# PATIENT MEDICATION ADHERENCE

Dr. Madhuri Pandole

**Assistant Professor** 

Dept. of Pharmacology& Pharmacy Practice

SARASWATI INASTITUTE OF PHARMACEUTICAL SCIENCES

#### **ADHERENCE**

Defined by the World Health Organization as 'the extent to which a person's behavior [in] taking medication...corresponds with agreed recommendations from a health care provider'

- World Health Organization

- The Term **COMPLIANCE** has come into disfavor because it suggests that a person is passively following a doctor's orders, rather than actively collaborating in the treatment process.
- Adherence, on the other hand, requires the person's agreement to the recommendations for therapy.

**PERSISTENCE** is defined as the ability of a person to continue taking medications for the intended course of therapy.

In the case of chronic diseases, the appropriate course of therapy may be months, years, or even the person's lifetime.

A person is classified as non-persistent if he or she never fills a prescription or stops taking a prescription prematurely.

Discussing the intended course of therapy when medications are first started has been shown to be an important factor in keeping people persistent with a medication regimen.

- Adherence is a multidimensional phenomenon determined by the interplay of five sets of factors, termed "dimensions" by the World Health Organization:
- 1. Social/economic factors
- 2. Provider-patient/health care system factors
- 3. Condition-related factors
- 4. Therapy-related factors
- 5. Patient-related factors



#### 1. SOCIAL AND ECONOMIC DIMENSION

- 1. Limited English language proficiency
- 2. Low health literacy
- 3. Lack of family or social support network
- 4. Unstable living conditions; homelessness
- 5. Burdensome schedule
- 6. Limited access to health care facilities

- 7.Lack of health care insurance
- 8. Inability or difficulty accessing pharmacy
- 9. Medication cost
- 10. Cultural and lay beliefs about illness and treatment
- 11.Elder abuse

#### 2. HEALTH CARE SYSTEM DIMENSION

- 1. Provider-patient relationship
- 2. Provider communication skills (contributing to lack of patient knowledge or understanding of the treatment regimen)
- 3. Disparity between the health beliefs of the health care provider and those of the patient

- 4.Lack of positive reinforcement from the health care provider
- 5. Weak capacity of the system to educate patients and provide follow-up
- 6.Lack of knowledge on adherence and of effective interventions for improving it

- 7. Patient information materials written at too high literacy level
- 8.Restricted formularies; changing medications covered on formularies
- 9. High drug costs, copayments, or both
- 10. Poor access or missed appointments
- 11.Long wait times
- 12.Lack of continuity of care

#### 3. CONDITION-RELATED DIMENSION

- 1. Chronic conditions
- 2. Lack of symptoms
- 3. Severity of symptoms
- 4. Depression
- 5. Psychotic disorders
- 6. Mental retardation/developmental disability

#### 4. THERAPY-RELATED DIMENSION

- 1. Complexity of medication regimen (number of daily doses; number of concurrent medications)
- 2. Treatment requires mastery of certain techniques (injections, inhalers)
- 3. Duration of therapy
- 4. Frequent changes in medication regimen
- 5. Lack of immediate benefit of therapy
- 6. Medications with social stigma attached to use

- 7. Actual or perceived unpleasant side effects
- 8. Treatment interferes with lifestyle or requires significant behavioral changes

#### 5. PATIENT-RELATED DIMENSION

#### **PHYSICAL FACTORS:**

- 1. Visual impairment
- 2. Hearing impairment
- 3. Cognitive impairment
- 4. Impaired mobility or dexterity
- 5. Swallowing problems

#### Psychological/Behavioral Factors:

- 1. Knowledge about disease
- 2. Perceived risk/susceptibility to disease
- 3. Understanding reason medication is needed
- 4. Expectations or attitudes toward treatment
- 5. Perceived benefit of treatment
- 6. Confidence in ability to follow treatment regimen

- 7. Motivation
- 8. Fear of possible adverse effects
- 9. Fear of dependence
- 10. Feeling stigmatized by the disease
- 11.Frustration with health care providers
- 12. Psychosocial stress, anxiety, anger
- 13. Alcohol or substance abuse

## MEASURING ADHERENCE

There are several ways to measure medication adherence.

1.Medication event monitoring systems (MEMS):-

These are the most accurate method of measuring adherence because they record the date and time the medication bottle was opened through microprocessor technology embedded in the cap.

## Advantages with microprocessor:-

- 1. erroneous/not faith/falls., because pt may remove more than one dose
- 2. Very expensive & different devices are needed for each medication
- 3. Therefore it is an impractical way to determine adherence in clinical practice.

2. Patient self-reports is easiest method when adherence is being assessed, open-ended questions should be asked.

Instead of asking, "Are you taking your medications?" the HCP should phrase the question along the lines of, "How many times in the past week (month) have you skipped your medications?"

#### 3. Pill counts

- 4. Pharmacy databases or refill rates, and
- 5.Blood levels
- which also are employed in research, are more feasible options for clinical practice
- 6.Morisky's Medication Adherence Scale (MMAS)

It was designed to distinguish poorly adherent patients from those with mediumto-high adherence to their antihypertensive regimen

- MMAS consists of questions addressing multiple reasons for non-adherence..
  - e.g., because regimen complexity can lead to noncompliance.
  - The scale contains a question assessing whether the patient feels hassled (trouble/Tense) about his or her regimen

- Since patients tend to give their HCPs positive answers to please them, the questions in Morisky's study were phrased to avoid this bias.
- Each question measures a specific medicationtaking behavior rather than adherence or compliance behavior.

# Table 1. Morisky's Medication Adherence Scale

- Do you sometimes forget to take your high-BP pills?
- 2. Over the past 2 weeks, were there any days that you did not take your high-BP medication?
- 3. Have you ever cut back or stopped taking your medication without telling your doctor because you felt worse when you took it?
- 4. When you travel or leave home, do you sometimes forget to bring your medication?
- 5. Did you take your high-BP medication yesterday?
- 6. When you feel that your BP is under control, do you sometimes stop taking your medication?
- 7. Taking medication every day is a real inconvenience for some people. Do you ever feel hassled about sticking to your BP treatment plan?
- 8. How often do you have difficulty remembering to take your BP medication?

BP: blood pressure. Source: Reference 9.

# Methods Can Improve Medication Adherence by Pharmacists

- 1. Use Kitchen Table Consults
- 2. Improve Pharmacy Work Flow
- 3. Simplify Patients' Medications
- 4. Identify Reasons for Medication Non-adherence
- 5. Ask Patients Specific Questions About Their Medication

# ROLE OF THE PHARMACIST

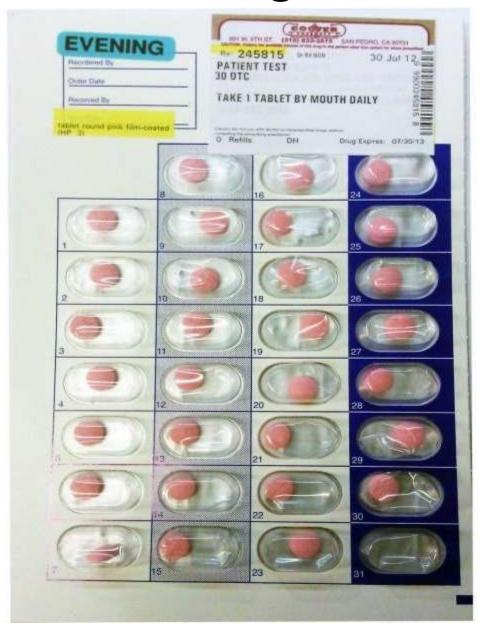
• While medication dispensing is the best-known function of the pharmacist, pharmacists—through counseling, medication therapy management (MTM), disease-state management, and other means—can play a pivotal role in patient care.

• There are opportunities in every type of pharmacy practice to improve patients' adherence and therapeutic outcomes, and pharmacists must embrace and act on them.

#### 1. Patient Education

- 2. <u>Dosing simplification and minimization of adverse effects</u> are extremely successful strategies for improving adherence.
- 3. <u>Preparing a dosing card</u> containing only the most essential elements of the patient's medications can be highly beneficial
- It can be extremely helpful for patients who take many medications or who have cognitive barriers.

# Dosing cards







4. Reminder calls, texts, or e-mails are helpful for many patients, especially those with busy lifestyles. Automatic refills are a useful strategy

- What ever the barriers to adherence may be, the only way to assess them is to talk to the patient.
- The pharmacist needs to be diligent (pay attention) about including the patient in the treatment experience.

 The more trust the patient has in the pharmacist, the more he or she will open up and disclose any apprehensions or difficulties about taking his or her medication. Only then can the pharmacist play an integral role in improving a patient's adherence.



# THANK YOU