It is not an easy decision to “fire” a patient from a glaucoma practice. Patients are sometimes asked to leave because of harassment, lack of payment, or even fighting, but what about poor adherence? If a patient’s failure to follow medical advice results in a poor outcome for him or her and wastes your resources, might ending that patient-physician relationship be a reasonable option? This article reviews the diagnosis, etiology, and treatment of poor adherence to explore whether a patient should be fired for consistently missing his or her ocular hypotensive medications.

WHOM WOULD YOU FIRE?

Adherence to topical glaucoma therapy is difficult to measure. Glaucoma adherence rates are typically reported at between 50% and 60%. Studies have calculated these figures using self-reporting, pharmacy claims, chart reviews, electronic dose-monitoring devices, and other resources.

The Travatan Dosing Aid Study demonstrated that physicians are unable to determine the level of their patients’ adherence. This study used an electronic dose monitor to measure patients’ use of eye drops over an 8-week period. The investigators found that only 56% of patients took their prescribed medication more than 75% of the time, and that physicians were poor at predicting their patients’ adherence to daily dosing of travoprost (Travatan; Alcon Laboratories, Inc.; intraclass correlation coefficient, 0.09). Djafari et al reported similar findings, with 70 of 181 (39%) patients misclassified for adherence. Further, of 45 patients thought to be nonadherent, 32 (71%) were actually adherent.

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Likewise, Kass et al found that ophthalmologists’ rankings of compliance correlated poorly with monitored dosing of medication.

These studies suggest that clinicians routinely overestimate adherence but that they also have difficulty recognizing who is struggling with adherence. In other words, be careful if you are handing out a pink slip for poor adherence.

WHY DOES POOR ADHERENCE OCCUR?

Patients fail to administer their drops for a multitude of reasons. In the Glaucoma Adherence and Persistency Study (GAPS), adherence was inversely associated with the cost of medication, travel and time away from home, the receipt of free samples, race, the absence of appointment reminders, a lack of physician acknowledgment of medications’ side effects, no self-education about glaucoma, and a patient’s lack of understanding of the risks of missing doses of medication. As the investigators noted, several of these risk factors are dependent on patient-doctor communication and patients’ health-related beliefs. This study suggested that, if doctors helped patients understand the glaucomatous disease process, the danger of missed
"Time and complexity are the largest hurdles clinicians face when addressing glaucoma patients’ adherence.”

visits and testing all take time. Although the aforementioned studies show the success of adherence interventions, these efforts may be too cumbersome for busy clinics.

Health behavioral models may be an efficient method by which to characterize patients’ health-related beliefs and perceptions about glaucoma. Patients with other diseases have shown impressive improvement in adherence with psychiatric medications, cardiovascular exercise, and self-breast examinations. These models measure specific facets of health behavior such as severity of disease, susceptibility to the disease, benefits of and barriers to the recommended action, and self-efficacy (patients’ perception of their ability to be adherent). They allow the clinician to identify one or more facets to be addressed with the patient, allowing more efficient interventions.9

CONCLUSION

Physicians know that medications do not help patients who consistently do not take them. Predicting, exploring, and treating poor adherence is a challenge. A first step toward improvement is talking about adherence with your patients and addressing specific issues that affect success. However, a systematic approach that is efficient and effective for adherence in glaucoma is needed. Until then, try to understand the roadblocks and continue educating, motivating, and supporting your patients.

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should you treat poor adherence?

Studies have shown that patients can improve their adherence to glaucoma treatment. In a randomized controlled trial, Okeke et al used an educational video, a compliance meeting with a study coordinator, and phone calls and electronic reminders to increase patients’ use of medical therapy.2 The study significantly improved adherence from 54 ±30% to 73 ±22% (P < .001). Likewise, Cook et al recently found that a glaucoma technician trained in motivational interviewing could improve patients’ adherence after three one-on-one meetings and three follow-up phone calls.7

A Cochrane database of randomized controlled studies on adherence in chronic medical disease showed that 19 of 39 interventions led to a statistically significant increase in patients’ adherence to taking medication. The effective interventions were usually complex and involved multiple modalities, and the increases were often modest; nevertheless, adherence an improvement in through education was shown to be feasible.

future approaches to address adherence

Time and complexity are the largest hurdles clinicians face when addressing glaucoma patients’ adherence. Interviewing and examining a patient, documenting the medical record (especially with electronic medical records), examining and reporting test results, discussing the treatment plan, and ordering future doses, and their need for self-education, their adherence might improve.6 Adherence might also increase if physicians took medications’ side effects more seriously and addressed them with patients. If an eye drop creates conjunctival injection, patients may use that drop less often than one they tolerate better. Likewise, medications with simple dosing schedules and few side effects—like prostaglandin analogues—have been shown to improve adherence.1,4

Finally, given the difficulty of adhering to complex medication schedules, a patient may consider proceeding with laser treatment or surgery instead of adding a second medication.

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