

Improving Adherence to Headache Treatment

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Compliance vs. Adherence

- “The extent to which a person’s behavior in taking medication....corresponds with agreed recommendations from a healthcare provider”
 - Compliance implies a more passive listening to the doctor
 - Adherence suggests a partnership between patient and physician
- Includes medication-taking behaviors, appointment-keeping, referrals, life style issues, doctor-patient relationship.

WHO (2003). Adherence to long term therapies: evidence for action

Adapted from Rains, 2008

Treatment Adherence

Assessment Basics

- Does patient understand therapy rationale?
- Did patient receive adequate drug or behavioral Rx?
- Has patient adhered to therapy regimens?
- Did medication overuse problems affect outcome?
- At what point does patient medicate?
- What skills need to be developed for better management?
- Ask open-ended questions and follow coping skills model

Nonadherence in Headache

- 40% of patients don't return for follow-up appointments
- 50%-70% of patients fail to optimally use medications
- 20% of triptan prescriptions and 25-50% of prescriptions for preventive agents are never filled
- Only 24% of headache patients use medications as instructed after 1 year
- Adherence with life style modification is poor (22 to 85% adherence)

Edmeads, et al., 1993, Holroyd et al., 1988, Packard & Collins, 1986, Spierings et al., 1993, Rains JC, et al. *Headache* 2006;46:1387-1394, Hooden, et. al *Headache* 2000;40:377-383.

Nonadherence

Demographic Factors

- Lower education
- Lower income
- Improves with age up to very elderly
- Females > Males especially for psychotropic medications

Rains et al. *Headache* 2006; Gottlieb Drug Ben Trends 2000;12(6):57-62.
Adapted from Rains, 2008 AHS Scottsdale

Nonadherence

Provider/Practice Factors

- Doctor-patient relationship
 - quality, duration, and frequency of interaction
 - attitude toward the patient, interviewing skill
 - empathy, eliciting and respecting patient concerns
 - poor instructions or doing too much at once
- Rotating health care professionals
- Long wait time for appointment

Nonadherence

Regimen Factors

- Complexity of regimen
 - more frequently the medicine needs to be repeated, lower probability of adherence, **SIMPLIFY**
 - the greater the number of medications the greater the risk of nonadherence
 - long-term regimens have increased likelihood of problems
- Side effects
- Treatment costs
- Calendars increase before and decrease after office visits

Claxton et al. *Clin Ther* 2001; Steiner et al. *Ann Int Med* 2000; Rains, et al. *Headache* 2006
Dunbar-Jacob et al. *Ann Rev Nurs Res* 2000;

Nonadherence

Patient Factors

- Comorbid depression or anxiety
- Lower self-efficacy; external LOC
- Insight and acceptance of diagnosis
- Strong belief systems (“I don’t need medicine”)
- Adherence at the outset of treatment, past adherence
- Lack of social support and financial issues
- Inappropriate expectations
- Anger at previous physicians

Rains JC, et al. *Headache* 2006;46:1387-1394; Baskin *Neurol Sci* 2007;28:S1-S5

Dunbar-Jacob et al. *Ann Rev Nurs Res* 2000; Gottlieb *Drug Ben Trends* 2000

Consequences of Nonadherence

- “Treatment Failures”
- Overuse of immediate-relief medications and transformation to chronic daily HA
- More complex pharmacotherapy and problematic drug interactions
- Progressive disability and dysfunction
- Increased # of ED or acute care visits & phone calls to MD

Maximize Adherence

Education

- General headache education
- Educate about prophylactic vs. acute consequences of medication overuse
- Use simple language and avoid jargon
- Use both verbal and written instructions
- Limit major points, simplify
- Involve significant other
- Have patient restate the diagnosis, treatment

Maximize Adherence

Communication

- Elicit patients expectations and perceptions
- “Patient-centered”. Involve patient in decision-making. Establish a partnership
- Ask about barriers to care, and what is most important for the patient.
- Open-ended questions elicit more information and take less time.

Maximize Adherence

Communication

- Assessing disability leads to better recognition of severity and more comprehensive therapy
- “Ask-tell-ask” strategy contains 3 basic steps
 - Ask patient to explain their current understanding of their situation (“How many HA’s, How many days of HA, What meds do you take and when, How do your headaches affect your life, How has your medication use changed?”)
 - Tell patient by reflecting patients answers and clarifying and correcting misperceptions
 - Ask if you understood the information correctly. Ask if the patient understood the information you imparted. How does she feel about the treatment plan, etc.

Maximize Adherence

Behavioral

- Assess and treat co-morbid psych issues; reduce emotional distress; educate about conditioning
- Simplify Rx regimen with frequent revisits
- Clear written instructions as to dosage repeating dosage and limits for abortive agents
- Specific titration schedules for preventives and strategies for side effect management
- Once/day dosing better for preventives
- Consider past experiences with adherence to treatment in order to enhance placebo and reduce nocebo effects.

Reasons That Patients Delay Treatment and Their Tendencies

Reason	Respondents (%)
Waiting to see if really a migraine attack	69
Only want to take medication for severe migraine	46
Concern about side effects	37
Concern about medication effectiveness if taken too frequently	34
Concern about becoming drug dependent (addicted)	29
Limit on supply imposed by insurer	15
Concern about cost	9

Migraine Adherence Prevention

- Positive Factors
 - Clinician involves pt in decision-making
 - Physician takes time to explain potential side-effects
 - Clinician quotes published efficacy data
- Negative Factors
 - Weight gain
 - Sedation

Rozen *Headache* 2006;46(5):750-753.

Maximize Adherence

- Accurately identify migraine onset
- Keep medication readily available
- Clear written instructions as to dosage repeating dosage and limits for abortive agents
- Specific titration schedules for preventives and strategies for side effect management

Coping Skills Training

Acute Migraine

- Preparing for a migraine
- The beginning of the headache
- As intensity builds
- Coping with thoughts and feelings at critical moments
- Self-reflection and evaluation

Two Types of MOH

Simple (Type 1)

- Involves relatively short-term drug overuse
- Modest amounts of overused drugs
- Minimal psychiatric contribution
- No history of relapse after drug withdrawal

Complex (Type 2)

- Multiple Axis I and II psychiatric comorbidities
- History of relapse post-withdrawal
- These are the “difficult” ones

Pain and Learning in Complex MOH

- Obsessive drug taking
- Some patients treat anticipatory anxiety related to stressors that could trigger migraine or physical sensations perceived as migraine “prodromes”
- They may treat fear (cephalalgia phobia) believing that they will preemptively avoid migraine
- Medication reduces their emotional distress and “prevents” the migraine a powerful avoidance learning conditioning process
- May self medicate psychiatric symptoms

General Treatment Considerations for Complex (Type II) MOH

- Keep a headache diary and address directly and openly
- Contact family members and prescribers (contract)
- Educate about time course for improvement
- Explicit plan for tapering or discontinuing overused agents; avoid medication “stretching”
- Discourage abortive Rx for mild/moderate HA’s in short term with acute treatment limits
- Start prophylaxis both meds and psych/behavioral
- Challenge dysfunctional beliefs about narcotics, etc.
- Frequent revisits and BF during “washout” period

Behavioral Analysis

- **Antecedents:** Events or triggers that precede migraine or periods of increased headache.
- **Behavior:** Actions taken during prodrome, headache or escalation of pain. May experience cephalalgia phobia (pre-emptive meds), or may delay taking meds, may increase or decrease activities, pain behaviors.
- **Consequents:** The impact and effect on the environment. Reinforcement, family responses, changes in pain or anxiety levels effects previous behaviors. Avoidance learning.