Maximizing Medication Safety

By Sister Barbara Battista, SP

Medications help us stay well, or in some cases to return to a state of well-being. Most of the time this is true, but what about when things don’t quite work out that way? As good as medications can be, they can also end up being the culprit in all kinds of medical misadventures. Prescribing, dispensing, and taking medications has become a complicated process. That complexity increases as we age. The older adult, when compared to children and young adults, is much more likely to experience adverse events directly related to medication use. Thankfully, we do have guides to help us avoid most of the potential hazards along the way.

This article will explore how to safely and effectively utilize medications to optimize our physical, emotional, and mental well-being. Major topics we will explore include developing a proactive approach to communicating with your healthcare provider; interventions to lessen your risk of falling; non-pharmacologic alternatives to medications; and particular systems that decrease the risk of adverse health outcomes related to taking medications.

My goal is to expand your understanding of how safe and appropriate use of medications can improve your quality of life. Along the way I hope to rekindle within you a sense of gratitude for the gift of good health and a renewed commitment to honoring your body by adopting or continuing behaviors that truly support human thriving.

“It will be increasingly important to understand that the use of medications in the older adult population should be directed toward support of the whole patient.”

Thomas R. Clark
The Role of Medications in the Lives of Older Adults: An Overview

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Aging and Well-being
Well-being is a rich concept worthy of a much more thorough discussion than this short article allows. For our purposes, I am primarily concerned with the domain of physical health as one component of well-being. I suggest we use the following definition from the Center for Disease Control and Prevention (CDC) section on health-related quality of life: “Health is more than the absence of disease; it is a resource that allows people to realize their aspirations, satisfy their needs and to cope with the environment in order to live a long, productive, and fruitful life.”

Speaking of definitions, what do we mean when we say “older adult?” There is no consensus on what exact age constitutes older adulthood. When I use “older adult” in this article I am referring to those persons 65 and older.

Let’s look at what might get in the way of coping with our environment or living a long and productive life. One obvious, though not necessarily warmly embraced fact, is that aging changes us. The evidence is all around us: our skin is dryer; joints are not as flexible; we lose strength in our hands; and it is harder to see at night. We all share internal, physiologic changes. The outward signs of these changes vary from person to person. We may not look our age yet the way our body responds to medications is a function of our age.

Some of these internal changes include the fact that our total body water content decreases. Our muscle mass also declines as we age. Less muscle mass means a weaker grip, more effort to get up out of a chair, or more difficulty climbing the stairs. Additionally, blood flow decreases. As we age we accumulate more total body fat in relation to muscle mass. The resistance in our vascular system increases.

These physiologic changes have direct effects on how our body responds to various stimuli, including medications, dietary changes, and our external environment. Yes, there is a reason why we need more lighting to see clearly, more time to climb the stairs, and at times, a little help to get our GI tract moving along. Just as we know we are not as agile or flexible as we were at age sixteen, the same is true for our physiology. The mechanisms mentioned above have effects at the cellular level where medications act and food is absorbed.

The net effect of these changes results in many older adults needing a lower dose and perhaps fewer doses per day of some very common medications such as those used for high blood pressure, heart rhythm disturbances, and diabetes. Because of this increased sensitivity, one way to enhance well-being as we age is to focus on risk reduction in terms of the use of medications. The remainder of this article will address specific interventions to accomplish this goal of reducing the risk to our health and enhancing our well-being.

Communication is the Key
Medical visits look and feel so different today as compared to twenty or thirty years ago. By the time we actually see our medical provider, i.e. doctor, physician assistant, or nurse practitioner, we may have interacted with two or three persons. Often, we are faced with answering a barrage of questions with precious little time allotted for us to pose questions of our own. Making the time to pose our questions is a vital part of every medical encounter. I suggest that you consider adopting a proactive approach to communicating with your provider. Preparing for each visit can go a long way in helping you avoid some common medication related issues. Keeping a journal or log of these visits can also
prove quite helpful.

Write down your symptoms or concerns  Medical providers are trained to consider any new symptom or “complaint” as a side effect of a medication until proven otherwise. This is why it is so important to let your provider know if you have any new problems or complaints. It is tempting to decide that such things as dry eyes, or getting a little lightheaded at times just comes with getting older. That is not necessarily true. By raising these types of issues, you may be helping your provider uncover some medication issues that can be easily corrected by decreasing a dose or changing to a different medication.

Update your medication list  This includes all eye drops, topicals, over-the-counter (OTC) meds, and herbal supplements. They are all important when considering drug-drug and drug-food interactions. Also, you should check to see which meds need refills and communicate that to the provider during the visit. Doing this while in the office can lessen the chances of miscommunications or delays in refill authorization.

Many of us will have access to clinical support staff whose responsibilities include managing medications. You will want to communicate regularly with them concerning your medications. Help them do an even better job by keeping your medication list on file and up to date.

Consider bringing a companion  This is particularly helpful if you are ill. Having a trusted friend or, perhaps, a clinical staff person with you during your medical visits has several benefits. Primarily among the benefits is that he or she can take notes and help you remember what concerns you wanted to bring to your provider. Your companion can also serve as an extra set of ears. Medical conversations can get quite complex and at times downright scary, especially if the topic being discussed is you! Having another person present helps to ensure that whatever information is being conveyed will be heard and remembered. Get the most out of your companion by having a conversation ahead of time with him or her. Let your companion know what your health concerns are and what you hope to accomplish during your medical visit. I suggest you consider adopting the practice of having a companion during medical visits long before one would be absolutely required.

Medications: What You Need to Know  According to William Osler (1950), the founder of modern medicine “One of the first duties of the physician is to educate the masses not to take medicine.” And one of the primary principles guiding healthcare providers is primum non nocere or, first do no harm. Reconciling these
two concepts with the current practice of medicine is a bit challenging. We have literally hundreds more medications in our treatment options now as compared to when William Osler was founding Johns Hopkins Hospital. What does it mean now, in the 21st century, to “educate the masses to not take medicine”? I suggest that learning to appreciate the benefits and risks of the use of medications is honoring Dr. Osler’s advice.

Keep a personal medication record Communication with your healthcare provider is the key to being or becoming an active participant in healthcare decisions related to your use of medications. An essential component of this communication is maintaining a personal medication record. You can create your own template or download one from the internet. Websites for the Institute for Safe Medication Practices and the American Association of Retired Persons have forms that are good examples. You could also keep a list on your phone. For many of us, the biggest challenge will be to keep the document up to date. Of course, you’ll want to have it with you at every medical visit. It’s actually a good idea to have a copy with you at all times.

Have an annual review If you are on Medicare, ask for a Medicare Wellness exam that does not cost you, the patient, anything. An excellent practice you can adopt in your efforts to lower your risk of medical misadventures as you age is to ask your medical provider for an annual medication review. At least annually, and for some with complex medication regimens even more often, bring all your medications in their original bottles to your medical provider’s office. Include all supplements, vitamins, herbs, OTC and prescribed medications. Go through everything and confirm what each is for. Ask if you can try going without it or with a lower dose. If you do still need the medication you can ask about the possibility of changing it to a class of medications that has less potential for interactions or side effects. Ask if there is a non-pharmacological way to treat the condition or situation. You would be surprised at the possibilities that might come up during this review.

Use with caution Another way to reduce your risk of medication related health problems is to attempt to avoid long term use of some types of medications as much as possible. There are certain classes of medications that should be avoided in older adults. Among these are muscle relaxants, benzodiazepines, the stronger pain medications known as narcotics, and most sleeping pills. No longer is it acceptable medical practice to prescribe narcotics for chronic pain unless and until other interventions have failed. The medical community has come a long way in understanding the complexity of chronic pain. Thankfully we have many more choices for acceptable and effective methods to treat.
chronic pain now. Chronic pain medications in older adults have two major drawbacks. One is that they are sedating, which puts a person at increased risk of falling. The other is a phenomenon often referred to as a “prescribing cascade,” i.e. one medicine causes a problem that requires another medication to be prescribed. That additional medication can cause another problem necessitating still another medication. This is not an exaggeration. No one wants to be on the receiving end of this cascade.

While I am on the topic of using medications with caution, let me say a word or two about storing old medications. Just don’t do it. I suggest you turn in any supply of unused medications to your clinical office and/or your local pharmacist. See the FDA guide included in the reference list for detailed instructions on this topic.

**More can sometimes be better** One other tool to improve health outcomes is to be aware of situations where adding a medication qualifies as risk reduction. Yes, many experts agree that the use of vitamin D supplementation, low dose aspirin, vitamin B12, cardio-selective beta blockers, and statins each have a benefit when used in selected populations of older adults. It is beyond the scope of this article to describe particular situations where the addition of one of these medications is indicated. Suffice it to say that sometimes adding a medication can prove beneficial.

A note about vitamins and other OTC medications. It is always a good idea to discuss the benefits and risks of starting one or another of these items with your medical provider or clinical support staff before adding anything to your medication regimen. All medications have drug interactions. This is as true for vitamins and OTC medications as it is for prescription medications. Get professional advice before starting any new vitamin or supplement.

**Alternatives to Medications**

Earlier, I mentioned that the medical community now has numerous options other than narcotics for treating chronic pain. These options include cognitive behavioral therapy, psychotherapy, relaxation, biofeedback, massage, physical therapy, aerobic exercise, heat or cold application, ultrasound or electrical stimulation, ablation, and trigger point injections. The risk of falling coupled with the risk of overuse of narcotics makes exploring these alternatives well worth your effort.

Nutritional modifications are another example of non-pharmacologic treatment modalities. Persons with diabetes, osteoarthritis, heart disease, chronic obstructive pulmonary disease, hypertension, and of course, obesity are good candidates for a dietary consultation. Changing our relationship with food and understanding how certain food groups affect our body systems function is an important step in the lifestyle modifications called for when making dietary changes that last. For some, these changes are all it takes to maintain good blood pressure or blood sugar control.

Movement oriented interventions are proving useful in a variety of settings. Tai Chi improves balance and thus decreases fall risk. Evidence suggests that the regular practice of yoga can help persons with Parkinson’s maintain flexibility longer, delay the appearance of the classic Parkinsonian rigidity and gait disturbances, and lower their risk of falling. Choosing to use the chair rise exercise regularly as shown in the graphic from STEADI (see resources) can lower your risk of falling.

It’s never a good idea to start into an exercise regimen without first consulting your medical...
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provider. And, if given the green light, always use caution in performing this or any other exercise. Use your clinical support staff if available. If you do not have access to staff, then consider exercising in a group such as with the Silver Sneakers program. Many local exercise facilities use this.

Regular exercise of at least moderate activity for 150 minutes per week plus strength training twice weekly improves cardiovascular health, mood, strength, sleep, and helps us attain a healthier body mass index (BMI) (Hamer, Lavoie, & Bacon. 2014). Some persons with diabetes or hypertension manage to get off meds and continue with good control through regular exercise and excellent dietary practices.

Taking Medications on Schedule

Another aspect of safe and appropriate use of medications is staying on schedule and actually taking medications as prescribed. This sounds simple and yet can end up being very complicated. If there is one issue, short of falling, that can precipitate a health crisis, not staying on schedule with your medicines is it. Fortunately, there are a number of systems you can put in place to safeguard this process. A word of caution is in order. The systems mentioned here are not capable of helping persons with neurocognitive challenges that happen to be on certain high-risk medications. Insulin and warfarin are examples of commonly used high-risk medications. The vast majority of older adults, however, can benefit from one or the other of these systems.

These systems range from no cost and low tech to monthly subscription services arranged through your local pharmacy. Some of the more advanced systems clearly increase your medication costs. However, when evaluated alongside the benefits of enabling a person to stay in his or her home or local community longer and with a higher quality of life, that increased cost may be a very good investment.

Taking the time to plot out the times you eat and the times for your medications is a good place to start. Do this whenever your medication regimen changes. You may want to ask your pharmacist for advice on how to simplify your schedule. Knowing which meds to take on a full or empty stomach and which ones are best taken at bedtime can help you get the best effect from your medications. Knowing the schedule is only part of the challenge though!

Remembering to take your medicines ends up not being such an easy task. As one’s health declines this task is even more difficult. And when neurocognitive challenges are present, visual cues and reminders become even more important. Pill minders, or simple plastic boxes or trays are the most well-known of these systems. These plastic containers, ranging from seven to twenty-eight compartments, help many of us stay on schedule. These pill-minders, coupled with a reminder call from a friend or a daily

Sister Mary Moloney, SP (left) and Sister Betty Koressel, SP, practicing armchair yoga. Courtesy of the Sisters of Providence.
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drop-in visit, can keep some persons on sched-
ule.

Another option involves pharmacist dispensing medications into blister packs for each day and time of the day your medications are sched-
uled. Dispill is one such system. You can take a few days or a week’s worth of your meds by simply tearing off that section of the pack. Each compartment is labeled with your name, time and date that the medications are due to be taken. It is nearly foolproof. You do have to have the ability to grasp the paper tab and pull it away from the plastic bubble pouch containing your medications. This system could be utilized in several different ways. If there is no or limited clinical support staff available, this system could be invaluable when attempting to manage difficult medication regimens for per-
sons with some neurocognitive decline.

For completeness sake, you might like to know that there are all types of electronic devices de-
designed to alert persons if medication bottles or trays have not been opened. These alerts can be set up to inform community members or staff at a distance via text messaging. There are al-
so vials that are on time locks so that they only open on a pre-arranged time schedule. If you find yourself struggling to stay on schedule or helping someone else to do so, do not hesitate to ask your pharmacist, a discharge planner, or a social worker about what options are availa-
ble and appropriate for your situation. There is no shortage of creativity in this industry.

A Final Thought
Ultimately, it is the quality of our life that truly matters. Our healthcare system offers us a myriad of opportunities to preserve or regain a sense of health and well-being. I hope that you have learned a few things about medication and how to get the most out of your interactions with your healthcare providers. I also hope that you have found in these pages some tools to use in order to avoid the chronic use of certain medications. I believe that by focusing on prac-
tices and norms to increase safety with the use of medications you will be contributing to an enhanced quality of life for yourself and for those you serve.

Resources

- Silver Sneakers. https://www.silversneakers.com
- Where and How to Dispose of Unused Medicines. https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm101653.htm

Editor’s Note: Sr. Barbara will be presenting one of eight workshops that NRRO will offer at the RCRI conference in October, 2018.

If you have any questions concerning this article, correspondence may be addressed to Sr. Barbara at bbattista@spsmw.org

Calendar 2018

April 24 - 26
- Planning and Implementation workshop in Dayton, OH (filled)

May 15
- NRRO Webinar on Fall Reduction with Dr. Sasha Speer, DPT, 1:00 PM ET
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