Medication Adherence:
We Didn’t Ask and They Didn’t Tell

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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.
TREATMENT

ADHERENCE

OUTCOMES

PATIENTS DON’T TAKE THEIR MEDICINE AS PRESCRIBED 50% OF THE TIME

25% OF INITIAL PRESCRIPTIONS ARE NEVER FILLED

Trouble Getting Started
Predictors of Primary Medication Nonadherence

N = 423,616

24% = 101,668

Adapted from Fischer M AJM 2011 124;1081.e9-e22

Impact of Medication Adherence on Healthcare cost

Adapted from Sokol M Med Care 2005:43: 521–30
Adherence leads to total health care savings

Impact of Medication Adherence on Health Costs

Patients > 65 yo
85% OF PHYSICIANS BELIEVE THE MAJORITY OF THEIR PATIENTS ARE ADHERENT

85% OF PATIENTS SURVEYED STATE THAT THEY WOULD NOT TELL THEIR DOCTOR THAT THEY WERE NOT PLANNING ON BUYING A MEDICINE

Brown MT Family Practice Mgt; March/April 2013
McHorney, C Current Medical Research and Opinion 2009 25:1; 215-238

30% UNINTENTIONAL (Forgetfulness) 70% OTHER CAUSES

NONADHERENCE CAUSES

Osterberg L NEJM. 2005;353(5):487-497
WE DIDN’T ASK AND THEY DIDN’T TELL
video

Rationale for Hiding Nonadherence

✦ Social desirability bias
✦ Fear of being punished or admonished/dismissed
✦ Fear of embarrassment
INTERVIEWING IN A 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?

OBSTACLES

UNINTENTIONAL vs 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
✧ ALTRUISM
Variations in pill appearance and the risk of Nonadherence\(^1\)

**CHANGES IN PILL COLOR INCREASED RISK OF NONADHERENCE**

A PATIENT TAKING 5 MEDICINES, EACH PRODUCED BY 5 GENERIC MANUFACTURERS THEORETICALLY FACES OVER 3000 POSSIBLE ARRAYS OF PILL APPEARANCES (5\(^5\))

IF TAKING 9 MEDS, PATIENTS EXPERIENCE 36 OPPORTUNITIES/YR TO CHANGE APPEARANCE

80% OF ALL MEDS IN U.S. ARE NOW GENERIC\(^2\)

UK MANDATED INHALER COLORS BE COORDINATED

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**OBSTACLES**

- **PATIENT**
  - Cost/Health literacy/Access
  - Rational nonadherence
  - 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
  - Low refill consolidation
Competence and caring in relation to building trust


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ADHERENCE IS DRIVEN BY PATIENTS’ BELIEFS

A ‘non-adherent personality’ does not exist.

Adherence to medications is unrelated to adherence to self-care and lifestyle recommendations.

There is no consistent relationship between demographic characteristics and adherence.

Non-adherence is rational behavior—it is driven by patient beliefs about their treatment, disease, and prognosis as well as their objective experiences.

McHorney, C. Current Medical Research and Opinion 2009 25:1; 215-238

SUMMARY

✦ 50% OF PATIENTS ARE NONADHERENT
✦ MOST NONADHERENCE IS INTENTIONAL
✦ MEDICATION TAKING BEHAVIOUR IS COMPLEX
✦ ASSESS ADHERENCE IN BLAME-FREE WAY
✦ USE GENERICS BUT COLOR/SIZE CHANGE OFTEN
✦ USE DAILY DOSING
✦ MEDICATION SYNCHRONIZATION
✦ ENGAGE THE ENTIRE TEAM
✦ PROVIDE TIME TO DEVELOP TRUST