

The Management of the Non-adherent Patient

There are many ways to increase compliance.

BY ELLIOT UDELL, DPM

Goals and Objectives

After completing this CME, the reader will:

- 1) Understand that non-adherence is not limited to one cause but is a complex issue
- 2) Be able to implement the technique of “concordance” in their practices
- 3) Understand some of the leading causes of non-adherence to medical advice
- 4) Master techniques for advising patients or their families on how to increase adherence when it comes to taking oral medications
- 5) Understand the importance of and the proper method for documenting non-adherent behavior into their patients’ medical records
- 6) Appreciate the impact of age-related dementia and physical handicaps that can interfere with a patient’s ability to carry out medical directives

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Following this article, an answer sheet and full set of instructions are provided.—Editor

All healthcare providers from every specialty share a lifelong commitment. We all want our patients to do well. As podiatrists, we have trained for over 10 or more years in order to treat patients. The one “demon” that we often encounter in our practices that can pour water over the best of our treatment plans is patient

non-adherence to our clinical recommendations and orders. To make matters worse, patients and their families often hold us accountable if there is a negative outcome caused by patients neglecting our orders. This paper will attempt to explain some of the underlying causes of why some patients do not follow medical advice. We will then discuss some strategies for increasing

adherence in podiatric clinical settings.

How many of you have ever been non-adherent to advice from a healthcare provider? Probably very few. How many of you have ever forgotten to floss your teeth at night? Probably most of us. One hundred percent of all human beings are technically non-adherent to medical advice at some time in their lives.

“There is current public spotlight on the severity of non-adherence in society. After seeing hundreds of infectious disease specialists, ER doctors and other medical specialists on television strongly admonish the public that the only way to reduce cases of the deadly coronavirus in our society is for people to stand six feet from each other and cover their faces, there is plenty of television coverage showing mass gatherings at public squares, beaches, and other places of countless people not social distancing and not wearing face masks. This is in spite of the fact that the people are aware that well over 100,000 Americans have already died from this virus.”

Medical or dental professionals will not feel bent out of shape if a patient forgets to brush or floss his or her teeth on occasion. Likewise podiatrists will not lose sleep if a patient tells us that he or she occasionally forgets to apply a prescribed medication to treat a mycotic nail. On the other hand, foot care providers might get really upset if a patient presents for follow-up and admits that he or she has not taken prescribed antibiotics to treat an infection, or the patient self-removed bandages and off-loading padding used to treat a diabetic foot ulcer. Podiatrists might have a lot of restless nights if results from a biopsy indicated that the patient has cancer and the patient refused to fol-

low through on a referral to a surgical oncologist.

nal of Medicine published a study in which a cohort of over 5,000 patients who survived myocardial infarctions were then studied to assess compliance in taking medications designed to reduce the chance of a second serious episode.¹ Sadly, less than fifty

percent of the patients took their medications. Yet, the patients knew that they were being treated to prevent another life-threatening episode and even spent down time in ICU wards of hospitals surviving the first episode. The same study further proved that the cost of the medications was not the single or most significant cause of their non-adherence. Hence, we learned that non-adherence to medical orders is a complex issue and understanding it can help us tailor better treatment plans that can increase patient compliance with our orders.

facial procedure and might not even remember filling out an insurance form. The same applies to those who will not wince at paying whatever it costs to treat their mycotic toe nails so that their feet look good on the summer sand at the local beach. The second

Cosmetic surgeons have high rates of adherence because psychologically, humans will do anything to look good.

Before discussing some specific causes of non-adherence, let's focus on two facets of healthcare where patients tend to be close to 100% adherent. One area is looking good and the other is avoiding pain or other noxious expe-

riences. Many patients will defer seeing podiatrists for foot problems because they have not met their annual “100 dollar” annual deductible. These same patients will also view a podiatrist as a monster because s(he) will endeavor to collect a small co-payment which is legally mandated by Medicare. Patients may have no difficulty paying 10,000 dollars or more in cash for a

Common Causes of Non-adherence

area where non-compliance is hardly ever an issue is where pain is involved. Rarely will a patient forego taking his or her meds prescribed to manage post-operative or chronic pain. In the case of the post-myocardial infarction patients, these people no longer had any pain, and looking good was not relevant.

Six common but not exclusive causes of non-adherence are: 1) Dementia in the geriatric population, 2) Arthritis or other physical handicaps, 3) Visual problems—especially in the geriatric population, 4) Fixed incomes combined with rising costs of medications, 5) Competing life issues. 6) Unwillingness to trust a medical experts advice, when the condition currently does not cause pain or feelings of not well-being.

As people get older, dementia starts to set in. For some, it is more consequential than in others, and people lose some of their short-term memory. Yet older people are the ones who tend to need more medications on a daily and nightly basis. Very often geriatric patients present with histories of taking twelve to fifteen pills a day in divided doses, and yet some of these patients cannot remember what day of the week it is. Understanding and remembering any medical orders can be a problem for these people.

Arthritis and other physical handicaps can impact greatly on medical orders, especially if those orders require a patient to bend down and place medications or dressings on the foot. This applies to the patient who might need to apply dressings to a diabetic ulcer or place medications on the feet

In a study published in the *New England Journal of Medicine* where a cohort of over 5,000 patients who survived myocardial infarctions, less than fifty percent of the patients took their medications.

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Non-adherence to medical advice, in serious cases, can result in increased morbidity, mortality, and increased financial burden on the healthcare system.

Recent research has shown that non-adherence is prevalent in all facets of healthcare. *The New England Jour-*

nal of Medicine published a study in which a cohort of over 5,000 patients who survived myocardial infarctions were then studied to assess compliance in taking medications designed to reduce the chance of a second serious episode.¹ Sadly, less than fifty percent of the patients took their medications. Yet, the patients knew that they were being treated to prevent another life-threatening episode and even spent down time in ICU wards of hospitals surviving the first episode. The same study further proved that the cost of the medications was not the single or most significant cause of their non-adherence. Hence, we learned that non-adherence to medical orders is a complex issue and understanding it can help us tailor better treatment plans that can increase patient compliance with our orders.

to treat mycotic toe nails. Arthritis can also lead to increasing hypertension because people in pain cannot exercise as often.²

Visual problems can also play a role in non-adherence. If a person cannot visually recognize what their pills look like or cannot read the bottles, taking their medications at the right time can be challenging. The same may apply to a patient who has an age-related hearing deficit. He or she may not comprehend verbal medical orders.

Fixed incomes in the elderly, along with rising costs of medications—including some generics—can dissuade many patients from buying and taking their medications. It is not uncommon for these patients to present for a follow-up visit to assess a worsening condition but will not admit that they did not fill the prescription given to them on a prior visit.

Lastly, there are some patients who have complex and challenging lifestyles that prevent them from taking proper care of themselves. They may be caretakers for a sick parent, spouse, or child. Often, they put their relative's needs ahead of their own. One patient of mine who would not ease up on walking on a diabetic foot ulcer was

help prevent themselves from catching the coronavirus? For starters they are not feeling ill at the moment and may have “cabin fever” from being locked down in their homes for two months. The same applies in cases where weather experts and public officials will warn people to abandon their homes in coastal regions before the advent of a serious hurricane. Most ad-

vice. This approach is controversial. On one hand, it enables the treating healthcare provider to “cut bait” and not have to deal with a patient whose actions will undermine the best of treatment plans. It also insulates that doctor from being held legally accountable if the patient's physical health deteriorates while under his watch. On the other hand,

Patients taking multiple oral medications are more likely to take the correct medications at the correct time of day if the pills are organized into a pill box that has compartments for the day of the week as well as morning and night.

here but many holdouts will not leave their homes. They look up in the sky and it is blue and clear and they trust their senses more than the predictions of weather experts who see a horrendous storm about to bare down the community. Unfortunately become statistics after the storm hits.

In podiatry we also see this. An example was a patient who was a chain

discharging such a patient rather than working with him/her is akin to not fixing a broken car and giving it to a neighbor. The next buyer will still have to make the repair. In the opinion of this author, there is a greater and more rewarding challenge to employing some of the techniques outlined in the balance of this paper rather than denying that patient any medical care; you should not, however, fault any physician who feels and acts otherwise.

Dr. Michael Wolf found that adherence in taking pills is increased if the doctor instructs the pharmacy to write, “Morning and Night” as opposed to saying “take BID.”

blunt in telling me that she was taking care of a husband who recently had a stroke and she had no intention of resting her foot. Since it was neuropathic, she had no pain and was willing to gamble with the consequences. I treated a similar case of a much younger patient with a diabetic ulcer whose economic needs outweighed his needs to take a month off from his auto mechanic shop. Needless to say, you need to document such facts in the patient's record.

Why are many people not social distancing and not wearing masks to

smoker and developed Buerger's Disease. She was developing ischemia in one of her legs. She was admonished to stop smoking. In her case, the pleasure she was getting from smoking a carton of cigarettes a week outweighed any symptoms she was currently having from impending ischemia. Eventually, gangrene set in and she lost her leg, and very soon after died from cardiovascular disease.

Some physicians are quick to discharge patients from their practices when there is the slightest sign that the patients did not heed medical ad-

Partial List of Solutions for Increasing Adherence

In the case of a patient suffering with dementia or Alzheimer's disease, it is our job to assess whether the patient can follow orders and if we determine that the patient cannot, it is advisable to speak to members of the patient's family and give them both verbal and written medical instructions. In many cases where the diagnosis of cognitive impairment is well known, patients may already be coming to the office with a healthcare aide. Bringing that assistant into the treatment room and giving him or her instructions may be the ideal solution. If the patient and the family are not aware of this ongoing neurological problem, then a referral to a neurologist and/or a geriatric internist is in order.

As for arthritis or any other disorders that impact the patient's ability

to physically bend and apply medications to his or her feet, soliciting help from family members may be the first line of response. If this fails or if there is no family member to

Many older patients on fixed incomes are resistant to spending money on new medications that they can't emotionally grasp as being important. In some cases, they tell the

patient explaining the pros and cons of a given treatment plan and then enrolling the patient into being a partner in his or her health.

Medical/Legal Issues Regarding Non Adherence

Because we live in a litigious society, and patients who neglect medical advice often have bad outcomes, it behooves the treating physician to document incidents of non-adherence to the fullest extent; however, only the facts should be stated in the patient's medical record, and no commentary. For example, the doctor should write "patient is being treated for an infected ulceration but missed such and such follow-up visit, or the patient came in without his or her dressings intact, or the patient admits to not taking the prescribed antibiotics, etc. Each and every incidence of non-adherence should be documented on the date of each occurrence. At no time should the comment, "patient is non-adherent" or any similar comments be included in the medical record.

Summary

Non-adherence is a complex problem that affects all facets of healthcare. In some cases, it is minor, such as forgetting to floss

One trick for increasing adherence when it comes to the use of oral or applied pharmaceuticals in the face of increasing prescription costs and a patient with a fixed income is to have the patient bring the medication with them at each visit so you can monitor usage.

communicate with, home nursing services can be utilized. These agencies will send nurses to the patient's home to help change dressings and even assist with the taking of medications and, in most cases, these services are covered by the patient's insurance.

Another helpful device for geriatric patients who take a lot of medications morning, afternoon, and evening is the use of a pill organizer. These can be purchased very inexpensively online or at major pharmacies. These will enable the patient or a caregiver to organize what pills a patient takes in the morning and evening every day for a week at a time. This has proven to be a very helpful tool for patients taking a lot of medications.

Another useful trick was developed by Dr. Michael Wolf. He found that adherence in taking pills is increased if the doctor instructs the pharmacy to write, "Morning and Night" as opposed to saying "take BID." Wolf also showed that printing the directions in larger letters on the bottle also helped.³

Because the cost of prescription medications has skyrocketed in the United States and even certain generics are extremely expensive, dealing with the patient who does not want to pay for important medications is important. If the medication in question is a brand name and the patient is truly indigent, many pharmaceutical companies have funds set aside for subsidizing patients who cannot afford their product.

healthcare professional that they are using a prescribed pharmaceutical even though they never filled the prescription. One technique that often works if there are grounds for suspicion that the patient is not using the prescribed medication is to insist that the patient bring the bottle of medication with them to each follow-up visit. This enables the doctor to monitor whether the patient acquired the medication and if he or she is indeed using it. This is highly effective if the patient is instructed to use a very expensive topical or oral medication.

Both auditory and taste sense, if impaired, can interfere with a patient's ability to adhere to a medical regimen.

A Novel Concept Out of England

An approach developed in England for managing non-adherence in patients where cognitive impairment is not the issue is called "Concordance."^{4,5} This technique, which has yielded very positive results, involves converting the doctor-patient relationship from that of a distant authority figure giving orders into a relationship where the doctor and the patient become partners in promoting the patient's well-being. In order for this method to be successful, it requires the physician, and very often the staff, to spend more time with the

one's teeth after a busy day. Other cases may be more serious, such as not taking antibiotics in light of a serious infection, or not following up on recommendations for dealing with a potential malignancy.

Physicians should be aware of some of the root causes of non-adherence as well as some solutions that have proven efficacious in dealing with non-adherent patients. There are no solutions that are 100% effective. Physicians must document all instances of non-adherence but must only list the facts and refrain from commentary. **PM**

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¹ Choudhry. Avorn, et al., Full Coverage for Preventive Medications After Myocardial Infarction. *N Engl J Med*, Volume

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Physicians must document all instances of non-adherence but must only list the facts and refrain from commentary.

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⁴ M Marinker; From Compliance To Concordance: Achieving Shared Goals in Medicine Taking, Royal Pharmaceutical Society of Great Britain, 1997.

⁵ Chris Wahll BSc, Jean-Pierre Gregoire, MPH, PhD, -Concordance,



Dr. Udell is President of the American Society of Podiatric Medicine. He served on the board of the American Society of Podiatric Dermatology for over ten years, is board certified by the American Board of Podiatric Medicine and

has been published in *JAPMA* and the *Archives of Internal Medicine*. Dr Udell is a frequent contributor to *PM News*. He has lectured at podiatry conferences all over the country.

CME EXAMINATION

1) In a study published in the *New England Journal of Medicine*, 5,000 patients recovering from myocardial infarctions were given medications designed to prevent a recurrence. What percentage of these patients took their medications?

- A) 80%
- B) Less than 50%
- C) 90%
- D) 100%

2) Cosmetic surgeons have high rates of adherence because _____

- A) Psychologically, humans will do anything to look good.
- B) Their fees tend to be covered by insurance companies.
- C) They are trained at manipulating patients.
- D) They only take patients willing to be adherent.

3) To increase adherence in patients afflicted with advanced dementia or Alzheimer’s disease, which of the following may be helpful?

- A) Talk to relatives of the patient.
- B) Talk to a home healthcare aide who ac-

companies the patient to the office.

- C) Write down your medical orders and give a copy to the patient as well as his or her caregiver or close relative.
- D) All of the above.

4) According to a study by Dr. Michael Wolf of the National Institutes for Health, adherence in taking oral medications can be enhanced if _____

- A) The pharmacist states on the bottle, “to be taken morning and night” as opposed to twice a day.
- B) child-proof bottles are not used.
- C) Larger bottles are used.
- D) Less medication is placed in each bottle.

5) Patients taking multiple oral medications are more likely to take the correct medications at the correct time of day if _____

- A) The pills are organized into a pill box that has compartments for the day of the week as well as morning and night.
- B) The pills are color coded.
- C) The pills are flavored to taste better.
- D) None of the above.

Continued

- 6) To protect against a lawsuit a healthcare provider should _____
- A) Always document all the incidents of non-adherence.
 - B) Only document facts and no commentary.
 - C) Refrain from documenting opinions about the patient.
 - D) All of the above
- 7) Non-adherence to health provider advice is prevalent within the following professions:
- A) Medical doctors
 - B) Doctors of osteopathic medicine
 - C) Podiatrists and dentists
 - D) All of the above
- 8) Patients with the following are more likely to seek and follow medical advice:
- A) Abnormal foot pronation
 - B) Asymptomatic tibial dysfunction
 - C) Non-symptomatic dry skin around the rim of the heels.
 - D) Severe foot pain
- 9) One trick for increasing adherence when it comes to the use of oral or applied pharmaceuticals in the face of increasing prescription costs and a patient with a fixed income is to _____
- A) Have the patient bring the medication with them at each visit so you can monitor usage.
 - B) Have the medication coated with flavor.
 - C) Call the pharmacy to see if the patient filled his or her prescription.
 - D) Ask the patient if he or she is taking the meds.
- 10) Which of the following sensory systems, if impaired, can interfere with a patient's ability to adhere to a medical regimen?
- A) Auditory
 - B) Visual
 - C) Taste
 - D) A and B

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EXAM #7/20
The Management of the Non-adherent Patient
(Udell)

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