

A Survey of Opioid-Dependent Patients Treated With Buprenorphine—Medication Use and Misuse

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Introduction

- Buprenorphine is a key therapeutic option in successful opioid-dependence treatment planning^{1,2}
- The combination of buprenorphine and naloxone may have less potential for diversion and abuse/misuse⁵
- However, little is known about patient experiences and attitudes during buprenorphine-based therapy
- To gather information about patients' experiences with buprenorphine therapy, the National Alliance of Advocates for Buprenorphine Treatment (NAABT), a patient-centered advocacy organization, conducted an online survey of buprenorphine-treated patients between April and July 2014
- The survey revealed interesting information on product use and misuse

Methods

- A medical communications consulting firm (The Curry Rockefeller Group, LLC [CRG], Tarrytown, NY) was commissioned by the sponsor (BioDelivery Sciences International, Inc. [BDSI], Raleigh, NC) to contract with a survey research firm (National Business Research Institute, Inc. [NBRI], Addison, TX) to develop a Web-based survey that was approved and administered by the NAABT
- An initial draft of the survey instrument, developed by NBRI and CRG, was finalized after consultation with a steering committee of addiction medicine experts in April 2014

- The resulting 81-item questionnaire was designed to record patient demographic information, addiction history, and current treatment data as well as patients' assessments of their physician relationships, medication, medication use and misuse, and negative side effects

—Medication and professional services payments were also examined

—The survey was conducted in compliance with privacy provisions of the Health Insurance Portability and Accountability Act

- Patients were eligible to participate if they had been prescribed buprenorphine; they were recruited using advertisements on the NAABT website, banner advertisements on other Web pages, and an e-mail broadcast to NAABT registrants

—Survey respondents could remain anonymous

- As an incentive, potential survey respondents were able to enter into a drawing for monetary compensation ranging from \$50 (40 prizes available) to a grand prize of \$500 (1 prize)

- Medication use revealed in this survey was compared with published prescription patterns for buprenorphine⁶ as a check of whether the survey sample was representative of established prescribing patterns

- Survey responses are reported using descriptive statistics

Results

Demographics

- A total of 606 people responded to the survey; both sexes were represented almost equally (female, 52%; male, 48%) (Table 1)

—A majority of the patients (63%) were ≤44 years old

—Slightly more than half were employed (53% full or part time)

—Essentially a quarter (24%) had a bachelor's degree or higher

Table 1. Patient Characteristics

Characteristic	Patients, % (N=606)
Sex	
Female	52
Male	48
Age groups, y	
19–24	4
25–34	34
35–44	25
45–54	20
55–65	15
>65	2
Relationship status	
Single	24
Married	37
Divorced	13
Separated	3
Unmarried, cohabiting with partner	18
In relationship, not cohabiting	5
Employed when starting buprenorphine treatment	
Yes	54
No	46
Employment status	
Employed full time	40
Employed part time	13
Unemployed or between jobs	12
Unemployed, not actively seeking employment	3
Disabled	14
Stay-at-home	10
Retired	4
Full-time student	4
Education	
Some high school	6
High school diploma, GED, or HSED	21
Some college	37
Associate's degree	12
Bachelor's degree	16
Master's degree	6
Post-master's degree	2
Live with children (<18 y)	
Yes	39
No	61

GED, General Educational Development; HSED, High School Equivalency Diploma.

Characteristics of Addiction

- Patients' self-reported characteristics of their opioid addiction are shown in Figure 1 A–D
- A majority of patients (58%) began using opioids at <25 years old, initially for acute or chronic physical pain; 90% have been dependent for ≥2 years

Experience With Buprenorphine

- Patients' self-reported experience with buprenorphine products, dosing schedules, and length of treatment are summarized in Figure 2 A–C

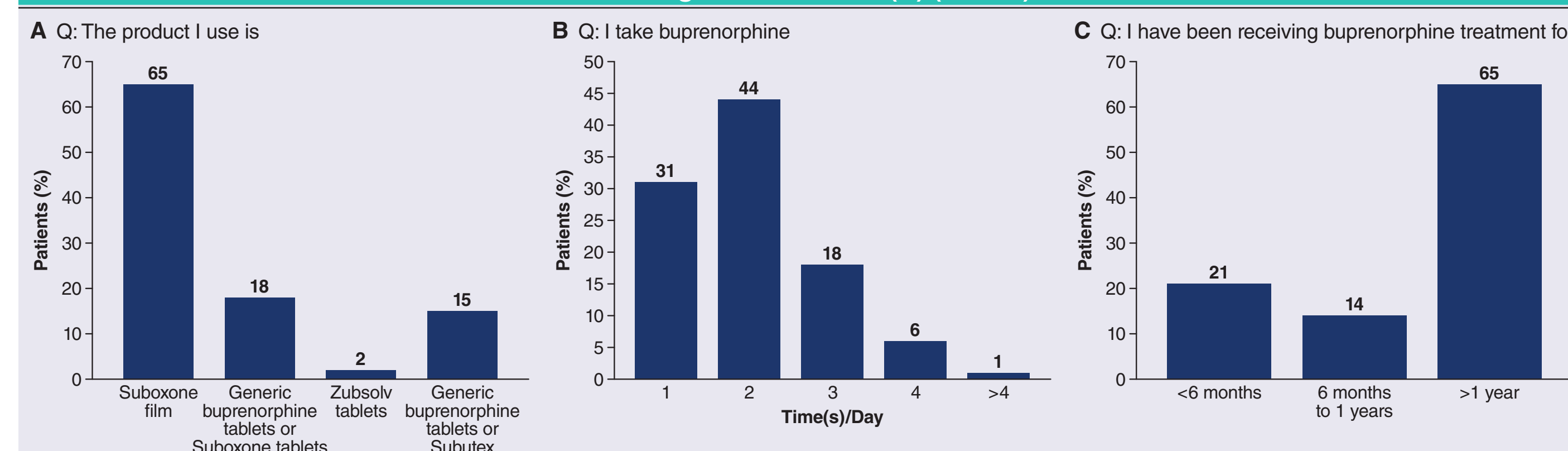
- A comparison of patients' survey responses with published prescription data⁶ indicates that the product types used by respondents are representative of the patient population receiving buprenorphine at the time the survey was conducted

Experience With Misuse and Diversion

- A slight majority (56%) of patients indicated that they had taken a smaller dose than prescribed, most commonly to create an emergency stockpile (33%, 112/341) (Figure 3 A–B)

- Most patients received their first dose of buprenorphine through a prescription from their doctor; self-reported misuse ("recreational" use) was uncommon (Figure 4 A–B)

Figure 2. Patients' Self-reported Experience With Buprenorphine Products* (A), Dosing Schedules (B), and Length of Treatment (C) (N=606)



*Suboxone® (buprenorphine and naloxone) sublingual film and Subutex® (buprenorphine) sublingual tablets are trademarks of Reckitt Benckiser Pharmaceuticals Inc. Zubsolv® (buprenorphine and naloxone sublingual tablets) is a trademark of Orexo US, Inc.

Figure 3. Length of Time at Reduced Dose (A) and Reasons for Reduced Dose (B) (n=341)

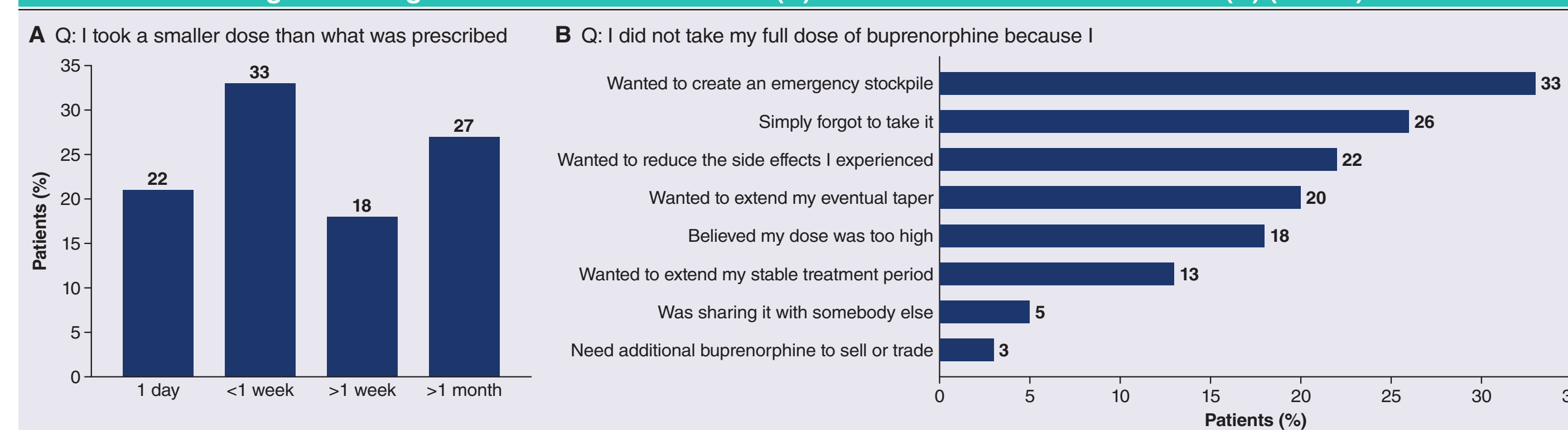
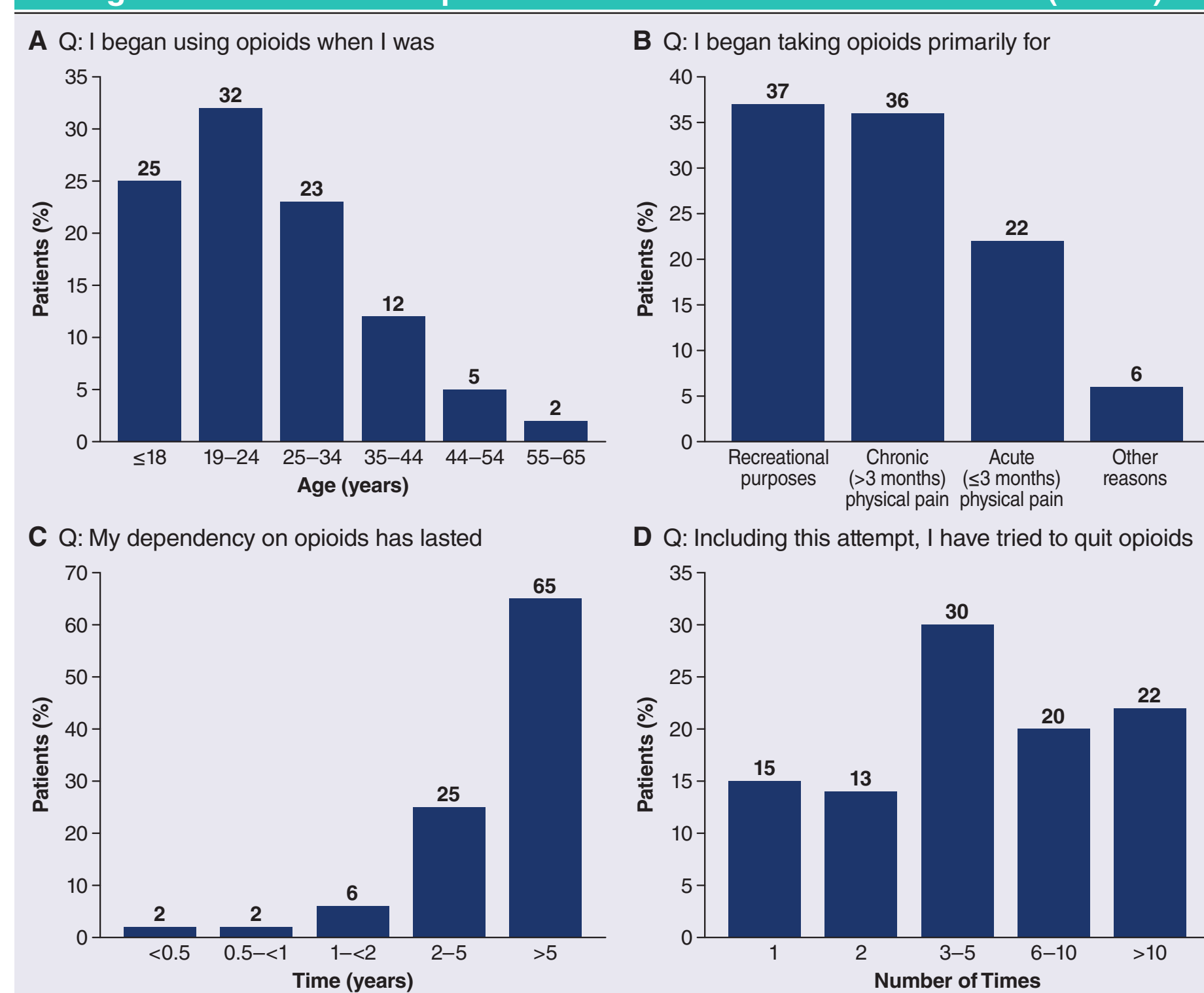


Figure 1. Patients' Self-reported Characteristics of Their Addiction (N=606)



Results (cont.)

—Recipients of diverted medication used it primarily for self-treatment; most cited the prohibitive cost of a physician visit as a barrier to obtaining a prescription (Figure 4 C–D)

- Among the sample assessed via this confidential online survey, self-reported misuse was relatively uncommon: 23 (3.8%) participants reported that they had "used buprenorphine for recreational purposes"

—Among those using buprenorphine "recreationally," most did so only for a short period of time, using it primarily sublingually when used for this purpose, but also via nasal inhalation (Figure 5 A–B)

- Only 55 patients (9%) indicated that they had "exchanged buprenorphine for financial benefit"; of these, nearly half (47%) stated they sold their medication to "afford their treatment" (Figure 6 A–B)

Figure 4. Percentage of Patients Receiving Buprenorphine Without Prescription (A) and Use of Diverted Buprenorphine (B–D)

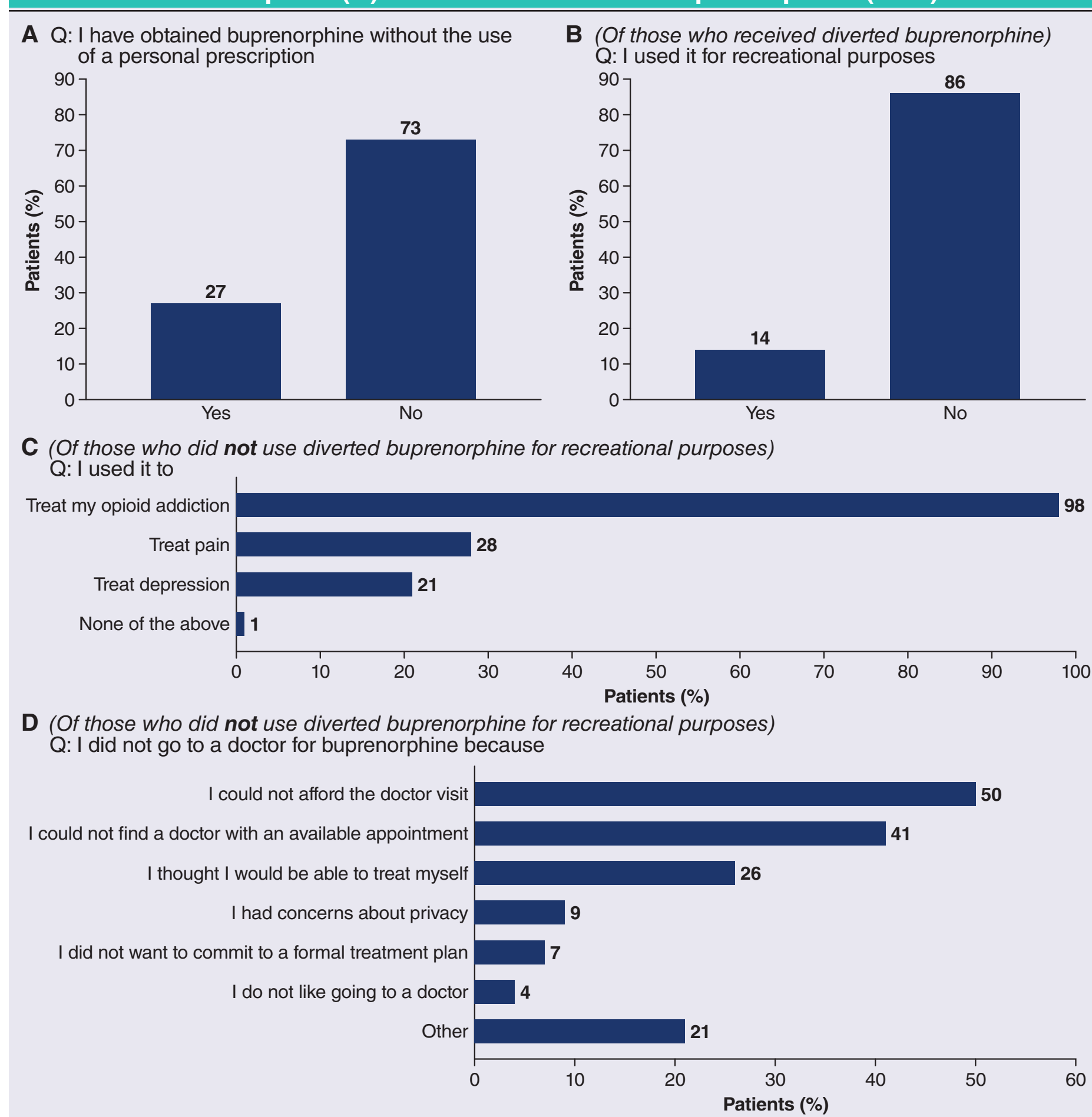


Figure 5. Length of Time of Recreational Use of Buprenorphine (A) and Route of Administration (B)

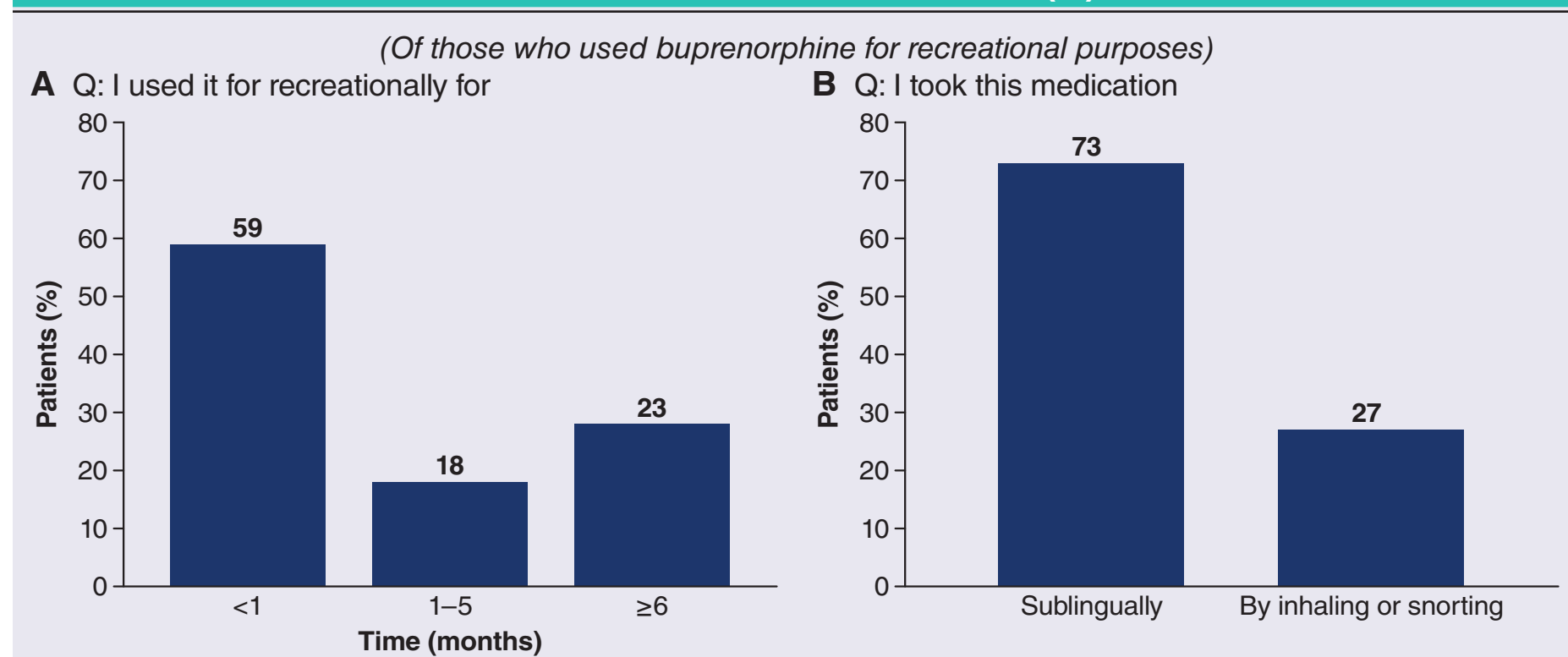
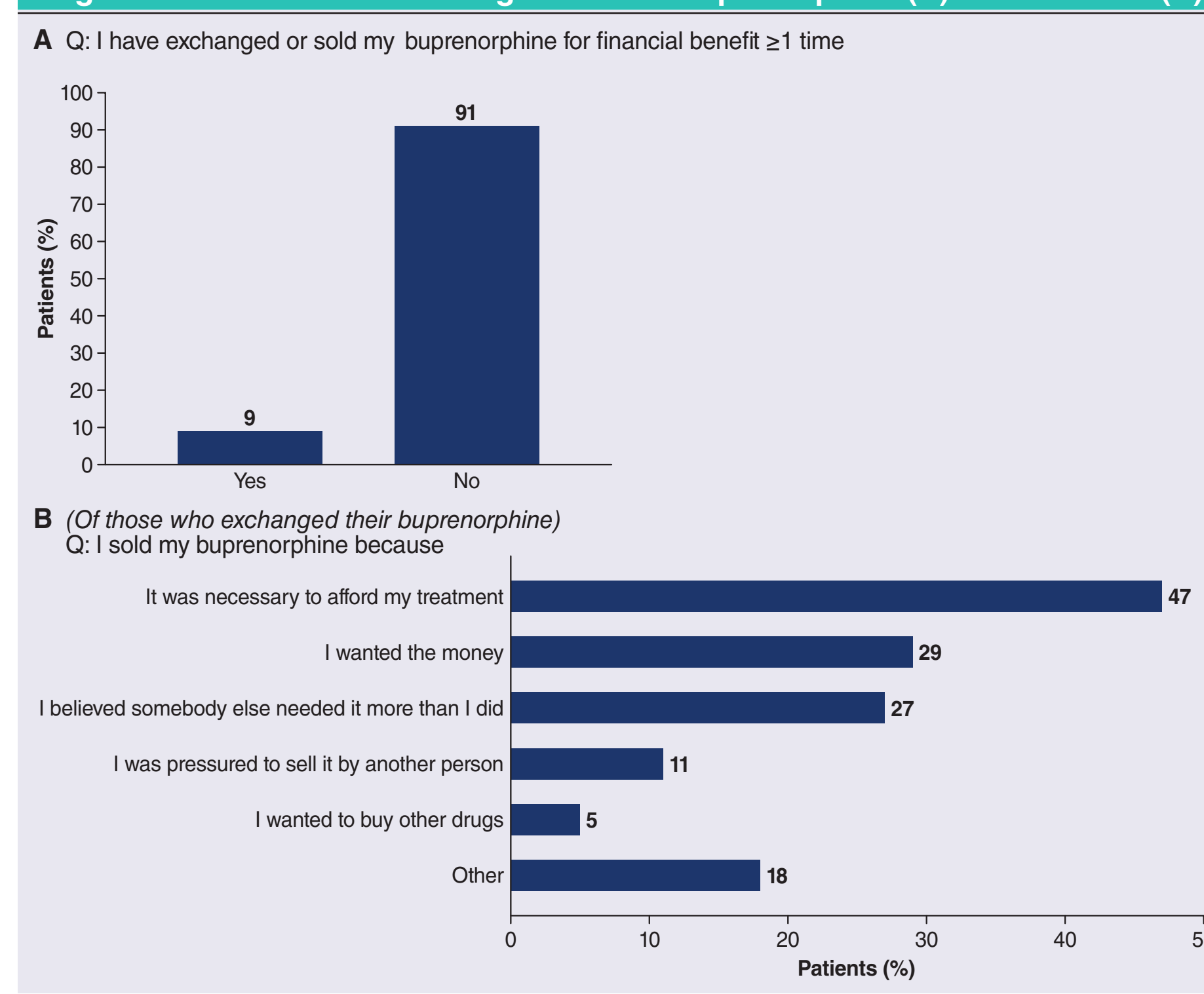


Figure 6. Patients Who Exchanged or Sold Buprenorphine (A) and Reasons (B)



Conclusions

- Survey results show that product misuse and diversion tend to take place on a smaller scale than what might be anticipated, and is primarily driven by patients' concerns about maintaining access to buprenorphine
- Financial barriers to treatment access were a concern for individuals who obtained buprenorphine without a prescription, as well as for those who sold their buprenorphine supplies to others

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Acknowledgment

This research was funded by BioDelivery Sciences International, Inc. Editorial assistance was provided by The Curry Rockefeller Group, LLC, and was funded by BioDelivery Sciences International, Inc.

Disclosures

Dr. Genie L. Bailey's institution has received grant support from the National Institute on Drug Abuse; Titan Pharmaceuticals, Inc.; BioDelivery Sciences International, Inc. (BDSI); and Orexo. Dr. Bailey has received travel support from Titan Pharmaceuticals and BDSI. She is on advisory boards for Braeburn Pharmaceuticals, BDSI, and Camurus AB, and is on the speakers bureau for BDSI. Dr. Monique Ziebro has nothing to disclose. Mr. Timothy P. Lepak has received grant support from Reckitt Benckiser Pharmaceuticals; Alkermes, Inc.; Orexo US, Inc.; and BDSI. Dr. Richard G. Soper is a consultant for BDSI; Gerson Lehrman Group, Inc.; and Indivior plc. Dr. Michael M. Miller has received honoraria from Alkermes plc and BDSI for participation in training to be a member of the speakers bureau and for speakers bureau presentations. Dr. Miller has received a stipend from Braeburn Pharmaceuticals for participation on a Physician Advisory Board; serves on a Physician Advisory Board for BDSI; and is a consultant for The Curry Rockefeller Group, LLC.

