Compliance/Adherence to Physician-advised Diagnostic and Therapeutic Strategies

I thoroughly enjoy seeing both inpatients and outpatients here at the University of Arizona Medical Center. However, there is one feature of daily clinical medicine that I have found most frustrating: failure of patients to comply with medical advice when it is clearly in their best interest to follow clinician recommendations. It is not uncommon for me to spend considerable time and effort trying to convince a patient with a recent myocardial infarction to take a daily dose of one form or other of a statin drug. Patients seem to fear that these agents can have dangerous toxic effects on hepatic or musculoskeletal function. My careful explanation about the very minor incidence of true statin side effects seems often inadequate to convince some patients that taking a statin following an acute myocardial infarction will substantially reduce their risk of a possibly fatal recurrence of the recent event. A frightening statistic, recently told to me by one of our pharmacists working on the coronary care unit, was that only 50% of patients who have suffered an acute myocardial infarction are still taking their prescribed statin drug 1 year after being hospitalized for treatment. When I hear this discouraging statistic, I am reminded of Surgeon General C. Everett Koop’s remark that “Drugs don’t work in patients who don’t take them.” Likewise, I have often heard my mentor, Dr James E. Dalen, state that the commonest cause of aspirin resistance is failure to take the drug.

A little research into the topic of compliance, or adherence to medical advice, revealed a variety of frightening statistics supporting the idea that noncompliance/nonadherence is very common and potentially linked to fatal patient outcomes.1,2 It is an often-stated clinical paradigm that the more drugs a patient is prescribed, the greater is the likelihood for noncompliance. This certainly makes sense, especially in an elderly patient with diminished vision or cognitive function. The average rate of adherence for US patients taking once-a-day medicine is 80%. Unfortunately, this number falls rapidly if patients are prescribed multiple medications or are expected to take their drug more than once per day; for example, adherence is only 50% for 4-times-a-day therapies. Indeed, as many as 75% of all patients and 50% of individuals with chronic illnesses fail to adhere to prescribed medical regimens.1 It has been estimated that the economic cost of nonadherence in the US is an amazing $100 billion per year! The New York Times has referred to failure to adhere to prescribed medical therapy as the world’s ‘other drug problem.’3 A number of reasons have been proposed for failure to comply with a prescribed medication, including memory lapses, cost of the medication, failure to understand the reasoning behind the pharmacological regimen, which at times relates to inadequate clinician explanation; anxiety created by overemphasis on potentially adverse reactions from a particular medication, and lack of trust in the judgment of the health professional prescribing the drug. Certainly, in some instances, multiple factors are at work. Finally, the high-pressure demands of a very busy clinical practice may lead to a short and possibly inadequate explanation of the rationale behind a given drug prescription.

What, if anything, can be done to improve patient adherence to advised medical therapy? A number of compliance/adherence tools are available for sale on the Internet, including various forms of pillboxes, some with digital alarms that remind the individual that it is time to take their medication. In my opinion, however, the most important factor leading to good prescribed medication adherence relates to the patient’s understanding of why a given medication is important for their well-being. For example, I always tell my acute coronary syndrome patients that the prescribed statin drug will increase by 40% their chance of being alive and well in future. In a similar vein, I emphasize repeatedly how critically important it is that my patients who have undergone implantation of a drug-eluting stent in their coronary arterial tree continue both their daily aspirin and the second anti-platelet agent, for example, clopidogrel. These explanations also include a brief description of what the prescribed drug is supposed to do to improve the patient’s chance to avoid another coronary event. I tell my patients that adherence to the prescribed drug regimen has been shown to decrease mortality in a number of clinical, scientific trials.4,5 Other advice for improving compliance includes the following actions:

1. Assess the number of agents and the complexity of the drug regimen for each patient and eliminate as many

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drugs as possible, as well as seeking to use once-a-day medications.

2. Individualize the drug regimen based on a perceived sense of the patient’s ability to pay for and adhere to the protocol prescribed.

3. Give the patient a written document listing their medicines, including times when these agents should be taken.

4. Develop a trusting relationship with the patient and educate, educate, and educate concerning the whys and hows of the drugs in the regimen.

5. Attempt to construct a system for monitoring patient adherence to the therapeutic protocol. I often seek the help of family members for this latter activity.

Unfortunately, the scientific evidence is not conclusive that any one of the above-described techniques guarantees patient compliance. So, we clinicians will have to continue to do the best we can to induce patients to take their medicines. Sometimes I feel like a salesperson when I try to convince a patient to adhere to my prescribed drug regimen. I then convince myself to continue the “sales pitch” because I know that if this strategy works, it will eventually benefit the patient by lowering their risk for morbidity and mortality.

As usual, I welcome responses to this editorial on our blog at amjmed.org.

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References