A Retrospective Snapshot of Patients Prescribed Acute Versus Chronic Narcotic Therapy in a Resident-Provider Internal Medicine Outpatient Clinic

To the Editor: Prescribing narcotics remains a precarious undertaking in primary care clinics due to patient risks of addiction, withdrawal, misuse, and overdose. In this study, we examined in a resident-provider internal medicine outpatient clinic the potential differences between patients prescribed acute versus chronic narcotic therapy.

Participants were 223 internal medicine outpatients, 134 women (60.1%) and 89 men (39.9%), between the ages of 23 and 82 years (mean [SD] = 49.94 [11.27] years). As for marital status, 87 (39.0%) were single, 63 (28.3%) married, 55 (24.7%) divorced, and 18 (8.1%) widowed. With regard to employment, 47 (21.1%) were disabled, 83 (37.2%) employed, 59 (26.5%) employed/attending school, and 34 (15.2%) retired. The most commonly prescribed narcotics were a hydrocodone combination (114 [51.1%]), an oxycodone combination (65 [29.1%]), or tramadol (31 [13.9%]). Among the participants, 110 (49.3%) were designated as acute users, whereas 113 (50.7%) were deemed chronic users (the latter defined as 2 temporal prescriptions for narcotics within a 6-month time period with an index point between May and September 2014). The most common indication for narcotic prescription was musculoskeletal/nonspinal (88 [39.5%]) followed by spinal pain (66 [29.6%]). In this sample, 30 participants (13.5%) had signed a narcotic prescription contract and 88 (39.5%) had undergone urine drug testing.

Table 1. Comparisons of Acute and Chronic Narcotic Users (N = 223)[a]

Characteristic	Acute Prescription (n = 110)	Chronic Prescription (n = 113)	χ^2	$P <$
Sex				
Male	37 (33.6)	52 (46.0)	3.56	.08
Female	73 (66.4)	61 (54.0)		
Marital status			6.35	.10
Single	52 (47.3)	35 (31.0)		
Married	27 (24.5)	36 (31.9)		
Divorced	24 (21.8)	31 (27.4)		
Widowed	7 (6.4)	11 (9.7)		
Employment status			0.30	.97
Disabled	22 (20.0)	25 (22.1)		
Unemployed	42 (38.2)	41 (36.3)		
Working/school	30 (27.3)	29 (25.7)		
Retired	16 (14.5)	18 (15.9)		
Narcotic prescribed			26.49	.001
Fentanyl	1 (0.9)	4 (3.5)		
Hydrocodone combination	47 (42.7)	67 (59.3)	6.12	.02
Methadone	1 (0.9)	1 (0.9)		
Morphine	1 (0.9)	2 (1.8)		
Oxycodone combination	30 (27.3)	35 (31.0)	0.37	.56
Tramadol	28 (25.5)	3 (2.7)	24.21	.001
Other	2 (1.8)	1 (0.9)		
Indication for narcotic therapy			13.60	.05
Cancer-related	4 (3.6)	5 (4.4)		
Fibromyalgia	8 (7.3)	4 (3.5)	1.53	.23
Musculoskeletal/nonspinal	48 (43.6)	40 (35.4)	1.58	.23
Neuropathic pain	5 (4.5)	11 (9.7)	2.25	.15
Rheumatologic pain	0 (0)	2 (1.8)		
Spinal pain	25 (22.7)	41 (36.3)	4.92	.03
Other	20 (18.2)	10 (8.8)	4.17	.05
Signed narcotic agreement	3 (2.7)	27 (23.9)	21.45	.001
Coadministered controlled substances				
Fentanyl	1 (0.9)	2 (1.8)		
Hydrocodone	6 (5.5)	3 (2.7)		
Methadone	1 (0.9)	2 (1.8)		
Morphine	1 (0.9)	1 (0.9)		
Oxycodone	3 (2.7)	10 (8.8)	3.82	.10
Tramadol	11 (10.0)	8 (7.1)	0.61	.48
Alprazolam	11 (10.0)	13 (11.5)	0.13	.84
Clonazepam	11 (10.0)	11 (9.7)	0.00	1.0
Lorazepam	1 (0.9)	3 (2.7)		
Other benzodiazepine	2 (1.8)	9 (8.0)		
Psychostimulant	0 (0)	1 (0.9)		
Zolpidem	9 (8.2)	12 (10.6)	0.39	.65
Other	4 (3.6)	10 (8.8)	2.58	.17
Urinary drug screen	21 (19.1)	67 (59.3)	37.71	.001

[a]Values are n (%).

Comparisons between those patients prescribed acute narcotics and those prescribed chronic narcotics are presented in Table 1. For categorical data, χ^2 tests were employed to test for statistically significant between-group differences. For variables with more than 2 categories (4 cells), an omnibus χ^2 test was performed that included all categories for that variable. When statistically significant ($P < .05$), follow-up χ^2 analyses were performed for those categories that contained at least 12 patients total (results of these follow-up tests are presented in Table 1 as well). Because patients could have more than 1 type of coadministered controlled substance, there was no omnibus test for all categories, but rather a series of individual χ^2 analyses were performed for those categories containing at least 12 patients total (see Table 1).

Inspection of Table 1 reveals that there were no statistically significant differences between patients prescribed acute versus chronic narcotic therapy with regard to sex, marital status, employment status, or coadministration of an additional controlled substance. However, there were several statistically significant between-group differences. Specifically, compared to acute narcotic users, chronic narcotic users were more likely to be prescribed a hydrocodone combination, to suffer from spinal pain, to have signed a narcotic contract, and to have had a urinary drug test. Likewise, chronic users were less likely to be prescribed tramadol or to have a narcotic prescribed for "other" types of pain. The only noncategorical variable for which χ^2 analysis was not appropriate was patient age. A 1-way analysis of variance revealed no statistically significant difference between the ages of acute (mean ± SD = 50.25 ± 11.44) and chronic (mean ± SD = 49.63 ± 11.15) users of prescribed narcotics, $F_{1,221} = 0.17$, $P < .69$.

In this study, we encountered surprisingly few differences between patients prescribed acute versus chronic narcotic therapy. Moreover, the differences we did encounter were of minimal concern clinically. Potential limitations of this study include the small sample size and use of patients from a training clinic, ie, concerns about the ability to generalize findings and the presence of supervisors may have resulted in more conservative prescribing patterns. However, contrary to our suspicions, patients prescribed chronic narcotic therapy in this clinic demonstrated few differences in comparison with those prescribed acute narcotic therapy.

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