

What we know about adherence to opioid therapy might surprise you: findings from qualitative studies of opioid use behaviors

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What is “medication adherence”?

- Framing has shifted over time
- What is adherence to opioid therapy? Larance et al (2011) propose two aspects:
 - medication adherence
 - programmatic adherence
- Most deviations from physician instructions on medication use are omissions

Do patients take medications as instructed?

- Short answer: Frequently no (DiMatteo, 2004)
- Why not? Multiple reasons (Pound et al, 2005)
 - Patient beliefs about the severity of the disease may conflict with providers' beliefs
 - Patients may not trust providers' motivations for prescribing a medication
 - Many patients have an aversion to medications and want to 'test' them

Do pain patients take opioids as instructed?

- Indirect evidence from urine drug screens (UDS)
- How often are UDS negative for a prescribed opioid?
 - 38% of patients screened for noncompliance (Couto et al, 2009)
 - 42% to nearly 1/3 of pain clinic patients (Manchikanti et al, 2004 and Manchikanti et al, 2005)
 - 25% of VA primary care patients (Sekhon et al, 2013)

Potential reasons for these findings

- Limitations of urine drug screens
- Patient populations
- Reason patients were given a UDS
- Other reasons
- Or... patients are choosing not to take opioids as instructed by omitting doses

Do pain patients take opioids as instructed?

- Direct evidence from qualitative studies
- Rates of analgesia rejection or opioid non-adherence:
 - Hospitalized patients: range from 26% (Lutomski et al, 2003) to 41% (McNeill et al, 1998) to 70% (Carr, 2002)
 - Cancer patients: 33% (Enting et al, 2007)
 - Pain clinic patients: 34% (Broekmans et al, 2010)
- Review article: 2%-52.9% of patients used less analgesic medication than directed (Broekmans et al, 2009)

Why don't pain patients take opioids as instructed?

- Patients have specific reasons for 'under-use:'
 - Side effects (Gregorian et al, 2010)
 - Fear of addiction or dependence
 - Lack of efficacy
 - Desire for alternative treatments
 - Etc. – Fishman et al (2000) provides 16 reasons
- Poor patient-provider communication

Our research

- Three linked studies of opioid use patterns
- Data from 191 Veteran patients given the Prescription Drug Use Questionnaire (Compton et al, 1998)
 - Response to 4 questions relevant to opioid use patterns
- Additional data from multiple structured assessments (e.g. side effects, depression) and electronic medical records (e.g. number of prescriptions)
- Patients had diverse pain conditions and duration of opioid use, but most had chronic pain

Study 1: Why do patients under-use prescribed opioids? (Lewis et al, 2010)

- 20% of patients did not take an opioid, despite having the medication available and being in pain
- Under-users reported more pain than other opioid users but filled only slightly fewer opioid prescriptions
- Communication problems between patients and providers about opioids were common
- Explanations for opioid under-use were consistent with research on reasons for non-adherence to other medications

Study 2: How do patients use their opioid

- 49% of patients with chronic pain reported symptomatic use of opioid medication (e.g., taking an opioid in response to increased pain) ^(Lewis et al, 2014)
- Symptomatic use of opioids was associated with poorer pain-related mental health, after controlling for pain duration and pain-related physical functioning
- Findings about symptomatic use are consistent with findings about the potential impact of reinforcing effects of opioid medication on functional outcomes

Study 3: What do patients do with unused opioids?

(Skinner et al, 2012)

- 65.4% retained some or all opioids even if they ceased taking it, and some accumulated large amounts
- 34.0% described sharing or diverting opioids at least once, most often receiving them from a family member or a friend
- What patients do with unused opioids is consistent with research on medication disposal and diversion

Why is opioid under-use not a focus of research?

- Over-use (abuse and misuse) is a highly visible, high consequence problem
- Patient behaviors associated with over-use are highly salient to prescribers
- Implicit belief that under-use is not problematic?
- Conceptual confusion: what does “adherence” mean when patients are instructed to take the opioid “as needed”?

Research implications of under-use

- Need for a clearer conceptualization of opioid non-adherence
- Implication for studies of associations between receipt of opioid prescriptions & patient outcomes
- Need for additional research on patient-provider communication about opioids
 - Conversations about the Informed Consent for Long-Term Opioid Therapy for Pain
http://vaww1.va.gov/vhapublications/ViewPublication.asp?pub_ID=3005

Clinical implications of under-use

- Assess opioid efficacy regularly: don't give patients medications they won't take
- Patients may be more interested in alternatives than you think: pain management ≠ opioid therapy (Wallace et al, 2014)
- Complete “Informed Consent for Long Term Opioid Therapy for Pain”
- Educate patients on appropriate storage and disposal of medications

Policy implications of under-use

- Direct resources toward non-opioid pain management treatments
- Create policies for safe and secure opioid disposal
 - Recent DEA published regulations about controlled substance disposal
http://www.deadiversion.usdoj.gov/drug_disposal/index.html

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