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The availability of ancillary counseling in the practices of physicians prescribing buprenorphine

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Abstract

Objectives—We set out to examine physicians' perceptions of the provision of ancillary services for opioid dependent patients receiving buprenorphine.

Methods—An email invitation describing the study was sent out by the American Society of Addiction Medicine to its membership (approximately 3,700 physicians) and other entities (for a total of approximately 7,000 email addresses). Email recipients were invited to participate in a research study funded by the National Institutes on Drug Abuse involving completion of an online survey; 346 physicians completed the survey.

Results—The majority of the 346 respondents were internal or family medicine (37%) or addiction medicine providers (30%) who were practicing in urban (57%) or suburban settings (27%). Most respondents reported either offering (66%) or referring patients for ancillary counseling (31%). Interventions that were most frequently offered or referrals provided were individual counseling (51%) and self-help groups (63%), respectively. Counseling availability differed significantly by provider specialization for any, individual, group, family or couples, and self-help groups.

Conclusions—Generally, respondents reported compliance with ancillary counseling requirements for buprenorphine treatment of opioid use disorder. In addition to examining the efficacy of a variety of ancillary counseling services for patients receiving opioid agonist treatment, further research should examine physicians' attitudes toward the role of such counseling in buprenorphine treatment. While the study sample was relatively large, the generalizability of the findings is unclear, suggesting that further investigation of the availability of ancillary counseling in buprenorphine treatment among a larger nationally representative sample of providers may be warranted.

Keywords

Opioid use disorder; buprenorphine; physician; counseling

1. INTRODUCTION

Buprenorphine is effective in treating opioid use disorder (Ling et al., 1998, Fudala et al., 2003, Fiellin et al., 2006, Schottenfeld et al., 2008) and is considered an essential medication for this indication (World Health Organization, 2013). Since receiving Food and Drug Administration approval in 2002, buprenorphine has significantly increased treatment capacity for opioid use disorder in the U.S. (Arfken et al., 2010, Greene, 2010). However, one barrier to this approach is physician concern about the lack of available ancillary psychosocial services (Netherland et al., 2009, Arfken et al., 2010, Hutchinson et al., 2014). In contrast to methadone maintenance, which is usually provided in opioid treatment programs, treatment of opioid use disorder with buprenorphine occurs in diverse medical settings and onsite psychosocial services are not required. Instead, as defined in the buprenorphine waiver program established by the Drug Addiction Treatment Act of 2000¹, buprenorphine providers need only to have the “capacity to refer the patients for appropriate counseling.”

An evaluation of the waiver program was conducted by the Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment (SAMHSA/CSAT) in 2004–2005 and found that solo provider practice was the most common setting for buprenorphine induction, and 59% of patients who received buprenorphine reported attending at least one counseling session (Stanton et al., 2005, Stanton et al., 2006). Similarly, in a study of buprenorphine treatment at a federally qualified health center, 53% of patients reported attending at least one onsite counseling visit (Haddad et al., 2013). Since the inception of the waiver program, buprenorphine has been prescribed by an increasing number of primary care physicians (Walley et al., 2008, Mark et al., 2009, Turner et al., 2015). Because these providers may have less access to immediate services or referrals, there is a clear need to examine the availability of ancillary counseling in buprenorphine treatment practices. The examination of counseling availability may be particularly important to assess given that studies to date have not found robust support for the efficacy of providing psychosocial interventions in combination with buprenorphine to treat opioid use disorder. A recent systematic review of counseling in medication assisted treatments reported that of 8 studies conducted between 2008 and 2014 that examined buprenorphine treatment, 3 found a significant effect of psychosocial interventions (broadly defined) on treatment retention or drug use (Katz et al., 2011, Ruetsch et al., 2012, Brigham et al., 2014, Dugosh et al., 2016). The purpose of the current study was to examine, among a national convenience sample of buprenorphine providers, the extent to which patients are offered, referred, or receive counseling. We also examined whether primary care providers differed in referral, availability, and patient use of counseling from other clinical specializations.

¹Drug Addiction Treatment Act of 2000. XXXV--Waiver authority for physicians who dispense or prescribe certain narcotic drugs for maintenance treatment or detoxification treatment. October 17, 2000;H.R. 4365:122–127. Accessed at <http://buprenorphine.samhsa.gov/fulllaw.html> on October 14, 2015.

2. METHODS

2.1 Participants and Procedures

In November and December 2010, an email invitation was sent out by the American Society of Addiction Medicine to its membership (approximately 3,700 physicians) and other entities (for a total of approximately 7,000 email addresses). Email recipients were sent a survey link with an introductory email inviting them to participate in a study funded by the National Institutes on Drug Abuse on ancillary services for opioid dependent patients receiving buprenorphine; 346 physicians completed the survey. One reminder email was sent approximately 4 weeks after the first request. Approximately 85% of responses occurred before the reminder email. The Web-based survey was hosted on SurveyMonkey© and was designed to be completed in less than 15 minutes. Participants received no remuneration. This study, involving the use of survey data without subject identifiers, was presented to the Institutional Review Board at the Yale University School of Medicine and was exempted from review.

2.2 Survey

The study questionnaire was based on the SAMHSA/CSAT *Buprenorphine Waiver Survey: Evaluation of the Buprenorphine Waiver Program* (Stanton et al., 2006). Survey items examined: 1) medical practice characteristics (number of buprenorphine patients treated monthly; practice setting [urban, suburban, small town or rural]; practice type [solo, clinic with teaching hospital, staff model HMO outpatient, multiple specialty groups, community clinic, specialty substance abuse, group practice, other hospital clinic, single specialty group, opioid treatment program, community mental health, other]; primary area of clinical specialization [addiction medicine, psychiatry, internal medicine, family medicine, infectious disease, HIV medicine, other]); 2) provider characteristics (years since medical school graduation, years prescribing buprenorphine, allocation of work activities [patient treatment, administration, research, other/mixed]); 3) description of patients receiving buprenorphine (gender, age, race or ethnicity, insurance status, and opioid of choice); 4) availability of ancillary counseling services (individual, group, family or couples, telephone or Web-based, self-help support group [e.g., NA, AA]), including whether the provider offers or provides referrals to these services; and 5) estimates of counseling service use. For individual, group, family or couples counseling, the survey items specified that the counseling was provided by “a trained professional.” Regarding ancillary service availability, participants were provided with a list of options, and were informed: “The following questions are about ancillary services that may be available to your buprenorphine patients.” For each service listed, possible answer choices included, “Easily Available,” “Available,” “Not Available,” and “Don’t Know.” Regarding whether the provider offered or provided referrals, participants were presented with the same list used in the question about ancillary service availability, and were asked for each service: “Do you offer or refer buprenorphine patients for these services?” Possible answers included, “Offer,” “Refer,” and “Not Available.”

2.3 Data Analysis

The primary analyses comprised a descriptive evaluation of providers' reports of ancillary counseling service availability (offered, referral provided, unavailable). Percentages were computed for categorical variables and means and standard deviations for continuous measures. In the analyses concerning primary area of clinical specialization, we grouped internal medicine and family practice into "internal or family medicine," and because of the low frequency of respondents who answered "infectious disease" (n=2) and "HIV medicine" (n=2), we added them to the "other" categorization. We compared responses by providers' primary clinical specialization using ANOVA and chi-square tests in univariate analysis (Fisher's exact tests were used for estimated cell sizes less than five). Significance was set at $p < .05$. All analyses were performed using SPSS/PASW 19.0 software (IBM Corporation, Somers, NY).

3. RESULTS

3.1 Provider and Medical Practice Characteristics

Three hundred and forty-six physicians completed the survey. As summarized in Table 1, respondents' clinical specializations were internal or family medicine (37%), addiction medicine (30%), psychiatry (25%), and other (8%). Mean years since graduating medical school and mean years of prescribing buprenorphine were 27.2 and 4.3, respectively. Practice settings were primarily urban (57%) or suburban (27%), while the most frequently reported practice types were solo practice (31%), specialty substance abuse (12%), clinic with teaching hospital (11%), group practice (11%), and community clinic (9%). During a typical month, on average, respondents reported treating 39 patients with buprenorphine and spending about 87% of their work time on patient treatment, 5% on administration, 3% on research, and 5% on other activities.

3.2 Description of Patients receiving Buprenorphine

Respondents estimated that 59% of their patients receiving buprenorphine treatment were men and that prescription opioids were the primary opioid drug of choice for approximately 68% of their patients. Seventy percent of patients were estimated to be between 18 and 40 years old. Regarding race and ethnicity, most patients were estimated to be White (81%), African American (8%) or Hispanic (8%). A minority of patients (23%) was estimated to have medical insurance. Respondents estimated that the proportions of their patients on buprenorphine who used ancillary counseling services were: self-help support group (50%), individual (46%), group (41%), family or couples (14%), and telephone or Web-based (13%).

3.3 Counseling Services

As summarized in Table 2, the majority of respondents reported that they offered (66%) or referred (31%) patients receiving buprenorphine for ancillary counseling, while 3% reported it was unavailable for their patients. The most frequently offered counseling interventions were individual (51%) and group (41%), while the least frequently offered comprised telephone or Web-based counseling (13%). Nearly one-third of respondents reported

offering self-help support groups (32%) or family or couples counseling (31%). In contrast, counseling referrals were most frequently for self-help support groups (63%), family or couples counseling (48%), or group counseling (48%). One-quarter of respondents reported referring patients receiving buprenorphine to telephone or Web-based counseling, while 45% reported referring them for individual counseling. While a minority of respondents reported that individual counseling (4%) and self-help support groups (5%) were not available to their patients receiving buprenorphine, most reported that telephone or Web-based counseling was unavailable (62%).

3.4 Provider Clinical Specialization

Counseling availability differed significantly ($p < .05$) for any, individual, group, family or couples, and self-help support group interventions: Generally, addiction medicine providers most frequently offered each of these interventions, while internal or family medicine providers most frequently referred patients (with the exception of self-help groups).

4. DISCUSSION

Respondents generally report compliance with the Drug Treatment Act of 2000 requirement regarding ancillary counseling availability. It is noteworthy that providers appeared to be offering a broad range of adjunctive counseling services; about one-half reported offering individual counseling, over forty percent reported offering group treatment, and nearly one in three providers reported offering family or couples counseling. Given the high prevalence of psychiatric comorbidity in patients with opioid dependence and the toll that substance use disorder can exert on couples and family systems (Rowe, 2012, Savant et al., 2013), such wide availability of different counseling services is likely to be warranted.

Given the widespread availability of self-help support groups and the absence of associated patient cost, it is not surprising perhaps that more than sixty percent of respondents reported offering referrals for these services. One benefit of buprenorphine treatment is that it has expanded treatment access for opioid use disorder to locations where methadone maintenance treatment is often unavailable (e.g., rural settings)(Dick et al., 2015). Telephone and Web-based counseling interventions are not restricted to specific geographic locations and may be particularly suited for patients receiving buprenorphine (Moore et al., 2011); thus, it is important to note that most respondents reported that these interventions were unavailable for their patients. These findings suggest that additional research is warranted to examine the effectiveness of such approaches, and the feasibility, acceptability, and barriers to their implementation.

Generally, respondents who specialized in addiction medicine were the most likely to offer patients the different counseling interventions assessed in the current study, while those who specialized in internal or family medicine were the least likely. One possible explanation for this apparent discrepancy is that providers who specialize in addiction medicine may routinely offer or refer their patients irrespective of their specific diagnosis for a variety of different counseling interventions whereas their counterparts in internal or family medicine may not. Addiction medicine specialists may also practice in areas that have greater access to specialty counseling services. Currently, it is unclear whether physicians from different

clinical specializations who treat opioid use disorder with buprenorphine differ in the extent they assess and address specific co-occurring psychiatric disorders, and this question merits further research investigation. It is noteworthy, however, that in most cases where providers, regardless of their clinical specialization, reported not offering ancillary counseling, they provided referrals.

On average, respondents were physicians who were not early adopters of buprenorphine and who had graduated medical school more than two decades ago; their work primarily involved patient contact, and they treated about 39 patients with buprenorphine each month. Consistent with recent trends (Market et al., 2009, Turner et al., 2015), a sizable proportion of respondents were internal medicine and family medicine providers. While the use of email invitations targeting those belonging to a particular professional organization facilitated the recruitment of a relatively large number of members from a specialized group (i.e., physicians who prescribe buprenorphine), only a small subset of those who were emailed invitations participated in the study (about 5%). However, the response rate is likely to be artificially low since not everyone who was invited to participate in the study was treating patients with buprenorphine. The recruitment strategy of soliciting prospective participants from one professional organization and the low response rate may reduce the generalizability of the study findings. Given the lack of remuneration and the online survey design, the response rate is not unusual (Barry, 2001, Wright, 2005). Future studies of the availability of ancillary counseling in buprenorphine treatment would benefit from using a larger, nationally representative sample of providers. It is unclear whether prospective respondents who routinely provided or referred patients for counseling were more likely to participate in the study (i.e., self-selection bias). Additionally, the extent to which participants provided responses that they perceived to be correct was not assessed (i.e., social desirability bias). In an effort to reduce respondent burden, limited information about provider demographics and beliefs was collected. Counseling availability (and not counseling attendance) was examined in this study. Finally, no independent assessment of participants' responses was conducted.

5. CONCLUSIONS

Despite these limitations, the current study represents an initial investigation of ancillary counseling availability in buprenorphine providers' practices, and found that respondents generally reported compliance with guidelines regarding to the availability of adjunctive counseling. The term "appropriate counseling" is not operationally defined in the Drug Addiction Treatment Act of 2000; further research is needed to assist providers in making this determination. This issue is complicated because studies to date have not found strong support for the efficacy of psychosocial interventions beyond standard medical management in improving treatment outcomes for patients with opioid use disorder receiving buprenorphine/naloxone (Amato et al., 2011, Ling et al., 2013, Dugosh et al., 2016). While prior studies have identified physician concern about the lack of available ancillary psychosocial services as a barrier to implementing buprenorphine treatment (Netherland et al., 2009, Arfken et al., 2010, Hutchinson et al., 2014), the attitudes of physicians toward the counseling requirement in DATA 2000 is currently unclear, and merits further investigation. The further expansion of buprenorphine treatment for opioid use disorder will involve

providers from different clinical specializations. Understanding potential differences related to clinical specialization in attitudes toward and actual provision of counseling may help to tailor future trainings for providers who are interested in offering buprenorphine treatment.

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Table 1Provider and Medical Practice Characteristics (n=346)[†]

Years since medical school graduation, mean (SD) ^{††}	27.2 (11.5)
Years prescribing buprenorphine, mean (SD)	4.3 (2.7)
Number patients treated monthly, mean (SD)	38.8 (36.9)
Practice Setting, % (n)	
Urban	57% (198)
Suburban	27% (93)
Small town/rural	16% (54)
Practice Type, % (n) [*]	
Solo practice	31% (105)
Specialty substance abuse	12% (41)
Group practice	11% (38)
Clinic with teaching hospital	11% (38)
Community clinic	9% (31)
Multiple specialty group	5% (16)
Single specialty group	5% (15)
Opioid treatment program	4% (12)
Other hospital clinic	2% (8)
Community mental health	2% (6)
Staff model HMO outpatient	1% (4)
Other	7% (23)
Clinical specialization, % (n)	
Addiction medicine	30% (103)
Psychiatry	25% (87)
Internal medicine/family medicine	37% (127)
Other	8% (29)
Allocation of work activities, %	
Patient treatment	87%
Administration	5%
Research	3%
Other/Mixed	5%

[†] Some percentages may not add up to 100% due to rounding error^{††} SD, Standard Deviation^{*} Proportions listed are based on 337 responses

Table 2

Ancillary Counseling Availability by Clinical Specialization

	Overall [†] N = 346	Addiction Medicine 30% (n=103)	Psychiatry 25% (n=87)	Internal/Family Medicine 37% (n = 127)	P value
Any					.002
Offer	66% (228)	78% (80)	68% (59)	57%* (72)	
Refer	31% (106)	20% (21)	26% (23)	42% (53)	
Not Available	3% (12)	2% (2)	6% (5)	2% (2)	
Individual					<.001
Offer	51% (178)	65% (67)	57% (50)	39% (49)	
Refer	45% (155)	31% (32)	38% (33)	60% (76)	
Not Available	4% (13)	4% (4)	5% (4)	2% (2)	
Group					.009
Offer	41% (143)	56% (58)	38% (33)	33% (42)	
Refer	48% (165)	37% (38)	51% (44)	56% (71)	
Not Available	11% (38)	7% (7)	11% (10)	11% (14)	
Family/Couples					<.001
Offer	31% (107)	47% (48)	36% (31)	17% (22)	
Refer	48% (166)	45% (46)	44% (38)	54% (69)	
Not Available	21% (73)	9% (9)	21% (18)	28% (36)	
Telephone or Web					.10
Offer	13% (46)	18% (18)	10% (9)	10% (13)	
Refer	25% (87)	24% (24)	18% (16)	31% (39)	
Not Available	62% (213)	59% (61)	71% (62)	59% (75)	
Self-Help Support Groups					.002
Offer	32% (110)	46% (47)	18% (16)	29% (37)	
Refer	63% (217)	50% (51)	76% (66)	67% (85)	
Not Available	5% (19)	5% (5)	6% (5)	4% (5)	

[†]The overall sample included respondents whose specialization was "other." Respondents in the other category did not differ significantly from those in the other specialization categories.

Some percentages may not add to 100% due to rounding error

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