adherence no better than chance could predict it. These percentages may vary from practice to practice and according to how adherence is measured, but on the whole we overestimate the number of our patients who cooperate fully with treatment regimens.

Clinicians may also want to step back and look at the power differential between them and their patients. The “blame” for nonadherence may rest on the shoulders of the more powerful person in the relationship.

We ask patients to change their behavior, and changing behavior is not easy. It takes time to teach patients how to do this, and it takes time for them to understand and incorporate changes into their lives. In our busy clinics, time is often the commodity we do not have, but to address the adherence issue effectively, time must be allocated. If half our patients do not cooperate fully with treatment, spending extra time may in the end be more beneficial to the patient, the provider, and the practice. Sometimes, too, we may need to adjust therapies to the realities of the patient's life.

Sugarman has suggested that we think about adherence in terms of the provider, the patient, and society.⁶

Clinicians should fully inform patients and make adherence as uncomplicated as possible. Patients should make the best choices possible for themselves. Society makes the best regimens possible available to patients who do adhere and for whom therapy would be a benefit.

The issue of adherence is becoming more important as therapeutic regimens become more specific and often more complicated. The time we spend and the words we use with our patients will provide them with a better understanding of these therapies and ultimately with better outcomes. Because we are the ones with the skills and knowledge, we shoulder a significant responsibility for the clinician-patient relationship.

Returning to Mr. S. with this new information, what would you do in this case? Would you reconsider his therapies? Would you further investigate causes for his nonadherence? How? How often do you address the question of adherence in your practice? What do you do about it? How many patients have you asked to leave the practice? Why? How often do you take your medications as prescribed and finish the entire antibiotic course? Do you miss? Why?

The issue of withdrawing a patient from the practice will be addressed in a future column. **JAAPA**

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REFERENCES

1. *AMA Manual of Style: A Guide for Authors and Editors*. 10th ed. New York, NY: Oxford University Press; 2007.
2. Jonsen AR, Siegler M, Winslade WJ. *Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine*. 6th ed. New York, NY: McGraw-Hill; 2006.
3. Cramer JA, Mattson RH, Prevey ML, et al. How often is medication taken as prescribed? A novel assessment technique. *JAMA*. 1989;261:3273-3277.
4. Stephenson BJ, Rowe BH, Haynes BR, et al. The rational clinical examination. Is the patient taking the treatment as prescribed? *JAMA*. 1993;269(21):2779-2781.
5. Gilbert JR, Evans CE, Haynes RB, Tugwell P. Predicting compliance with a regimen of digoxin therapy in family practice. *Can Med Assoc J*. 1980;123(2):119-122.
6. Sugarman J. *20 Common Problems: Ethics in Primary Care*. New York, NY: McGraw-Hill; 2000.