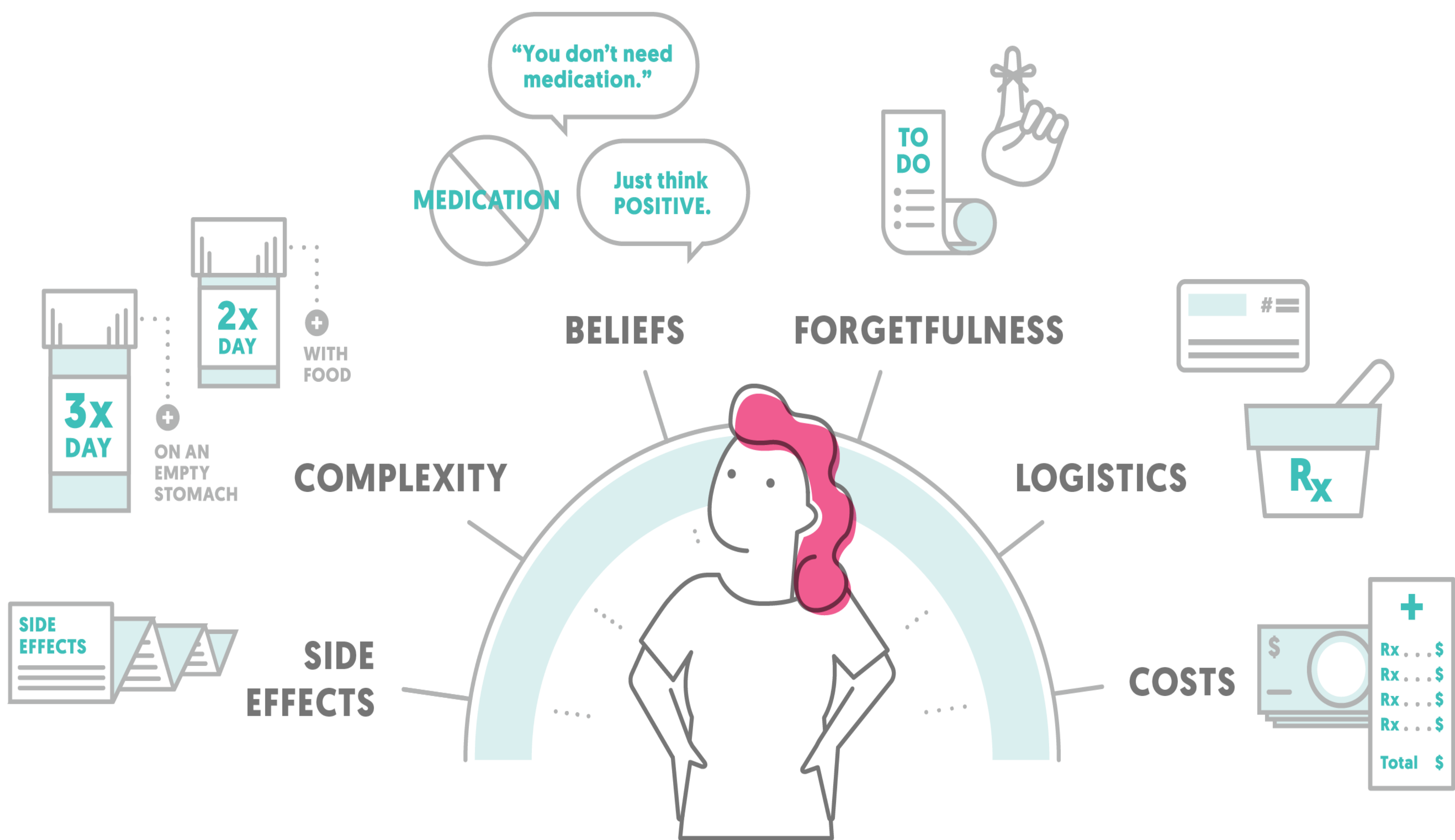


Bridging the Information Gap between Healthcare Providers and Older Clients to Improve Medication Adherence

By: Rishi Bamba

SETTING THE STAGE

As more Americans live into older age, medication use becomes an integral part of one's daily routine. Research suggests that 38% of Americans receiving Medicare benefits live with 4 or more chronic health conditions such as cancer, high blood pressure, dementia, and arthritis (Levy & Barney, 2016, p. 214). Management of these conditions often occurs by taking medications. In order to manage and properly treat one's condition, medication adherence is of significant importance. However, many obstacles such as cost, transportation, health-care literacy, and language barriers exist that make it difficult for older adults to properly take their medications. The consequences of nonadherence can be detrimental and even fatal to one's health. 30% of hospital admissions and 23% of nursing home admissions have been found to be attributed to medication nonadherence (Levy & Barney, 2016, p. 218). Thus, healthcare providers have an obligation to improve medication adherence in elderly clients by promoting health-care literacy by bridging the information gap with regards to medical terminology, medication names/uses, potential side-effects, and how/when to take a medication.



For every 100 prescriptions written: **100**



50-70 are filled at the pharmacy



48-66 are picked up from the pharmacy



25-30 are taken properly



15-20 are refilled as prescribed



Source: National Association of Chain Drug Stores, Pharmacies: Improving Health, Reducing Costs, July 2010. Based on IMS health data.

MEDICAL TERMINOLOGY

For elderly individuals, prescription labels can often be difficult to read or understand due to gaps in knowledge with regards to medical abbreviations. Such abbreviations may be printed on prescription labels or documents with discharge instructions. Knowing what these abbreviations mean can be the difference between safe/intended and unsafe medication therapy.

The abbreviations described below refer to the frequency with which medications may be taken, the route of administration (such as oral), and at what time (before or after meals).

TABLE 13-9 Medication Dosage Abbreviations

Term	Directions
QD	Every day
BID	Twice a day
TID	Three times a day
QID	Four times a day
QHS	Bedtime
ac	Before meals
pc	After meals
QOD	Every other day
Q2H	Every 2 hours
PO	By mouth
PRN	As needed

Note. Reprinted from “Pharmacology, Pharmacy, and the Aging Adult: Implications for Occupational Therapy” by Levy, H.B., & Barney, K.F., in Barney, K., & Perkinson, M., *Occupational Therapy with Aging Adults*, 2016, p. 228. Elsevier.

Routes of Administration

Route	Explanation
buccal	held inside the cheek
enteral	delivered directly into the stomach or intestine (with a G-tube or J-tube)
inhalable	breathed in through a tube or mask
infused	injected into a vein with an IV line and slowly dripped in over time
intramuscular	injected into muscle with a syringe
intrathecal	injected into your spine
intravenous	injected into a vein or into an IV line
nasal	given into the nose by spray or pump
ophthalmic	given into the eye by drops, gel, or ointment
oral	swallowed by mouth as a tablet, capsule, lozenge, or liquid
otic	given by drops into the ear
rectal	inserted into the rectum
subcutaneous	injected just under the skin
sublingual	held under the tongue
topical	applied to the skin
transdermal	given through a patch placed on the skin

Note. Reprinted from "Medication Administration: Why It's Important to Take Drugs the Right Way." 2019. Retrieved from <https://www.healthline.com/health/administration-of-medication#potential-problems>

RESOURCES AVAILABLE TO LEARN IMPORTANT INFORMATION REGARDING YOUR MEDICATIONS

Prescription pamphlets often contain an overwhelming amount of information related to uses, cautions, side-effects, and possible overdose in a small to read font size. These pamphlets are not ideal or easily accessible for older adults. Alternate resources are available that may be utilized to learn useful medication information in a more easily accessible manner.

Tips on How to Talk to your Pharmacist

Click above! 

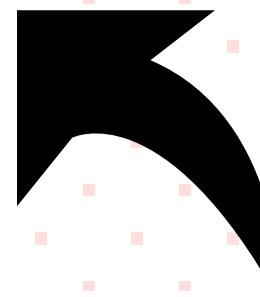
Commonly Prescribed Medications with Descriptions, Uses, and Side Effects in Alphabetical Order

Click above! 

Drug Interaction Checker

Click above! 

Understanding your Prescription Label

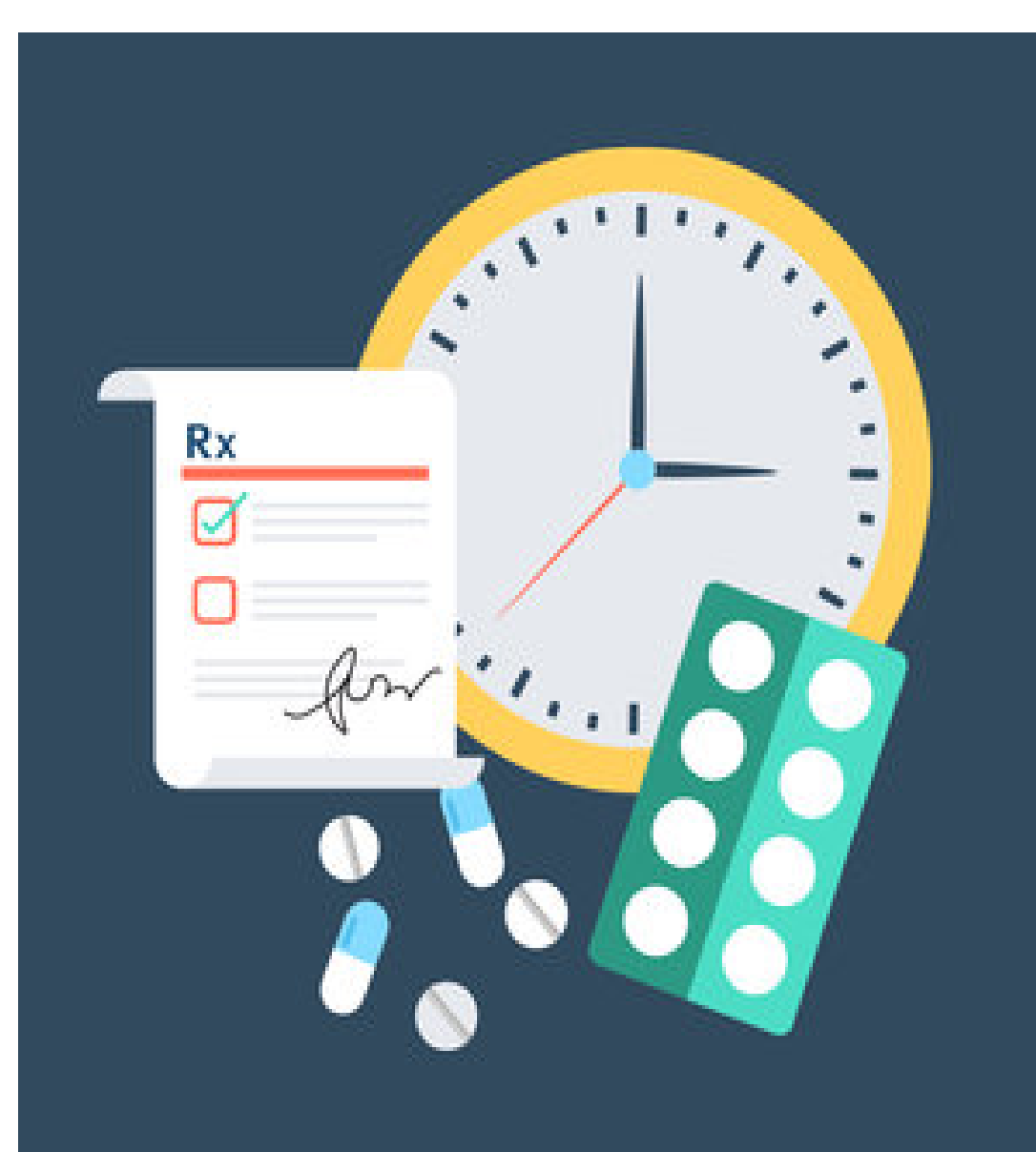
Click above! 

OCCUPATIONAL THERAPY PERSPECTIVE ON MEDICATION ADHERENCE

Occupational Therapists are important healthcare professionals who help clients maintain, restore, or improve skills needed to function independently in daily life. Areas that OTs can assist in include: leisure, play, education, rest/sleep, social participation, work, activities of daily living (ADLs) such as bathing, dressing, and feeding, and instrumental activities of daily living (IADLs) such as paying bills (AJOT, 2014, p. S18). Because medication adherence is an important self-care task, OTs are involved with helping clients take and manage their medications appropriately.

OT TREATMENT APPROACHES

- Health promotion through client/caregiver education
- Help simplify client's medication therapy routine
- Recommend aids/assistive devices



OT TREATMENTS

- Education may be provided to client and/or caregiver on the importance of medication adherence. Intervention can focus on informing the client and/or caregiver on the purpose of each medication. Additionally, education can be provided on how to properly take the medications (dose, quantities, and time of the day).
- If a client demonstrates difficulty with developing a consistent routine with how to take his or her medication, the OT can help develop a routine that is easy to remember. According to Sanders & Van Oss (2013), medication adherence can increase by 50% when a medication is linked with an environmental cue (p. 92). For example, one may set his or her medication bottle next to the coffee maker and take the medication every morning while making coffee.
- Aids and assistive devices can help simplify and organize one's medications. When taking multiple medications, it is very important to differentiate between each one to ensure that one takes the proper dose/quantity of each medication. Helpful assistive devices/aids may include weekly pill containers, a pill map sorter in which each pill is shown and identified, and apps that can help track when to take each medication.



***PHONE APP TO HELP TRACK YOUR
MEDICATIONS***

iPhone Medisafe App

Click above! 

INTERPROFESSIONAL RESOURCES

Pharmacists



Pharmacists are important healthcare professionals who fill prescriptions, ensure there are no harmful drug interactions between a patient's medications, and provide consultations for any questions/concerns regarding safe medication therapy

Physicians



Physicians are medical doctors who play an important role in the health and well-being of individuals. They diagnose medical conditions and prescribe medications as necessary. They serve as a helpful resource for health/medication related questions

Pharmacy Technicians



Pharmacy Technicians are healthcare providers who work under the supervision of pharmacists. They are involved in typing prescriptions, counting medications, insurance billing, and dropping/picking up of prescriptions. They can serve as a helpful resource to sync prescriptions on a single date to save trips and find prescription discounts.

OCCUPATIONAL ENGAGEMENT

Becoming more informed of the purpose of one's medications, developing a routine that makes it easy to remember to take one's medications, and using assistive devices are such pill organizers and app trackers can help facilitate medication adherence which is important in order to treat/manage various health conditions.

For example, an individual named Tom diagnosed with Rheumatoid Arthritis may be prescribed an antirheumatic drug such as Plaquenil to help slow advancement of his condition. By consulting with his physician and pharmacist to understand the importance of this medication and how to take it safely to minimize side effects and following the routine and using the pill organizer suggested by his OT, Tom may be able to get out of bed pain-free and participate in daily activities that are important to him such as walking his dog .

For Tom, the pain, swelling, and inflammation caused by RA limits his participation in daily activities such as taking care of his dog. Under the International Classification of Functioning, Disability, and Health (ICF), the daily activity of "taking care of animals" is listed under the code "d6506." This code states that taking care of animals can involve "taking care of domestic animals and pets, such as by feeding, cleaning, grooming and exercising pets; watching over the health of animals or pets; planning for the care of animals or pets in one's absence." By improving his medication adherence, Tom may be able to take care of his dog by taking him out on walks, to vet appointments, feeding, and cleaning.

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