

Improving Adherence to Treatment

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Goals

- Background
- Principles
- Practice

What's the Problem?

- Problem: Medication nonadherence is endemic
- Consequences
 - Poor health outcomes
 - 30%–60% of hospitalizations may be adherence related
 - Costs: \$177B¹ to \$290B² in the United States annually
 - Total US healthcare costs \$2.24 trillion³
 - Very large amounts of hidden time, energy, hassle for providers

1. Ernst and Grizzle. *J Am Pharm Assoc.* 2001;41:192-129.

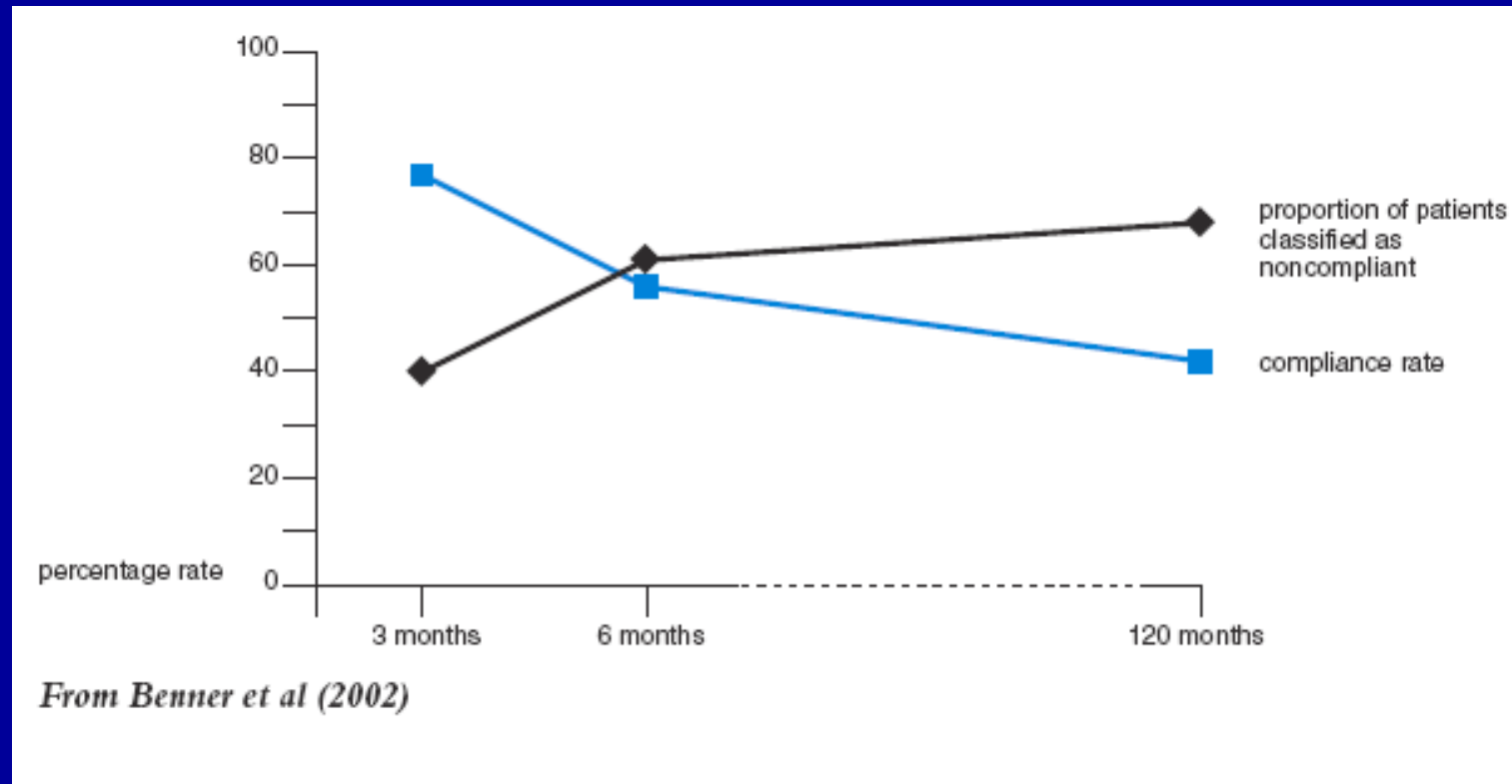
2. New England Healthcare Institute. Thinking Outside the Pillbox: A System-wide Approach to Improving Patient Medication Adherence for Chronic Disease. A NEHI Research Brief, July 2009.

3. Hartman et al. *Health Affairs.* 2010;29:147-155.

Epidemiology

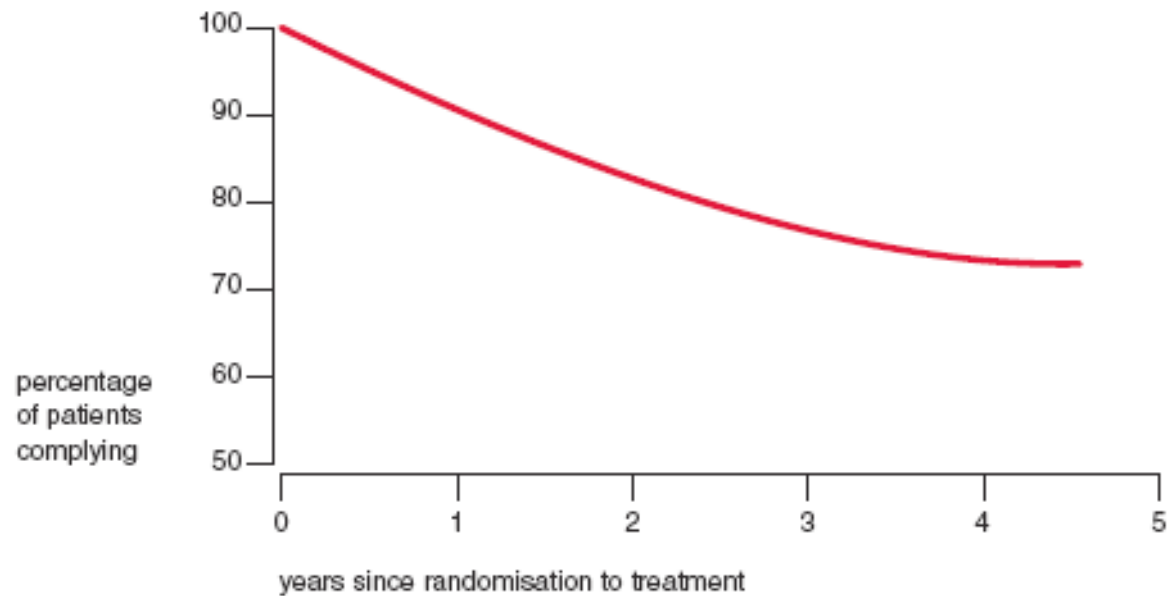
- Original Sackett and Haynes data: the famous 50%
- Better drugs don't solve the problem

Cholesterol: Statins



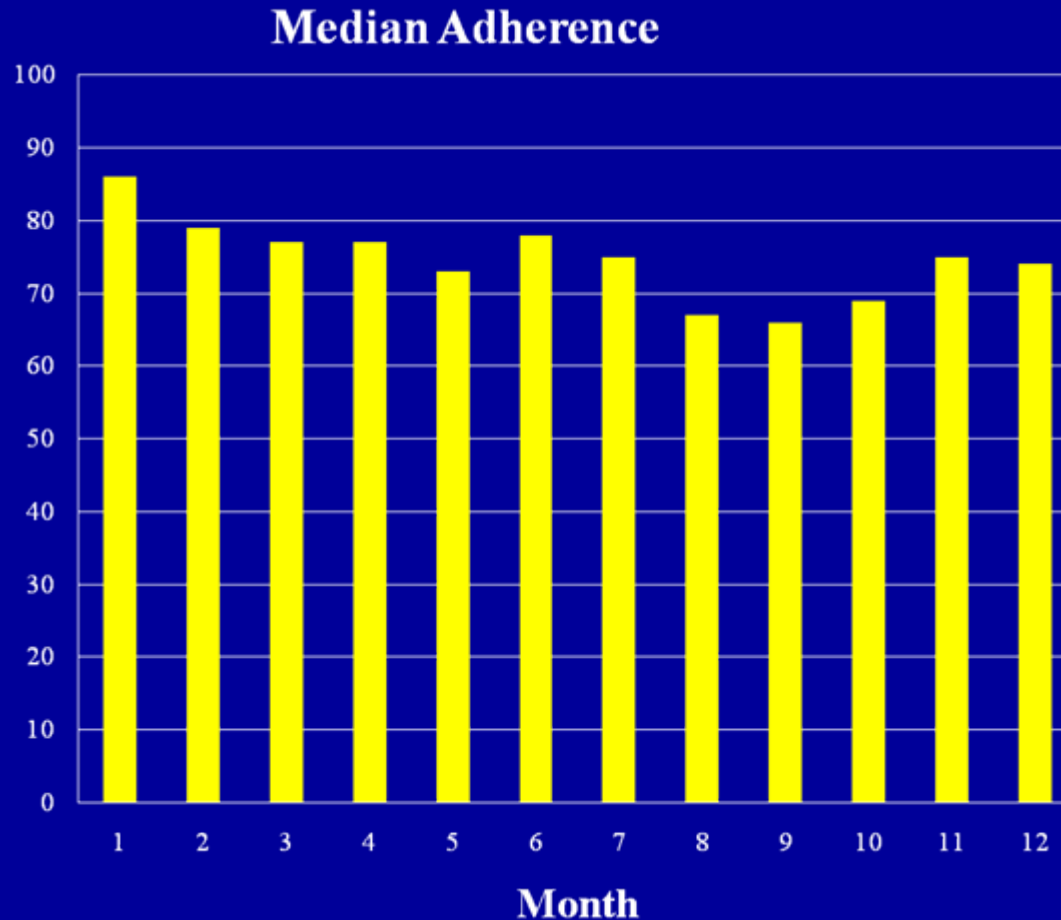
Cancer

Figure 3.
Compliance in
tamoxifen use



From Cuzick and Edwards (1999)

Longitudinal Adherence in HIV



Wilson IB for the MACH14 Investigators. 5th International Conference on HIV Treatment Adherence, Miami, FLA, May 23-25, 2010.

How Good Are Doctors at:

- Diagnosing nonadherence
- Treating nonadherence

Diagnosing Nonadherence

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- Hall JA, Stein TS, Roter DL, Rieser N. Inaccuracies in physicians' perceptions of their patients. *Med Care*. 1999;37:1164-1168.
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- Gross R, Bilker WB, Friedman HM, et al. Provider inaccuracy in assessing adherence and outcomes with newly initiated antiretroviral therapy. *AIDS*. 2002;16:1835-1837.
- Bangsberg DR, Hecht FM, Clague H, et al. Provider assessment of adherence to HIV antiretroviral therapy. *J Acquir Immune Defic Syndr*. 2001;26:435-442.
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Adherence Interventions

- 2008 Cochrane Review, Haynes et al
- Short-term treatments
 - 4 of 10 interventions in 9 randomized, controlled trials showed an affect on adherence in at least 1 clinical outcome; 1 intervention improved adherence but not clinical outcomes

Adherence Interventions

- Long-term treatments
 - 36 of 81 interventions in 69 RCTs were associated with improvements in adherence, but only 25 were associated with improvements in outcome
 - Almost all the effective interventions were complex
 - Even the most effective interventions did not lead to large improvements in adherence or treatment outcomes
 - “Current methods for improving adherence for chronic health outcomes are mostly complex and not very effective.”

Adherence Interventions in HIV

- Most recent meta analysis
 - 48 studies, 4810 participants
 - Odds of achieving 95% adherence in intervention compared with control arm 1.66 (1.54-1.78)

Adherence Interventions in HIV

- “Published reports of behavioral interventions both recently and in the past decade suggest it is possible to intervene in ways that promote antiretroviral medication adherence, but effects are generally small and transitory and there are no clearly demonstrated simple strategies.”

Nonadherence Summary

- Common
- Associated with poor health outcomes
- Expensive
- Physicians can't accurately diagnose it
- Interventions to treat it are weak

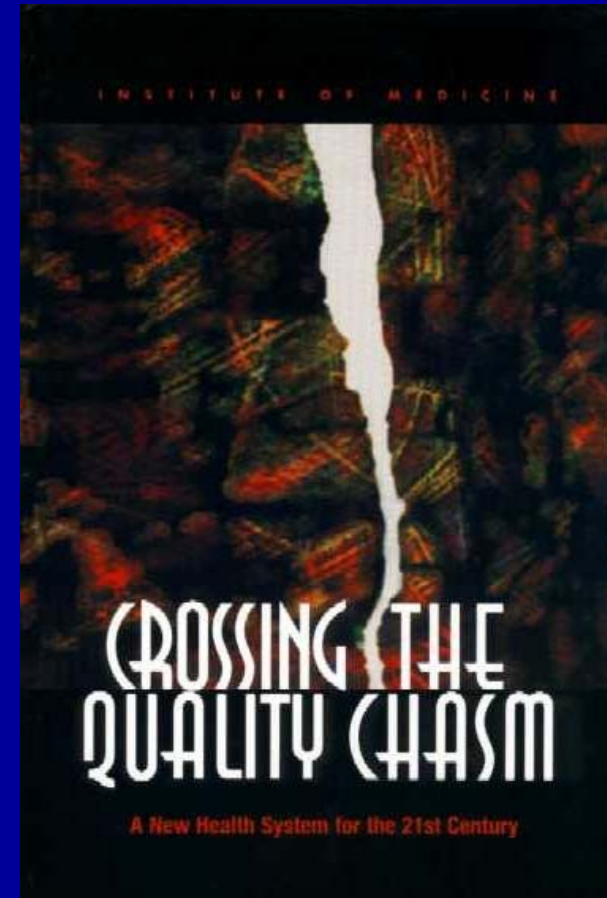
Principles

- Patient-centered care
- Adult learning theory
- Motivational interviewing

Patient-Centered Care

Patient-centered — “providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.”

Institute of Medicine, *Crossing the Quality Chasm*, 2001



Reprinted with permission from Committee on Quality of Health Care in America, Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century* Committee on Quality of Health Care in America. Washington, DC: Institute of Medicine National Academy Press; 2001.

How Do Adults Learn?

- Pedagogy vs. Andragogy
- Pedagogy
 - “paid” = child
 - “agagos” = leader of
- Principles of pedagogy
 - Teacher decides what is to be learned, how to learn it, when to learn it, and if it has been learned
 - Teacher directed; learner generally passive, follows directions

Andragogy (Malcolm Knowles)

- Translation: Man-leading
- Learners learn when they “need to know” when the information is important in their life
- Self-concept of the learner
 - Autonomous: responsible for their own decisions
 - Self-directing: dependent vs. self-directing learners
 - Resent and resist others telling them what to learn
- Prior experience of the learner
 - Resources and experience
 - Mental models
 - To ignore is to devalue the learner and their experience

Motivational Interviewing

- Motivational interviewing is a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence
- Non-judgmental, non-confrontational, and nonadversarial

Summary of Principles

- Patient-centered care as a characteristic of quality is here to stay
 - This has implications for medication adherence as a behavior
- It may be useful to base approaches to improving medication adherence on:
 - Well-established principles about how adults learn
 - Proven behavioral change methods and techniques

Practice

- Improving medication adherence is a skill
 - Diagnosis
 - Treatment

Making the Diagnosis

- Wrong diagnosis, wrong treatment
- Diagnosing nonadherence is difficult
 - If they are nonadherent
 - Why they are nonadherent
- Voluntary vs. involuntary nonadherence

Voluntary Nonadherence

- Not convinced it is really needed
- Doesn't think it is working
- Having a side effect or possible side effect
- Stigmatized by the diagnosis
- Stigmatized by medication taking
- Bad press for other medicines: rofecoxib and rosiglitazone
- Thinks they are on too many medicines
- Just doesn't like taking medications
- Confused

Involuntary Nonadherence

- Forgetting doses
- Forgetting to get refills
- Irregular schedule
- Working, childcare, etc
- Problems with personal organization
- Cost problems

The Hard Part

- One size does not fit all
 - Patients think about each medication differently (see Elliott et al)
- There are often multiple reasons why patients don't take their medications the way you would like them to

Making the Diagnosis

- Get the data (do a good history)
 - You can only get an accurate history by listening
 - Patients will only tell you the truth if they want to
 - Patients will NOT want to if you use it against them
- What works: listen, learn, explore; understand what their experiences have been (Pound et al)
 - Causal models
 - Attributions
 - “People almost never change without first feeling understood.” (Stone et al.)

Useful Questions

- How do you think these medications are working?
- What is it like taking all these medications?
- Do you think you are on too many medications?
- What's the worst part for you about taking all these medications?

Useful Questions

- What worries you the most?
- What do you think is going on?
- What is your theory?
- How do you put this all together?
- What questions do you have for me about your medications? (NOT: Do you have any questions?)
- What else?

Summary Points: Diagnosis

- Intentional and non-intentional nonadherence
- Adherence problems can be multifactorial
- Accurate diagnosis is a precondition for effective treatment . . . so you have to get a good history

Treatment

- Listen well
- Understand ambivalence
- Avoid direct persuasion
- Inform skillfully
- Be clear and direct

Listen Well

- Medical model: Patients come to you for answers and expertise
- Behavior change model: Answers lie within the patient, and finding those answers requires listening
- “A practitioner who is listening, even if it is just for a minute, has no other immediate agenda than to understand the other persons’ perspective and experience.”

Reflective Listening

- Repeat back to the patient what you just heard, using different words that guess at meaning

Reflective Listening

D: How do you think your medications are working?

P: OK.

D: But not great.

P: Well, I don't know.

D: You're worried about one of them.

P: I guess . . . the lipitor.

D: Your concerned it's not working.

P: No, I know that it is working but I worry about diabetes.

D: Tell me more about that.

P: Well, I read that statins can cause diabetes.

D: And you are concerned that you might get diabetes if you keep taking the lipitor

P: Right. What's the story there?

PROs and CONs of Taking ARVs

- PROs
 - Keep me from getting sick
- CONs
 - I feel fine right now
 - Don't like to be reminded I have HIV
 - Potential side effects
 - People may figure out I'm positive at work
 - Don't like taking pills
 - "I heard in my church that they can hurt you."

Understand Ambivalence

- People are often ambivalent about taking medications
- There are PROs and CONs to taking any medicine, particularly ARVs
- PROs favor change, CONs favor staying the same
- Goal of motivational interviewing is to produce change talk, to make the PROs outweigh the CONs

Avoid Direct Persuasion

- Doctor-centered information delivery
- Finger shaking or threatening
- Lecturing, convincing, or cheerleading

What to Do

- Listen reflectively
- Listen for change talk and **guide them** to expand on that

Change Talk

- Desire: Statements about preference for change
 - “I want to . . .”
 - “I would like to . . .”
 - “I wish . . .”
- Ability: Statements about capability
 - “I could . . .”
 - “I would . . .”
 - “I might be able to . . .”

Change Talk

- Reasons: Specific arguments about change
 - “I probably would feel better if I . . .”
 - “I need to have more energy to play with my kids.”
- Need: Statements about feeling obliged to change
 - “I ought to . . .”
 - “I have to . . .”
 - “I really should . . .”

Change Talk

- Commitment: Statements about the likelihood of change
 - “I am going to . . .”
 - “I will . . .”
 - “I intend to . . .”
- Taking steps: Statement about action taken
 - “I actually went out and . . .”
 - “This week I started . . .”

Inform Skillfully

- Ask permission
- Offer choices
- Talk about what others do
- Simplify the message

Inform Skillfully

- Ask permission
 - “Would you like to know some things other patients have done?”
 - “Would it be all right if I tell you one concern I have about this plan?”
 - “May I make a suggestion?”
 - “I have a couple of thoughts about what you just said, may I share them with you?”

Inform Skillfully

- Offer choices
 - “One approach would be to continue the medications that you were taking, another approach would be to try to find a regimen where you only had to take pills once a day. What are your thoughts?”
 - “One approach would be for you to concentrate on reducing your salt intake and losing weight, and if your blood pressure wasn’t better in 8 weeks, we could add another medication. Another approach would be to add the other medication today. Which approach makes more sense to you?”

Inform Skillfully

- Talk about what others do
 - “Some patients want to wait until they are clean to start taking ARVs, but others think it is important to start ARVs right away, and work on the drug problem at the same time or later. What do you think would work best for you?”
- Simplify the message
 - Chunk – check – chunk
 - Elicit – provide – elicit
 - Ask what they want to know
 - Provide the requested information
 - Ask if they understood

Be Clear and Direct

- Confusion about physicians' expectations is common
 - What the regimen is
 - How important it is to follow it rigorously
- Ask permission, but then make advice about adherence clear and direct
- Guide patients with information, clear advice, and support