Session 8:
ACP Featured Speaker:
Medication Adherence: We Didn't Ask.... and They Didn't Tell

Learning Objectives

1. Recognize the magnitude of medication nonadherence and the challenges of identifying nonadherent patients.
2. Identify health care team members and resources that can improve medication adherence.
3. Implement an appropriate intervention to identify and improve medication adherence into daily patient encounters.
Marie T. Brown, MD, FACP, is a practicing internist and an assistant professor of medicine, department of internal medicine, Rush University Medical Center Chicago, Illinois. She is ACP Governor-elect for Northern Illinois and recently appointed to the operations committee for the National Diabetes Education Program. Dr Brown's involvement in national education programs includes past chair of the scientific program subcommittee for the American College of Physicians Annual Session 2007. She also served on the national ACP medical education committee and is currently the American College of Physicians representative to and treasurer of the Council of Medical Specialty Societies. Her publications include reviews in the *American Journal of Medicine* and the Mayo Clinic Proceedings, including a review on medication adherence published in April 2011. She speaks nationally on a wide range of topics from the perspective of a practicing internist. After earning her medical degree from Rush Medical College in Chicago, Illinois she completed an internship and residency in internal medicine at Rush-Presbyterian-St. Luke's Hospital. American Board of Internal Medicine certification was granted in 1982 and additional qualifications in geriatric medicine were granted at its first offering by the American Board of Internal Medicine in 1988. She became a fellow of the American College of Physicians in 1993. Dr Brown in addition to her clinical work has participated in clinical research regarding hypertension in the LIFE study and lectures and consults regarding a variety of internal medicine topics including diabetes, stroke, hypertension, PAD, Alzheimer's disease, and other age-related issues. She has been active in guideline development for cardiovascular disease specifically congestive heart failure. She instructs residents and medical students in geriatrics and internal medicine. She is on staff at Rush University Medical Center and MacNeal hospital and is past chair of the CME committee at MacNeal hospital.

Faculty Financial Disclosure Statement
The presenting faculty reports the following:

Dr Brown has no financial relationships to disclose.
MEDICATION ADHERENCE

Marie Brown, MD, FACP
ACP Governor
mbrown@mbrownmd.net
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Chicago, Illinois

Keep a watch ... on the faults of the patients, which often make them lie about the taking of things prescribed.

For through not taking disagreeable drinks, purgative or other, they sometimes die.

— Hippocrates, Decameron

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✦ Definitions and incidence
✦ Impact of non-adherence
✦ Obstacles
  – Video: Real patient interviews
✦ Communication
  – Video: Don’t ask/Don’t tell
✦ Solutions
  – Blame-free environment
  – Resources
  – Video: Team-based patient-centered care

Medication Adherence
World Health Organization
Definition

“the extent to which a person's behavior ... corresponds with agreed recommendations from a health care provider”
**Individual Medication-taking Behavior**

Medication adherence implies patient agreement with recommendations.

Medication compliance implies patient passivity.

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**World Health Organization**

Increasing adherence may have a far greater impact on the health of the population than any improvement in specific medical treatments.

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**Measurement of Adherence**

✦ Subjective

✦ Objective
  – Pill counting
  – Refill records
  – EHR

✦ Biochemical
  – Drug levels
  – Addition of nontoxic markers

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Measurement of Adherence:

\[
\text{Adherent if } \frac{\# \text{ of pills absent in Time Z}}{\# \text{ of pills prescribed for Time Z}} \times 100 \geq 80\
\]

- 24 pills taken
- 30 pills prescribed

\[
\frac{24}{30} = 80\%
\]

Considered Adherent if \( \geq 80\% \)

- 24 out of 30 days!
Impact

✦ Studies demonstrate impact not only on surrogate markers such as A1c or LDL ... but on MI and mortality.
✦ Of all medication-related admissions, 33%–69% are due to poor adherence
✦ Cost of non-adherence: $100 billion/year

PATIENTS DON'T TAKE THEIR MEDICINE AS PRESCRIBED 50% OF THE TIME.
ONE-THIRD OF ALL PRESCRIPTIONS ARE NEVER FILLED.

Rates of Non-adherence

✦ Hypertension – 50%–80%
✦ Hyperlipidemia – 25%–50% within 1 yr – 75% at 2 yrs
✦ ASA – 20%–30% at 1 yr
OBSTACLES

✦ PATIENT
- Cost/Health literacy/Access
- Rational non-adherence
- Mental illness
✦ PROVIDER
- Failure to recognize/complicated regimens
- Inadequate communication/relationship
- Accusatory approach "shamed"
- Negative attitude toward the patient
✦ PROCESS
- Fumbled hand-offs
- Insufficient time to develop trust
- Lack of educational resources

UNINTENTIONAL  INTENTIONAL

✦ FORGETTING
✦ SHIFT WORK
✦ COST
✦ CONFUSION
✦ WORK RESTRICTIONS
✦ MISTRUST
✦ FEAR OF SIDE EFFECTS
✦ MENTAL ILLNESS
✦ LACK OF BELIEF IN BENEFIT
✦ FEAR OF DEPENDENCY
✦ FEAR IT IS DANGEROUS
✦ LACK OF DESIRE
✦ NO APPARENT BENEFIT

NON-ADHERENCE

UNINTENTIONAL

INTENTIONAL

Adherence Affected by Burden

Adherence Decreases as Frequency of Dosing Increases

Don’t ask ...
I didn’t ask ....

Don’t tell ...
They didn’t tell ...
INTERVIEWING IN THE BLAME-FREE ENVIRONMENT

✦ These are difficult to take every day. How often do you skip one?
✦ There are quite a few. How many of these do you take?
✦ Most people don’t take all their meds everyday. How about you?
✦ When was the last time you took drug A? B?

The Morisky 8-Item Medication Adherence Scale

1. Do you sometimes forget to take your blood pressure pills?
2. Over the past 2 weeks, were there any days when you did not take your blood pressure medicine?
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 along your medications?

5. Did you take your blood pressure medicine yesterday?
6. When you feel like your blood pressure is under control, do you sometimes stop taking your medicine?
7. Taking medication everyday is a real inconvenience for some people. Do you ever feel hassled about sticking to your blood pressure treatment plan?
8. How often do you have difficulty remembering to take all your blood pressure medications?

The Impatient Patient

✦ The non-adherent patient prefers immediate rewards to efforts linked to long-term therapy.
✦ Most people have an innate tendency to prefer smaller-sooner to larger-later rewards.
✦ The reward of adherence in the management of chronic disease is “to avoid complications.”
✦ Paradoxically this type of reward is never “received.”
✦ Doctors are future-oriented while patients may not consider themselves as having a future to look forward to.

SOLUTIONS

MEDICATIONS
In order for your Doctors and Nurses to better care for you we need your help.
Please review your medication list that has been handed to you at each and every visit.
Then we need you to look at it carefully and make some notes.
1. Circle the medications for which you need refills (you should leave the office today with enough refills to last until your next visit)
2. Cross out any medications you are no longer taking
3. Add medications other doctors are giving you (this includes eye drops, creams, inhalers and especially other pills)
4. Add supplements or vitamins that you are taking (this is very important)
knowledge and emotion

Don’t kill the messenger!

Do we tell patients that they will need to stay on a medicine for the rest of their lives? Why not?

✦ We don’t want to deliver bad news
✦ Concern it will cause patient to resist therapy
✦ Concern it will increase duration of the visit
✦ Fear it will increase the patients’ concern that they will become dependent on the drug

Patient-related factors

Provider-related factors

Health literacy:

Health literacy

Health literacy

Health literacy

Provider-related factors

Patient-related factors

System factors

Summary

✦ 50% of patients are non-adherent
✦ Medication taking behavior is complex
✦ Solutions include thinking outside the pill box