

**ORIGINAL RESEARCH**

# Dialing back opioids for chronic pain one conversation at a time

In this study, significant opioid tapering was achieved following frank discussions and the use of a tapering protocol. And patient-physician relationships weren't jeopardized.

**ABSTRACT**

► **Purpose** Our study examined the efficacy of a primary-care intervention in reducing opioid use among patients who have chronic non-cancer pain (CNCP). We also recorded the intervention's effect on patients' decisions to leave (or stay) with the primary-care practice.

► **Methods** A family physician (FP) identified 41 patients in his practice who had CNCP of at least 6 month's duration and were using opioids. The intervention with each patient involved an initial discussion of ethical principles, evidence-based practice, and current published guidelines. Following the discussion, patients self-selected to participate with their FP in a continuing tapering program or to accept referral to a pain center for management of their opioid medications. Tapering ranged from a 10% reduction per week to a more rapid 25% to 50% reduction every few days. Twenty-seven patients continued tapering with their FP, and 6 months later were retrospectively placed in the Taper Group. Fourteen patients chose not to pursue the tapering option and were referred to a single-modality medical pain clinic (MPC). All patients had the option of staying with the FP for other medical care.

► **Results** At baseline and again at 6 months post-initial intervention, the MPC Group was taking significantly higher daily doses of morphine equivalents than the Taper Group. The Taper Group at 6 months was taking significantly lower average daily narcotic doses in

morphine equivalents than at baseline. No significant baseline-to-6 month differences were found in the MPC Group. Contrary to many physicians' fear of losing patients following candid discussions about opioid use, 40 of the 41 patients continued with the FP for other health needs.

► **Conclusions** FPs can frankly discuss opioid use with their patients based on ethical principles and evidence-based recommendations and employ a tapering protocol consistent with current opioid treatment guidelines without jeopardizing the patient-physician relationship.

Opioid prescriptions for chronic non-cancer pain (CNCP) have increased significantly over the past 25 years in the United States.<sup>1</sup> Despite methodologic concerns surrounding research on opioid harms, prescription opioid misuse among CNCP patients is estimated to be 21% to 29% and prescription addiction 8% to 12%.<sup>2</sup> Tragically, with the overall increase in opioid use for CNCP, substance-related hospital admissions and deaths due to opioid overdose have also risen.<sup>3</sup>

Increased opioid use began in 1985 when the World Health Organization expanded its ethical mandate for pain relief in dying patients to include relief from all cancer pain.<sup>3</sup> Opioid use then accelerated following Portenoy and Foley's 1986 article<sup>4</sup> and the 1997 consensus statement by the American

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Academy of Pain Medicine (AAPM) and the American Pain Society (APS),<sup>5</sup> with both organizations arguing that opioids have a role in the treatment of CNCP. Increased use of opioids for CNCP continued throughout the 1990s and 2000s, as many states passed legislation removing sanctions on prescribing long-term and high-dose opioid therapy, and pharmaceutical companies aggressively marketed sustained-release opioids.<sup>3</sup>

■ **A balanced approach to opioids.**

While acknowledging the serious public health problems of drug abuse, addiction, and diversion of opioids from licit to illicit uses, clinical research and regulation leaders have called for a balanced approach that recognizes the legitimate medical need for opioids for CNCP. In 2009 the APS, in partnership with the AAPM, published evidence-based guidelines on chronic opioid therapy (COT) for adults with CNCP.<sup>6</sup> In developing these guidelines, a multidisciplinary panel of experts conducted systematic reviews of available evidence and made recommendations on formulating COT for individuals, initiating and titrating therapy, regularly monitoring patients, and managing opioid-related adverse effects. Additional recommendations addressed the use of therapies focusing on psychosocial factors. The APS-AAPM guidelines received the highest rating in a systematic review critically appraising 13 guidelines that address the use of opioids for CNCP.<sup>7</sup>

■ **When opioid use is prolonged.** Most primary care physicians are aware of the risks of prolonged opioid use, and many have successfully tapered or discontinued opioid medications for patients in acute or pre-chronic stages of pain.<sup>8</sup> However, many physicians face the challenge of patients who have used COT for a longer time. The APS-AAPM guidelines may help primary care physicians at any stage of treating CNCP patients.

**METHODS**

**Purpose and design.** This retrospective study, which reviewed pretest-posttest findings between and within study groups, received an exempt status from Creighton University's institutional review board. We designed the study to determine the efficacy

of an intervention protocol to reduce opioid use by patients with CNCP who had been in a family physician (FP)'s panel for quite some time. Furthermore, because a common fear among primary care providers is that raising concerns with patients about their opioid use may cause those patients to leave their panel,<sup>9</sup> our study also recorded how many patients stayed with their FP after initiation of the opioid management protocol.

■ **Subjects.** This study tracked 41 patients with CNCP in 1 FP's panel. Inclusion criteria for participation was: 1) presence of CNCP for at least 6 months, 2) current use of opioid medication for CNCP, 3) age of at least 16 years, and 4) ability to read and write English. Two exclusion criteria were the presence of a surgically correctable condition or an organic brain syndrome or psychosis.

■ **Clinical intervention.** The FP identified eligible patients in his practice that were taking opioids for CNCP and initiated a discussion with each of them emphasizing his desire to follow the ethical principles of beneficence, nonmaleficence, respect for autonomy, and justice.<sup>10</sup> The FP also presented his reasons for wanting the patient to stop using opioid medication. They included his beliefs that:

- 1) COT was not safe for the patient based on a growing body of published evidence of harm and death from COT<sup>3</sup>;
- 2) long-term use of opioids could lead to misuse, abuse, or addiction<sup>2</sup>;
- 3) prolonged opioid use paradoxically increases pain sensitivity that does not resolve with discontinuation of opioid maintenance<sup>11,12</sup> (although pain tolerance does improve after opioid cessation); and
- 4) the patient's current pain medications were not in line with published guidelines for use of opioids for CNCP.<sup>6</sup>

Initially, 45 patients were eligible for the study, but 4 declined participation before the intervention discussion and were immediately referred to a single-modality medical pain clinic (MPC). These patients were not included in subsequent analyses. Of the remaining 41 patients, all had a discussion with the MD about ethical principles, practice guidelines,

 **INSTANT POLL**

**Do you try to taper opioids yourself, or do you send patients to pain clinics to handle that aspect of opioid management?**

I generally taper them myself.

I send patients to a pain clinic.

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TABLE 1

## Between-group comparisons of daily opioid usage at baseline and at 6 months post-initial intervention

Time period	Group				95% CI for mean difference		t	P	df
	Taper (N=27)		MPC (N=14)		LL	UL			
	Mean	SD	Mean	SD					
Baseline daily morphine equivalents	30.79	39.42	172.94	155.11	-232.62	-51.69	-3.37	.005	13.88
6-month daily morphine equivalents	15.94	31.56	134.20	163.66	-213.31	-23.23	-2.68	.018	13.5

CI, confidence interval; df, degree of freedom; LL, lower limit; MPC, medical pain clinic; SD, standard deviation; t, t-test result; UL, upper limit.

and the importance of opioid tapering. After the discussion, patients decided whether to continue with the plan to taper their opioid therapy or to not taper their therapy and so receive a referral to an MPC.

The 27 patients who chose to work with their FP started an individually tailored opioid-tapering program and were retrospectively placed in the Taper Group 6 months later. Tapering ranged from a slow 10% reduction in dosage per week to a more rapid 25% to 50% reduction every few days. Although evidence to guide specific recommendations on the rate of reduction is lacking, a slower rate may reduce unpleasant symptoms of opioid withdrawal.<sup>6</sup> Following the patient-FP discussion, the 14 patients who chose not to pursue the tapering option were referred to an MPC for pain management, but could opt to remain with the FP for all other medical care. At 6 months post-discussion, we retrospectively assigned these 14 patients to the MPC Group.

**Measures.** We obtained demographic and medical information, including age, gender, race, marital status, and medication level in morphine equivalents, from the electronic health record. Medication level in morphine equivalents was recorded at the beginning of the intervention and again 6 months later. All analyses were conducted using SPSS Version 24 (IBM Corp, Armonk, NY) with  $P < .05$  used to indicate statistical significance.

## RESULTS

**Between-group differences.** The Taper and MPC groups did not differ significantly on

demographic variables, with mean ages, respectively, at 57 and 51 years, sex 56% and 50% female, race 74% and 79% white, and marital status 48% and 50% married.

We found significant differences between the Taper and MPC groups on total daily dose in morphine equivalents at baseline and at 6 months following initial intervention. The Levene's test for equality of variances was statistically significant, indicating unequal variances between the groups. In our SPSS analyses, we therefore used the option "equal variances not assumed." TABLE 1 lists resultant means, standard deviations, individual sample *t*-test scores, and confidence intervals. The MPC Group was taking significantly higher daily doses of morphine equivalents than the Taper Group both at baseline and at 6 months following initial intervention.

**Within-group differences.** Paired sample *t* tests indicated significant differences between baseline and 6-month average daily narcotic doses in morphine equivalents for the Taper Group. No significant difference was found between baseline and 6-month daily morphine equivalents for the MPC group. These results indicated that patients who continued opioid tapering with the FP significantly reduced their daily morphine equivalents over the 6 months of the study. Patients in the MPC Group reduced morphine equivalents over the 6 months, but the reduction was not statistically significant. Paired sample *t* test results are presented in TABLE 2.

**Patient retention.** All but one of the 41 patients in the Tapering and MPC groups continued with the FP for the remainder of



**Patients who tapered opioid usage under FP guidance significantly reduced daily morphine equivalents over 6 months.**

TABLE 2

## Within-group comparisons of daily opioid usage at baseline and at 6 months post-initial intervention

Group	Baseline daily morphine equivalents		6-month daily morphine equivalents		95% CI for mean difference		t	P	df
	Mean	SD	Mean	SD	LL	UL			
Taper (N= 27)	30.79	39.42	15.94	31.56	5.58	24.12	3.29	.003	26
MPC (N=14)	172.94	155.11	134.2	163.66	-42.88	120.368	1.03	.324	13

CI, confidence interval; df, degree of freedom; LL, lower limit; MPC, medical pain clinic; SD, standard deviation; t, t-test result; UL, upper limit.

➤ Of the 14 patients who opted not to participate with their FP in opioid tapering, 13 remained with him for all other care.

their health care needs. Contrary to some physicians' fears, the patients in this study maintained continuity with their FP.

### DISCUSSION

Results of this study indicate that an intervention consisting of a physician-patient discussion of ethical principles and evidence-based practice, followed by individualized opioid tapering per published guidelines, led to a significant reduction in opioid use in patients with CNCP. The Taper Group, which completed the intervention, exhibited significant morphine reductions between baseline and 6-month follow-up. This did not hold true for the MPC Group.

The MPC Group, despite participating in the discussion with the FP, chose not to complete the tapering program and was referred to a single-modality MPC where opioids were managed rather than tapered. While the MPC group reduced daily opioid dose levels, the reduction was not statistically significant. A possible reason for no difference within the MPC Group may be that they had greater dependence on opioids, as their baseline average daily dose was much higher than that in the Taper Group (173 mg vs 31 mg, respectively). Although we did not assess anxiety directly, we speculate that the MPC Group was more anxious about opioid reduction than the Taper Group, and that this anxiety potentially led 4 patients to opt out of the initial FP discussion and 14 patients to self-select out of the tapering program following the discussion.

The FP intervention was successful for the Taper Group. For MPC patients, an en-

hanced intervention including behavior health strategies<sup>13</sup> might have reduced anxiety and increased motivation<sup>14</sup> to continue tapering. Based on moderate-quality evidence, APS-AAPM guidelines strongly recommend that CNCP be viewed as a complex biopsychosocial condition. Therefore, clinicians who prescribe opioids should routinely integrate psychotherapeutic interventions, functional restoration, interdisciplinary therapy, and other adjunctive nonopioid therapies.<sup>6</sup>

Opioid tapering within multidisciplinary rehabilitation programs is possible without significant worsening of pain, mood, and function.<sup>15</sup> Recently, an outpatient opioid-tapering support intervention showed promise for efficacy in reducing prescription opioid doses without resultant increases in pain intensity or pain interference.<sup>16</sup>

The tapering protocol in our study and the inclusion of behavioral health co-interventions are also recommended by the 2016 guidelines published by the Center for Disease Control and Prevention.<sup>17</sup> More information on the similarities and differences among the various guidelines is available online.<sup>18,19</sup>

■ **Caveats with our study.** Patients' entry into the Taper or MPC groups occurred through self-selection rather than random assignment. Thus, caution is recommended in interpreting findings of the FP intervention. And, we did not measure patients' levels of pain, so differences between groups may have been possible. In addition, the number of patients per group was relatively small, which may have accounted for the lack of significance in the MPC Group findings. Conversely, significant reductions in opioid use

in the small tapering sample suggests a relatively robust intervention, despite a lack of random assignment to treatment conditions.

These findings suggest that FPs can have a frank conversation about opioid use with their patients based on ethical principles and evidence-based practice, and employ a tapering protocol consistent with current opioid treatment guidelines. Furthermore, this approach appears not to jeopardize the patient-physician relationship. **JFP**

#### CORRESPONDENCE

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#### References

1. Manchikanti L, Helm S, Fellows B, et al. Opioid epidemic in the United States. *Pain Physician*. 2012;15:ES9-ES38.
2. Vowles KE, McEntee ML, Julnes PS, et al. Rates of opioid misuse, abuse, and addiction in chronic pain: a systematic review and data synthesis. *Pain*. 2015;156:569-576.
3. Sullivan MD, Howe CQ. Opioid therapy for chronic pain in the United States: promises and perils. *Pain*. 2013;154:S94-S100.
4. Portenoy RK, Foley KM. Chronic use of opioid analgesics in non-malignant pain: report of 38 cases. *Pain*. 1986;25:171-186.
5. The use of opioids for the treatment of chronic pain. A consensus statement from the American Academy of Pain Medicine and the American Pain Society. *Clin J Pain*. 1997;13:6-8.
6. Chou R, Fanciullo GJ, Fine PG, et al. Clinical guidelines for the use of chronic opioid therapy in chronic noncancer pain. *J Pain*. 2009;10:113-130.
7. Nuckols TK, Anderson L, Popescu I, et al. Opioid prescribing: a systematic review and critical appraisal of guidelines for chronic pain. *Ann Intern Med*. 2014;160:38-47.
8. Hwang CS, Turner LW, Kruszewski SP, et al. Primary care physicians' knowledge and attitudes regarding prescription opioid abuse and diversion. *Clin J Pain*. 2016;279-284.
9. Top 15 challenges facing physicians in 2015. *Medical Economics*. <http://www.medicaleconomics.com/medical-economics/news/top-15-challenges-facing-physicians-2015?page=0,12>. Accessed October 18, 2018.
10. Kotalik J. Controlling pain and reducing misuse of opioids: ethical considerations. *Can Fam Physician*. 2012;58:381-385.
11. Angst MS, Clark JD. Opioid-induced hyperalgesia: a qualitative systematic review. *Anesthesiology*. 2006;104:570-587.
12. Wachholtz A, Gonzalez G. Co-morbid pain and opioid addiction: long term effect of opioid maintenance on acute pain. *Drug Alcohol Depend*. 2014;145:143-149.
13. Hunter CL, Goodie JL, Oordt MS, Dobmeyer AC. *Integrated Behavioral Health in Primary Care*. 2nd ed. Washington DC: American Psychological Association; 2017.
14. Miller WR, Rollnick S. *Motivational Interviewing: Helping People Change*. 3rd ed. New York, NY: The Guilford Press; 2013.
15. Townsend CO, Kerkvliet JL, Bruce BK, et al. A longitudinal study of the efficacy of a comprehensive pain rehabilitation program with opioid withdrawal: comparison of treatment outcomes based on opioid use status at admission. *Pain*. 2008;140:177-189.
16. Sullivan MD, Turner JA, DiLodovico C, et al. Prescription opioid taper support for outpatients with chronic pain: a randomized controlled trial. *J Pain*. 2017;18:308-318.
17. Dowell D, Haegerich TM, Chou R. CDC Guideline for prescribing opioids for chronic pain - United States, 2016. *MMWR Recomm Rep*. 2016;65:1-49.
18. Barth KS, Guille C, McCauley J, et al. Targeting practitioners: a review of guidelines, training, and policy in pain management. *Drug Alcohol Depend*. 2017;173:S22-S30.
19. CDC. Common Elements in Guidelines for Prescribing Opioids for Chronic Pain. Injury Prevention & Control: Prescription Drug Overdose 2016. <http://www.cdc.gov/drugoverdose/prescribing/common-elements.html>. Accessed October 18, 2018.

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