How Can Pharmacists Help Improve Medication Adherence?

Relationships Between Beliefs About Medications and Adherence

Adherence rates for medications vary greatly across different disease states, clinical settings, and populations. In general, adherence is not as high as healthcare professionals would prefer. This study looked at the relationships between health literacy and beliefs about medications, and how these factors affect medication adherence.

The investigators screened patients who were picking up prescriptions at 3 pharmacies in a single healthcare system. Participants were at least 18 years of age, were picking up prescriptions for themselves, Participants were then given a 50-minute interview that used several different questionnaires to address health literacy, adherence, and medication beliefs

The participants who completed the study were primarily black (86.2%), women (73.1%), and had an annual income of less than $10,000 (63.7%). Health literacy was defined as the ability to read at a high school level, which applied to 40.3% of the participants. Low adherence to medications was found in 53% of the sample.

Investigators found that the following factors were significant predictors of low medication adherence: age < 65 years (P = .02), low self-efficacy scores (P < .001),

and negative beliefs about medications (P = .006). Health literacy was not a significant predictor of medication adherence in this population.

Each year, a substantial number of hospitalizations result from medication nonadherence, and these hospitalizations cost the healthcare system billions of dollars. Pharmacists should be extensively involved in collaborating with patients and other healthcare professionals to address this problem. This study, along with previous research, confirms the fact that attitudes and beliefs about medications play a large role in adherence. many patients who received no information about their medications from prescribers, and often do not know the reason they are taking these medications. This lack of knowledge about prescribed medications often leads to fear of taking the medications. Some patients conclude that the medications are unimportant because their healthcare providers didn't deem it important to explain the rationale for the medications.

The pharmacist is the healthcare provider who encounters the patient each time he or she fills or refills a prescription. The pharmacist should assess medication adherence, patient understanding, and efficacy at each of these encounters. Of course, there are several barriers to providing this type of education, including pharmacist workload and lack of patient interest. However, as pharmacists move further away from the dispensing role, it is increasingly imperative that we establish ourselves as the primary educators about patients' medications.

Educating patients about the potential adverse effects of their medications is another important step in overcoming nonadherence. As identified in this and other research, patient beliefs about adverse outcomes and consequences of long-term use of their medications can impede adherence Pharmacists need to educate patients about outcomes associated with their medications and provide them with plans that explain what to do if they experience adverse effects, so that appropriate interventions can occur.

Pharmacists must partner with other healthcare professionals to identify patient beliefs and misunderstandings about medications, and must educate patients appropriately. Pharmacists can educate providers about the value of pharmacist services and partner with them to establish programs to monitor medication adherence. Teamwork presents a more united front and gives patients multiple opportunities to hear critical messages.

References

1. **Osterberg L, Blaschke T. Adherence to medication. N Engl J Med. 2005;353:487-497.**

Initiation of Insulin Therapy in Older Adults

Diabetes is a very common condition among older adults. It is estimated that one in every five people 65 years of age and older have diabetes, and the prevalence of diabetes among older adults is expected to increase by 44% in the next 20 years. Older adults newly diagnosed with diabetes experience high rates of complications during the subsequent 10 years, far in excess of those in older people without this diagnosis.

Over the past decade, eight classes of drugs have been used to treat diabetes; however, insulin remains the most effective and least costly treatment for older adults.

The initiation of insulin therapy is especially challenging in older adults, who are often have multiple comorbidities and physical limitations. In this article, we present a case-based approach to the initiation of insulin therapy in older adults.

Indications for the Initiation of Insulin Therapy in Older Adults

- Failure of oral hypoglycemic agents.

- Intolerance of hypoglycemic agents.

- Comorbid conditions that are contra-indications to the use of other oral hypoglycemic agents.

- Cost considerations .

- Acute illness or preoperative period.
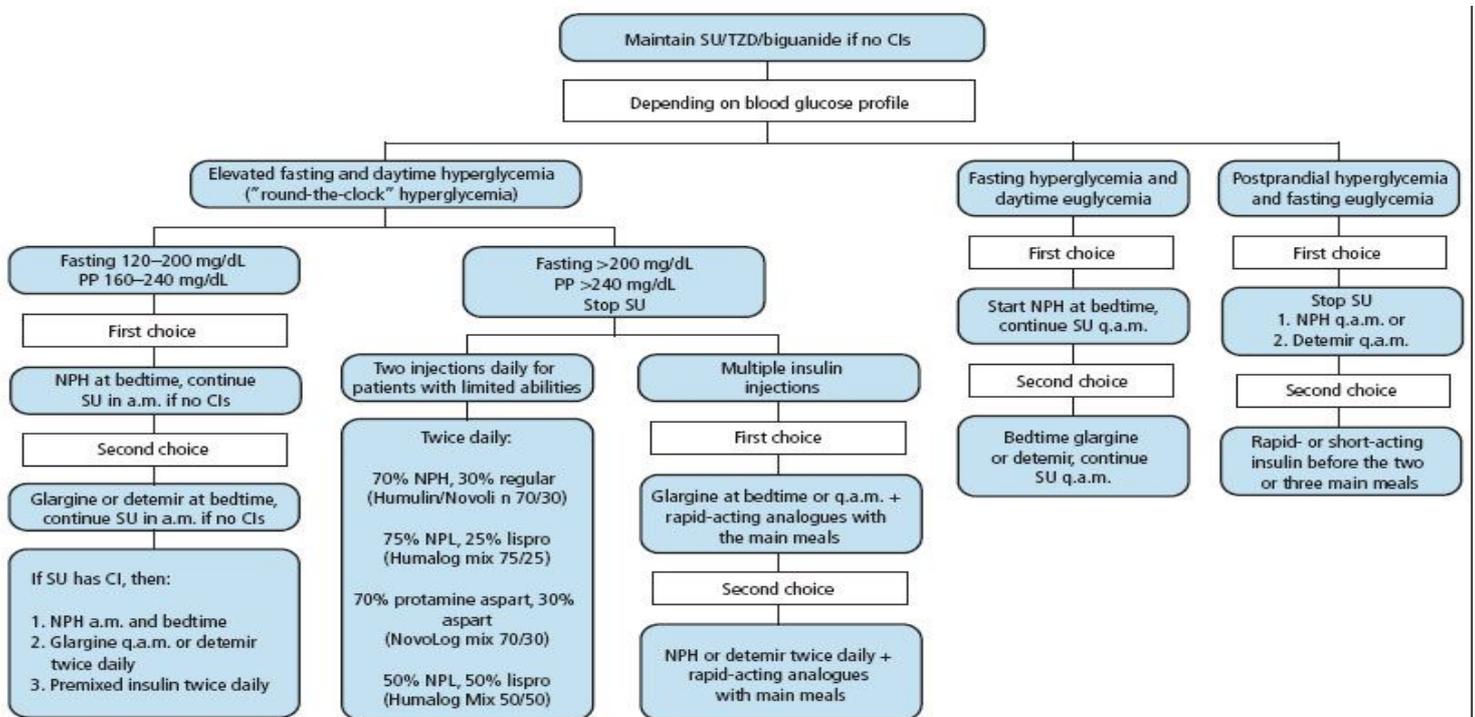
CI = contraindication; NPH = neutral protamine Hagedorn; NPL = neutral protamine lispro; PP = postprandial; SU = sulphonylurea; TZD = thiazolidinedione.

Medscape

Source: Geriatrics Aging © 2009 1453987 Ontario, Ltd.

Fig 1 Starting Insulin Therapy in Older Adults with Type 2 Diabetes Who Are Not Candidates for or Who Have Failed Treatment with Oral Agents

Conclusion

Insulin therapy is often combined with oral agents in patients with uncontrolled type 2 diabetes. For practical purposes, the type of insulin regimen is chosen according to blood glucose profiles. The latter can be divided into three general patterns as shown in Figure 1. In addition, special consideration in older adults should be given to their cognitive skills, physical and visual limitations, living situations, available resourses, and comorbidities. It is advisable to start low and to go slowly on insulin titration to avoid hypoglycemia, which usually manifests differently in older adults. Keeping these considerations in mind will enhance the safety and efficacy of insulin therapy in older adults.

Finally, although it may be easier to implement a complex insulin regimen to motivate healthy individuals living in long-term care facilities, it is quite challenging for inactive unhealthy older adults living alone. That is where homecare plays a major role in successful implementation and monitoring of such insulin regimen.

References

1. Mooradian AD, Bernbaum M, Albert SG. Narrative review: a rational approach to starting insulin therapy. Ann Intern Med 2006;145:125-34.

2. Oiknine R, Mooradian AD. Drug therapy of diabetes in the elderly. Biomed Pharmacother 2003;57:231-9.

مركـز مــعـلـومـات الـــدواء

Drug Information Center