Patient Compliance: Adherence and Health Behavior Change

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LITERATURE REVIEW

- Literature search
  - Keywords: (Medication(s) OR Drug(s)? OR Pharmacotherapy) AND (Compliance OR Adherence OR Persistence).
  - Focused on articles published in English between 1994 and 2004 (and classic literature prior to this...e.g. Sackett and Haynes, Roter, etc.)
- 11,981 potential articles identified
- 2,956 useable abstracts were classified as controlled studies, reports, or reviews and opinions.
Interventions

- Theory based interventions
  - Adherence improvement ranged from 5% - 43%
- Disease Based Interventions
  - Adherence improvement ranged from 4% - 46%
- Dosage simplification
  - Adherence improvement ranged from 4% - 24%
- Reminders
  - Adherence improvement ranged from 1% - 41%
- Discharge Interventions
  - Adherence improvement ranged from 7% - 43%
- One-time intervention (no follow-up)
  - Adherence improvement ranged from 11% - 36%
- Self-care initiatives
  - Adherence improvement ranged from 12% - 17%

Why Noncompliance?

- Patients don’t know what to do
- Patients don’t know how to do (take) it
- Patients aren’t motivated
  - Ambivalent about:
    - Efficacy
    - Necessity
    - Cost
    - Number of times per day
    - Benefits - critical issue (Biogen study)
    - Downside (barriers - overcoming)
- Motivation is internal
- Patients manage illness, NOT healthcare providers
Conditions necessary for adherence - Patients must:

- Understand and believe the diagnosis - but not enough - smoking
- Be interested in their health
- Correctly assess the impact of the diagnosis
- Believe in the efficacy of the prescribed treatment
- Know exactly how and for how long to use the medication - b.i.d., p.c. & h.s.
- Know the onset of action and how they will know when med is working
- Find ways of using the medication that are not more trouble than the disease
- Value the outcome of the treatment more than the costs - m.s. patients
- Believe the HCP cares about them
- Be ready to use the medication
- Be involved - client-centered

When should we be most concerned about adherence?

- Chronic illness
- Asymptomatic
- Progressive (M.S.)
- Complex regimen or injection
- When cost is a barrier
- Side effects
- Patient knowledge and understanding are limited
Potential Barriers

- Age, Education, Insurance, Low literacy, Homelessness, Employment status, Ethnicity, Gender, Marital status, Living arrangement, Support, Household size, Responsibility for others' care, Family cohesion, Family adaptability, Stable home environment, Belief medications are working / hope they will work, Belief medications are not important or they're harmful, Depression, Other neuropsychological disorders, Lower cognitive function or impairment, Forgetfulness, Self-efficacy, Anger, Psychological stress, Anxiety, Health status, Having co-morbid conditions, Alcohol/tobacco/substance abuse, Tired of taking meds, Exercise, Ability to manage side effects, Motivation, Life satisfaction, Hopelessness, Locus of control, no locus of control, Positive attitude, Vigor / fighting spirit, Sense of mastery, Use of avoidance coping skills, Use of active behavioral or cognitive behavioral coping skills, Use of planful coping skills, Side effects or fear of side effects, High price / economic issues, Embarrassment / cause of social isolation / inconvenience, Number of medications (taking 3 or more), Doses per day (higher number), Regimen complexity, Previous adherence, Satisfaction with treatment information, Severity of disease, More symptoms, Monitoring symptoms, Age of onset, Episodic course of illness, Length of illness, Knowledge of disease, Perceived risk/susceptibility, Perceived threat of disease to wellbeing, Lack of a perceived threat of disease to wellbeing, Viral load in HIV patients, Positive /supportive/trusting relationship with provider, More outpatient visits, Lack of medications, Access to care, Male providers, Younger providers.

Take-Home Points

- Any attempts to improve adherence must involve the patient in the decision-making process. The patient must be involved in setting goals of treatment that are relevant to the patient improving adherence.

- Adherence with short-term therapy falls off rapidly unless the patient is properly educated about how long the medicine needs to be used, the intended effects, and what the patient can expect.
Take-Home Points

- For long-term therapies:
  - the benefit of the therapy must be clear,
  - the barriers must be discussed and strategies for overcoming them determined,
  - regimens need to be tailored to patient’s daily routines,
  - follow-up care should be provided, and
  - compliance and good or improving performance needs to be rewarded.

- *New ways of thinking and more comprehensive approaches are needed.*

Overview

- Over 40 years of research on treatment adherence—not much has changed—old models of care don’t work
- *Patients want more information, help concerning their drug therapy*
- *Patients manage their illness, not us*
- In year two of a chronic illness, rate of adherence drops below 50%
SOME THINGS TO REFLECT ON:

- Managing an illness requires change (behavior modification)
- $1 trillion in health care costs last year
- 51% behavioral
  - Not taking meds
  - Smoking
- Currently affecting 2% of these costs
- $150 billion in morbidity and mortality due to nonadherence

Change and Resistance

Opposite Sides of a Coin
“Given a choice between changing and proving that it is not necessary, most people get busy with the proof.”
John Galbraith

Resistance behavior is the person’s signal of dissonance in the relationship - a disturbance in rapport
WHAT TO REMEMBER

- When faced with ambivalence or resistance, EXPLORE, don’t EXPLAIN

The righting reflex (the desire for change in another) and paradoxical responses (resistance to that desire)
“What fits your busy schedule better, exercising one hour a day or being dead 24 hours a day?”

Sometimes ... when you cry ... no one sees your tears ...

Sometimes...when you are worried....no one sees your pain...

Sometimes ... when you are happy ... no one sees your smile ...

But fart just one time...
Motivational Interviewing
A Definition

Motivational interviewing is:
* person-centered
* directive
* method of communication for enhancing intrinsic motivation to change by exploring and resolving ambivalence.

KEY POINTS

- Look for opportunities to reflect back your understanding
- Identify the motivational issues
- Assess the patient’s understanding of illness and treatment
- Ask permission to give advice/information
- Explore the decisional balance
- When faced with ambivalence or resistance, **EXPLORE**, don’t explain – or shift
- Respect patient autonomy - they decide, **NOT** us
- 3 minutes of M.I. more effective than 17 min B.M.
Stacey Kendrick is a 73-year-old white female, 170 lbs, 5 feet tall. Twice a week she enjoys walking with a friend. Stacey tells you that she has not been walking lately, “cause it’s too hot.” Stacey drinks 2 to 3 cups of coffee each morning, eats a bowl of cereal and “straightens the house up”. She is 10 days late coming in for a refill. When asked if she is having any difficulty taking the medicine she states “Ya know, I don’t know about that dexta score and I just don’t think I need this. Besides, it gives me heartburn.”

- **Vitals/Notes**
- Medication – a bisphosphonate every week for osteoporosis
- DEXA T-score = -2.8 (less than -2.5 indicates osteoporosis)
The Trucker

Tyler Durden is a 43-year-old Caucasian male, weighs 215 lbs. and is 5'8" tall. Tyler is a long-haul truck driver and is on the road five days a week. He is divorced and has two children. He was diagnosed with type 2 diabetes mellitus and hyperlipidemia. His diet on the road is fatty foods (cheeseburgers, French fries, bacon, sausage, etc.) at local diners or fast food restaurants. He usually eats frozen TV dinners when at home. He drinks about 6 sodas each day while driving because he says they help him stay awake and alert. Family is very important to Tyler and he says he would like to live to see his grandchildren. He dropped off new prescriptions for a statin and medication for his diabetes almost two weeks ago and has not come back to pick them up. When you call him about them he said, "I feel fine….don’t worry about it."

Vitals:
- HbA1c is 9%
- Total Cholesterol = 370; LDL = 190; HDL = 30

Major Concepts

- Decisional Balance - the pros and cons
- Ambivalence - pros = cons
- Resistance - cons > pros
- Dissonance - uncomfortable feeling
- Goals - patient centered
- Readiness - how ready
- Importance - how important is the change
- Confidence - that the patient can change
- Autonomy - that the patient can change
- Respect
- Face - face saving
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FACE

- Face saving
- Autonomy face
- Competency, Approval
- Motivational Interviewing does NOT violate face
The Five General Principles of Motivational Interviewing

- Roll with resistance
- Express empathy
- Avoid argumentation
- Develop discrepancy
- Support self-efficacy
- READS

Types of empathy

- Early empathy
  - Patient: I hear this medicine can make your muscles weak.
  - HCP: That would be frightening to think about. May I give you some information that could address your concerns?

- Double-sided Reflection
  - Patient: Look, I know that my cholesterol is high and I don't eat a good diet. I just wish everyone would stop bugging me.
  - HCP: You see health problems if you maintain your current diet. You just want people to stop hassling you about it.
Other types of reflections

- **Shifting focus**
  - Patient: OK, I know I need to quit smoking because it's bad for my heart. I am just not ready.
  - HCP: OK...I hear you...I will back off. What do you think about talking about taking your medicine the way you need to, to get your blood pressure down?

- **Agreement with a twist**
  - Patient: Look, my blood pressure is NOT that high....there are plenty of other patients whose blood pressure is much higher.
  - HCP: You make a good point and that is important. There is a bigger picture here that maybe I haven't explained well. All blood pressure that is high is dangerous and can stress the heart. That is what I am concerned about.

Other types of reflections

- **Emphasizing Personal Choice and Control**
  - Patient: I am just not ready to quit smoking...
  - HCP: No one can make you quit. It is your choice...your decision. I am just very concerned about your smoking and your high blood pressure.

- **Reframing**
  - Patient1: I just don't like weighing myself every day and being reminded I have heart disease.
  - HCP: On the one hand, you don't like being reminded that you have an illness you wish you didn't have. On the other hand, you realize that weighing yourself gives you feedback about whether any changes have taken place with your heart disease, and this is very important in controlling it.
Example - Develop discrepancy

“Mr. Brown, you haven’t filled your blood pressure medicine in several weeks. What are your thoughts on how this might affect the goal you told me last time about reducing your risk of stroke?”

Example - Roll resistance

Patient: “I don’t like the idea of taking blood pressure medicine. I hear it can have bad side effects?”

Pharmacist: “It really is your decision. I would like to address your concern about side effects if I might...”
**Example - Avoid arguing**

Patient: “You’re not my doctor! I don’t have time to wait for some pharmacist to tell me about this medicine.”

Pharmacist: “Mrs. Rogers, I see you’re in a hurry, so I will only cover three critical things you need to know about taking the medicine. Would that be ok?”

**Example - support self-efficacy**

1. “Mr. Simmons, it’s great that you take your diabetes medicine every day as you planned. Keep it up! What things do you do to stay on track?”

2. “I really believe you’re on your way to better health since you are thinking about lowering your cholesterol.”
GAWPOW

Getting Trained - Next steps

- AU MITI - [www.cmsa.org/aumiti](http://www.cmsa.org/aumiti) - train-the-trainers
- Web-based interactive
- Teleconferences
- Pilot study
- Teleconference training
- Prompts on computer
- Follow-up training
- List serve
Ten Motivational Interviewing Tips (from Miller and Rollnick, Motivational Interviewing, 2nd ed, 2002)

- Always keep the spirit of motivational interviewing in the forefront of everything you do....the spirit is caring and love (agape) of the patient...they are what is most important....not your needs.
- Resistance and ambivalence are relational...when you experience them, you need to change how you are talking to the patient and EXPLORE....

Ten Motivational Interviewing Tips (from Miller and Rollnick, Motivational Interviewing, 2nd ed, 2002)

- Remember that change talk on the part of the patient means that the conversation is in the right direction...resistance is the signal that you have veered off course.
- Unless a current "problem" behavior is in conflict with something that the patient values more highly, there is no basis for motivational interviewing.
Ten Motivational Interviewing Tips (from Miller and Rollnick, Motivational Interviewing, 2nd ed, 2002)

- Your patients are your teachers. Every patient offers an opportunity to shape and refine your reflective listening skills. Every patient TEACHES YOU what is important to them if you pay attention.

- No matter where patients start in their readiness to do the target behaviors, you can tell you are on the right track when your communication enhances commitment/change talk.

Ten Motivational Interviewing Tips (from Miller and Rollnick, Motivational Interviewing, 2nd ed, 2002)

- Learn to notice your own emotional and behavioral responses to the patient's dissonance and ambivalence. Become more aware of what takes place inside you when the patient resists (keeping in mind that your communication is contributing to the resistance). Learn to be aware of your anxiety and learn to have it act as stimulus or cue to respond differently...to explore....to realize that the patient is providing valuable information that is disconcerting to YOU.

- Whenever you defend the "good side" of a patient's ambivalence or resistance (why the patient should take the drug, stop smoking, lose weight), you force the patient to take the "bad side" (not take the drug, etc). Remember, ambivalence occurs BECAUSE the patient weighs the good and the bad equally. Don't force the patient to defend the bad...EXPLORE! Ask questions...what would have to happen? What would make you more ready? Confident? Etc.
Ten Motivational Interviewing Tips (from Miller and Rollnick, Motivational Interviewing, 2nd ed, 2002)

- LISTEN, LISTEN, LISTEN and reflect back what you understand.
- Reflecting your understanding does NOT mean agreement....it simply means that you understand and are not judgmental.

Suggested Readings

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