

◆ Introduction

The treatment of non-cancer chronic pain (NCCP) with opioids has become common in primary care populations, but knowledge of long-term effectiveness and adverse effects is limited. Investigations of self-reported experiences with pain and opioid use over long periods may increase our understanding of the benefits and risks of long-term opioid therapy.

◆ Methods

All patients 18 years and older in a primary care internal medicine and a family medicine practice who had been prescribed opioids for NCCP continuously for 1 year or more were identified (n=182). A survey about their experiences with NCCP and opioids was mailed to a systematic sample stratified by provider (n=107). Subjects were also asked to participate in a telephone interview and approve access to their medical records. The survey included items on pain characteristics, current and past treatments, opioid use, response, and adverse effects, and physical function. The interview allowed open-ended responses to broad queries about experiences with opioids. A qualitative researcher conducted the interviews and performed a content theme analysis by select patient characteristics (data not reported here).

◆ Results

- Response rate:**
- 46/107 surveys returned (44%)
 - 42 patients interviewed
 - 35 permitted review of their medical records
- Demographics:**
- Median age: 52 years (range 31-60 years)
 - 50% male; 50% female patients
 - 9% less than HS education; 30% HS grad/GED; 35% Some college/2-year degree; 26% at least a 4-year college degree
 - 23% currently employed; 77% unemployed
 - 91% White; 98% non-Hispanic
 - Self-rating of general health: 2% excellent; 9% very good; 43% good; 25% fair; 21% poor
- Opioid use:**
- 61% reported taking both long- and short-acting opioids
 - 33% reported taking short-acting opioids only
 - 20% had temporarily discontinued opioids at some time because of concerns about dependence

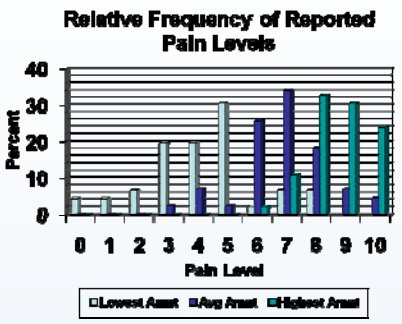
◆ Results

Types of Pain Reported Currently and Percent of Current Pain Present for > 5 Years		
Type of Pain	Current Pain N (%)	Duration > 5 Yrs (% of those with current pain) N (%)
Low back pain and/or sciatica	41 (89.1%)	31 (75.6%)
Tailbone or coccyx pain	14 (30.4%)	9 (64.3%)
Upper back pain	17 (37.0%)	9 (52.9%)
Neck pain	24 (52.2%)	13 (54.2%)
Knee pain	29 (63.0%)	13 (44.8%)
Hip pain	30 (65.1%)	16 (53.3%)
Hand, finger or forearm pain	22 (47.8%)	11 (50.0%)
Fibromyalgia	17 (37.0%)	8 (47.1%)
Pelvic pain	10 (21.7%)	5 (50.0%)
Nerve pain	14 (30.4%)	7 (50.0%)
Headache pain	23 (50.0%)	16 (69.6%)
Other chronic pain(s)	18 (39.1%)	8 (44.4%)

Frequency of Adverse Effects of Opioids			
Adverse Effect	Never N (%)	Sometimes N (%)	Often N (%)
Constipation	18 (40.9%)	16 (36.4%)	10 (22.7%)
Drowsiness	19 (42.4%)	20 (44.4%)	6 (13.3%)
Feeling 'spacey'	34 (77.3%)	8 (18.2%)	2 (4.5%)
'Fuzzy' thinking	35 (77.8%)	8 (17.8%)	2 (4.4%)
Over stimulated	36 (81.8%)	8 (18.2%)	0 (0.0%)
Nausea	31 (70.5%)	12 (27.3%)	1 (2.3%)
Itchiness	36 (81.8%)	6 (13.6%)	2 (4.5%)
Sweating	24 (54.5%)	12 (27.3%)	8 (18.2%)
Fatigue	22 (50.0%)	18 (40.9%)	4 (9.1%)

Daily Maximum Morphine Equivalent Doses	
	N* (%)
0 – 40 mg	8 (24.2%)
41 – 99 mg	7 (21.2%)
100 – 299 mg	7 (21.2%)
300+ mg	11 (33.3%)

* Among those patients surveyed who also agreed to a record review of their chronic pain medications



Reported Limitations in Vigorous and Moderate Activities		
	Vigorous Activities N (%)	Moderate Activities N (%)
Limited a lot	32 (69.6%)	22 (48.9%)
Limited a little	2 (4.3%)	15 (33.3%)
Not limited at all	0 (0.0%)	2 (4.4%)
Not applicable to me	12 (26.1%)	6 (13.3%)

Reported Limitations in Social Activities	
	N (%)
Not at all	6 (13.0%)
A little bit	7 (15.2%)
Moderately	14 (30.4%)
Quite a bit	11 (23.9%)
Extremely	8 (17.4%)

Reported Estimates of Adequacy of Doses of Opioid Medications		
	Immediate Release N (%)	Slow Release N (%)
Too low	10 (22.7%)	7 (22.6%)
About right	34 (77.3%)	24 (77.4%)
Too high	0 (0.0%)	0 (0.0%)

Duration and Effectiveness of Opioid Use	
Duration of Opioid Use	N (%)
< 1 Year	3 (6.7%)
1-3 Years	10 (22.2%)
3-5 Years	7 (15.6%)
5-7 Years	1 (2.2%)
7-9 Years	9 (20.0%)
10+ Years	15 (33.3%)
Opioid Use Effectiveness	
	N (%)
Not at all effective	2 (4.3%)
Somewhat effective	31 (67.4%)
Very effective	13 (28.3%)
% of Pain Relieved by Opioids	
	N (%)
< 50%	9 (20.0%)
50%-70%	21 (46.7%)
80%-100%	15 (33.3%)

Reported Reasons for Changes in Opioid Medication Over Time	
Reasons for Increasing Dose in Past Year*	N (%)
Medication not working as well	10 (43.5%)
Body used to meds	4 (17.4%)
Pain problem worsened	13 (56.5%)
Other reasons	8 (34.8%)
Reasons for Not Increasing Dose if Considered Too Low*	
	N (%)
Patient did not want increase	12 (26.1%)
Increase not approved by MD	11 (23.9%)
Side effects with higher dose	3 (6.5%)
No insurance cover	1 (2.2%)
Other reasons	7 (15.2%)

*Multiple reasons may have been checked

◆ Discussion

Qualitative and quantitative analyses confirm that most patients with NCCP receiving opioids credit them with providing several important benefits, but by several measures the perceived effectiveness of opioids and the range of functional improvement vary widely.

These patients report significant residual pain and significant impairment of physical and social functioning. More than 50% report average daily pain levels of 6-7 and > 25% report levels in the range of 8-10. Nearly three-quarters (70%) are limited 'a lot' in performing vigorous activities and 72% are moderately to severely limited in engaging in social activities.

Frequent occurrence of adverse effects is relatively uncommon except for constipation, drowsiness, and sweating which were each reported to occur 'often' with > 10% frequency among more than 30% of patients.

About 23% of patients believe that their prescribed doses of slow-release medication and/or immediate-release medication are too low despite the fact that about 50% report an increase in dosage over the last year. Patients report several reasons for not increasing the dose of medication including not wanting a higher dose (26%) and their doctor not approving a higher dose for them (24%).

◆ Conclusion

Patients perceive that long-term opioids for NCCP are effective, but the level of perceived effectiveness varies widely. One reason for this variation may be inadequate dose of medication, given that a substantial proportion of patients believe their dose is too low. Other reasons for limited effectiveness could include individual variation in biological handling of the drug, development of tolerance, and unrealistic expectations. Studies of appropriate dosing of long-term opioids are needed to assure patients receive maximal benefit while limiting the occurrence of adverse reactions. More objective evidence of long-term opioid effectiveness is also needed to confirm patient self-reports.

◆ Acknowledgements

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