

What's in a Name? Terminology Preferences Among Patients Receiving Methadone Treatment



Marina Gaeta Gazzola, MD^{1,2}, Emma Maclean, BA^{2,3}, Mark Beitel, PhD^{1,2,4},
Iain D. Carmichael, PhD⁵, Katharine M. Cammack, PhD³, Kathryn F. Eggert, LCSW²,
Teresa Roehrich, MS², Lynn M. Madden, PhD^{1,2}, Oluwole Jegede, MD^{1,2},
Xiaoying Zheng, BS^{2,6}, Emma Bergman, BS^{2,7}, and Declan T. Barry, PhD^{1,2,4}

¹Yale School of Medicine, New Haven, CT, USA; ²APT Pain Treatment Services, The APT Foundation, Inc., Yale School of Medicine, New Haven, CT, USA; ³The University of the South, Sewanee, TN, USA; ⁴Child Study Center, Yale School of Medicine, New Haven, CT, USA; ⁵Department of Pathology, Brigham and Women's Hospital, Boston, MA, USA; ⁶Yale University, New Haven, CT, USA; ⁷Quinnipiac School of Medicine, Hamden, CT, USA.

BACKGROUND: Despite recognition of the importance of substance use disorder (SUD) terminology, few studies examine terminology preferences among patients with SUDs.

OBJECTIVE: To examine preferences of patients with opioid use disorder (OUD) concerning the terminology used by addiction counselors.

DESIGN: From January 1, 2019, to February 28, 2020, participants were recruited consecutively from 30-day treatment review sessions at outpatient methadone treatment programs in the Northeastern United States to complete a cross-sectional survey.

PARTICIPANTS: Participants were English-speaking adult patients with OUD enrolled in methadone treatment.

MAIN MEASURES: Participants completed 7-point Likert-type scales from 1 ("Strongly Disagree") to 7 ("Strongly Agree") to rate their preferences for (a) the presenting problem, (b) collective nouns referring to those with the presenting problem, and (c) personal descriptors. We used univariate analysis of covariance (ANCOVA) to examine the associations between demographics (i.e., age, sex, and race) and terminology preferences and ordinal logit regression to explore the association between 12-step program partiality and preference for the term "addict."

KEY RESULTS: We surveyed 450 patients with mean age of 38.5 (SD = 11.1) years; 59.6% self-identified as male, 77.6% as White, and 12.7% as Hispanic. The highest-rated preferences for presenting problem were "addiction," "substance use," and "substance abuse." The highest-rated collective noun terms were "client," "patient," and "guest." "Person with an addiction," "person with substance use disorder," and "substance-dependent person" were the highest-rated personal descriptors. There were significant differences in terminological preference based on race and age. Twelve-step program partiality was associated with greater preference for the term "addict" ($F = 21.22$, $p < .001$).

Findings from this study were presented in part at the annual meeting of the American Society of Addiction Medicine held virtually in April 2021.

Received February 10, 2022

Accepted September 14, 2022

Published online September 26, 2022

CONCLUSIONS: Terminology preferences among people receiving methadone treatment aligned with existing guidelines recommending that clinicians use medically accurate and destigmatizing terminology when referring to substance use disorders and the persons who have them. Demographic differences emerged in terminological preferences, warranting further examination.

KEY WORDS: terminology; language; stigma; opioid-related disorder; methadone.

J Gen Intern Med 38(3):653–60

DOI: 10.1007/s11606-022-07813-w

© The Author(s), under exclusive licence to Society of General Internal Medicine 2022

INTRODUCTION

The USA is amid an overdose crisis, with over 100,000 lives lost to overdose the year ending in January 2022.¹ While this crisis is driven by multiple factors, untreated opioid use disorder (OUD)¹ and stigma toward evidence-based OUD interventions are two critical contributors.² Medication for Opioid Use Disorder (MOUD) with methadone or buprenorphine is the standard of care in the USA for OUD.³ MOUD is associated with reductions in opioid use, infectious disease risk, and overdose-related and all-cause mortality.^{3–8} However, few people with OUD receive MOUD,⁹ and enrolling and retaining patients in MOUD are key public health targets for addressing the overdose crisis.^{10–12} Patient-centered approaches, which involve soliciting patients' input to incorporate their preferences into treatment, can promote MOUD enrollment and retention.¹³ Patient-centered approaches in substance use disorder (SUD) treatment more broadly have been found to improve treatment outcomes.¹³ However, few studies have sought feedback from patients with OUD regarding preferred terminology used by clinicians.

¹ Diagnostic and Statistical Manual, fifth edition (DSM-5) nomenclature is used in this manuscript to describe substance use disorders and other psychiatric disorders.

Identifying preferred terminology is important because language, including terminology surrounding medical conditions and the people who have them, is a conduit for propagating stigma.^{14–18} Anticipated stigma from clinicians, partly based on prior negative experiences, can attenuate the likelihood of MOUD entry and retention^{2,19,20} and seeking healthcare generally.^{21,22} Unfortunately, stigma against people with OUD and other substance use disorders is common in healthcare settings,²³ including primary care. For example, a recent study found a majority of primary care providers surveyed had high levels of stigma against people with OUD, and stigma was negatively correlated with willingness to prescribe or support for improved access to MOUD.²⁴ Thus, finding ways to address stigma within clinical settings is important. Recent research has underscored the potentially stigmatizing nature of once common words surrounding substance use.^{25–29} For example, exposure to labels such as “substance abuser” or “addict” begets more negative attitudes than the label “person with a substance use disorder” among both the general population and clinicians.^{14,15,30} The diagnostic classification systems used by the American Psychiatric Association (DSM) and the World Health Organization (International Classification of Disease [ICD]) were intended to offer clinicians a standardized language for communication: the current version of the DSM includes the terminology “opioid use disorder,” whereas the ICD refers to the same diagnosis as “opioid dependence.”^{31,32} Professional organizations, scientific journals, and researchers have advocated for replacing unofficial labels that are potentially pejorative when referring to SUDs and the people who have them with person-first and medically accurate language.^{25,33–35} However, professionals and laypeople continue to use a range of “unofficial” labels to describe SUDs and other psychiatric conditions.³⁶

Many patients receiving MOUD in the USA receive methadone maintenance therapy (MMT), which is highly regulated and dispensed at licensed opioid treatment programs.³⁷ Patients are required to attend six weekly appointments for supervised methadone consumption for the first 90 days of treatment and often much longer.³⁸ These visits represent heavy exposure to the healthcare system, where addiction counselors are often the clinician whom patients interact with the most. Language is essential for these interactions and can convey or reduce stigma.^{39,40} Previous work demonstrates both clinicians and the general public change their perceptions of patients with SUDs depending on the descriptors used.^{14,15} Given the aforementioned negative relationship between stigma and treatment seeking among people with SUDs, identifying ways to reduce stigma in clinical settings for people with SUDs is essential. No published studies, however, have examined systematically the language of clinicians or patients in MMT clinical interactions^{41,42} or patient preferences regarding the terminology specific to SUDs used by addiction counselors or other clinicians. Understanding patients’ clinician terminology preferences may inform current efforts to

promote patient engagement in MMT and to address the stigma associated with OUD and MMT.^{43–46}

One potentially important yet understudied area of preferred terminology regarding SUDs is collective nouns. Clinicians use different collective nouns to refer to those who receive mental healthcare, including “patient,” “client,” “consumer,” and “customer.”⁴⁷ Whether these terms convey, attenuate, or accentuate stigma by possibly empowering or disempowering individuals with mental health conditions is debated.⁴⁸ While a majority of studies examining collective nouns across medical settings conclude “patient” as the preferred term, “client” is also popular in mental health settings.⁴⁷ However, no published studies have examined collective noun preferences among patients receiving MMT.

Research into patient terminology preferences surrounding SUDs is limited; only two published studies examine terminology preferences among people with SUDs.^{49,50} One study of 263 patients enrolled in a managed withdrawal program for heroin found that “addict” was the most common term reported in response to an open-ended question about self-identification. When a list of terms was provided, person-first labels (e.g., “person who uses drugs”) were preferred over “addict,” suggesting the way participants self-identify and the terminology they want others to use may differ.⁴⁹ Another study of 54 individuals “in recovery” from SUDs recruited through social media found that whether participants identified as an “addict” or “person with a substance use disorder” depended on the setting (e.g., family vs mutual aid [12-step] meetings). In both studies, preference for the term “addict” was common among those attending 12-step programs (e.g., Alcoholics Anonymous or AA).^{49,50}

The study aims were to examine, among patients receiving MMT, clinician terminology preferences to describe SUDs and the people who have them. Given the importance of 12-step programs in SUD treatment⁵¹ and prior studies demonstrating use of this term among people attending 12-step programs,^{49,50} we examined the relationship between partiality to 12-step programs and terminology preferences. We hypothesized that partiality to 12-step programs would be positively associated with preference for the term “addict.” Since age, sex, and race may be associated with language use and preference, we also explored whether these demographic characteristics were related to clinician terminology preferences.^{52,53}

METHODS

Study Design, Setting, and Recruitment

Participants were adult patients at the APT Foundation (“APT”) recruited from January 1, 2019, to February 28, 2020, who filled out a word-preferences survey at their first treatment plan review, approximately 30 days following MMT initiation. Inclusion criteria required receipt of MMT at APT and English literacy. All patients meeting criteria

attending a treatment plan review at two APT clinics were invited to complete the survey, and no one declined. APT, one of the largest MMT providers in Southern New England, is a not-for-profit, community-based organization that uses an “open-access” model, which reduces common barriers to MMT entry and retention.¹¹ This study was approved by the APT Board of Directors and the Human Investigations Committee at the Yale School of Medicine.

Variables and Measures

Terminology Preferences and Twelve-Step Partiality. Three survey questions assessed participants’ counselor terminology preferences: (1) “How do you prefer counselors to describe the problems you are seeking treatment for?” (i.e., presenting problem preference); (2) “How do you prefer counselors to refer to you?” (i.e., collective noun preference); and (3) “How do you prefer counselors to describe you?” (i.e., personal descriptor preference). These questions were followed by a list of responses using quotation marks (see Tables 1, 2, 3) derived from current and prior diagnostic classification systems, the literature, and the authors’ experiences treating patients receiving MMT.^{31,49,50,54} Responses included terms that prior studies indicated may be associated with stigma among the public, clinicians, and patients.^{14,15,30,49,55,56} A fourth question assessed participants’ partiality to 12-step programs: “12-step (e.g., AA, NA) is the best treatment for me.” For each question, participants rated each response using a 7-point Likert-type scale: 1 (“Strongly Disagree”), 2 (“Disagree”), 3 (“Somewhat Disagree”), 4 (“Don’t Agree or Disagree”), 5 (“Somewhat Agree”), 6 (“Agree”), and 7 (“Strongly Agree”).

Demographics. Participants self-reported age, sex (“male,” “female”), race (“Asian American or Alaskan Native,” “Asian,” “Black or African-American,” “White/Caucasian,” “Native Hawaiian or other Pacific Islander,” and “Multiracial”), and ethnicity (“Hispanic or Latino,” “Not Hispanic or Latino”) in response to demographic questions on the 24-item Behavior and Symptom Identification Scale (BASIS-24),⁵⁷ which was administered at MMT enrollment.

Analyses

Descriptive statistics (mean and standard deviation) were calculated for each term. Inferential statistics appropriate for categorical and continuous data were performed. To maximize power, only the top three preferred terms for each question were subjected to univariate analysis of covariance (ANCOVA) to determine the possible effect of demographic covariates (age, sex, and race). For comparisons involving race, we compared the responses of participants who self-identified as “White/Caucasian” or belonging to other racial groups which in subsequent sections are referred to as “White” and “other.”

We investigated the potential impact of partiality to 12-step programs on preference for the term “addict” via an ordinal

logit regression model⁵⁸ which is appropriate for ordinal variables such as those generated in response to a 7-point Likert-type scale.⁵⁹ Preference for the term “addict”—measured on a 7-point Likert-type scale—was regressed on the following variables: age, sex, binarized race, and preference for 12-step programs.

Missing data were minimal; therefore, data imputation strategies were not employed for the descriptive statistics and ANCOVA analysis². Missing data was imputed for the ordinal regression using median imputation for the one participant with missing 12-step preference.

The descriptive statistics and ANCOVA analyses were performed in IBM SPSS Version 27 (Armonk, NY). The ordinal regression was performed in Python with the *statsmodels* package version 0.13.2.⁶⁰

RESULTS

Four hundred and fifty participants completed the study (15 individuals who began MMT during the study period were excluded: 10 monolingual Spanish-speaking individuals and 5 with incomplete survey data). If an individual survey had more than 3 answers missing, their survey data were deemed incomplete and removed from the study. Participants’ mean age was 38.5 years (SD 11.1, range 18–69), 40.4% of participants were female ($n = 182$), and 59.6% were male ($n = 268$); 0.4% self-identified as American Indian or Alaskan Native ($n = 2$), 0.2% as Asian ($n = 1$), 6.4% as Black or African American ($n = 29$), 77.6% as White or Caucasian ($n = 349$), and 15.3% as multiracial ($n = 69$). Regarding ethnicity, 12.7% self-identified as Hispanic or Latino ($n = 57$) and 87.3% as “not Hispanic or Latino” ($n = 393$).

Participants’ ratings for presenting problem preference are shown in Table 1. Mean presenting problem preference ratings ranged from 4.80 to 5.54 (a score of 4 corresponded to “Don’t Agree or Disagree,” and a score of 6 corresponded to “Agree”). Participants’ highest-rated terms were “addiction” (mean 5.54, SD 1.60), “substance use” (mean 5.50, SD 1.53), and “substance abuse” (mean 5.38, SD 1.65), and their least preferred terms were “drug misuse” (mean 4.80, SD 1.88), “substance misuse” (mean 4.93, SD 1.83), and “substance-related disorder” (mean 5.00, SD 1.78). While no sex effects were identified for the three highest-rated terms, they were preferred significantly less by other participants than by White participants: “addiction” ($M_{\text{other}} = 5.29$, SD = 1.75; $M_{\text{White}} =$

² For question 1, of 6300 possible data points (450 participants, 14 word choices), 8 were missing. Five of the 14 word choices had a single missing response, and one word choice (the last for the question) had 3 missing responses. For question 2, of 2700 possible data points (450 participants with 6 word choices), there were 9 total missing answers across all answer choices: one with 1 missing answer, one with 2 missing answers, and two with 3 missing answers. For question 3, of 7200 possible data points (450 participants with 16 word choices), 24 were missing. Eight answer choices had 1 missing, one had 3 missing, one had 4 missing, and one (the last for the question) had 9 missing.

Table 1 Descriptive Statistics for Presenting Problem Preferences Among Patients with Opioid Use Disorder Enrolled in Outpatient Methadone Treatment (N = 450)

Term	M	SD	Participant agreement N (%)	Participant neutral N (%)	Participant disagreement N (%)
Addiction	5.54	1.60	338 (75.1)	71 (15.8)	41 (9.1)
Substance use	5.50	1.53	331 (73.7)	84 (18.7)	34 (7.6)
Substance abuse	5.38	1.65	322 (71.6)	81 (18)	47 (10.4)
Problem with substances	5.37	1.61	320 (71.1)	83 (18.4)	47 (10.4)
Chemical dependency	5.34	1.68	310 (69.4)	84 (18.8)	53 (11.9)
Substance dependence	5.32	1.65	312 (69.3)	87 (19.3)	51 (11.3)
Drug dependence	5.20	1.72	297 (66.1)	90 (20.0)	62 (13.8)
Problem with drugs	5.13	1.72	288 (64)	102 (22.7)	60 (13.3)
Drug use	5.11	1.74	290 (64.6)	97 (21.6)	62 (13.8)
Drug abuse	5.11	1.81	288 (64)	90 (20)	72 (16)
Substance use disorder	5.06	1.77	287 (63.8)	92 (20.4)	71 (15.8)
Substance-related disorder	5.00	1.78	271 (60.4)	103 (22.9)	75 (16.7)
Substance misuse	4.93	1.83	270 (60)	100 (22.2)	80 (17.8)
Drug misuse	4.80	1.88	258 (57.5)	101 (22.5)	90 (20.0)

Note: Scale ranges from 1 to 7
M mean, SD standard deviation

5.62, SD = 1.55; $F(4, 445) = 4.21, p = .041$), “substance use” ($M_{\text{other}} = 5.20, SD = 1.64; M_{\text{White}} = 5.58, SD = 1.64; F(4, 445) = 4.40, p = .036$), and “substance abuse” ($M_{\text{other}} = 5.03, SD = 1.86; M_{\text{White}} = 5.48, SD = 1.57; F(4, 445) = 6.67, p = .010$). There was also an age effect for “substance use” (but not for “addiction” and “substance abuse”) whereby older age was associated with decreased preference for the term ($r = -.11, p = .020$).

Table 2 contains findings related to collective noun preferences. Mean preference ratings ranged from 3.27 to 5.90 (a score of 3 corresponded to “Somewhat disagree,” and a score of 6 corresponded to “Agree”). Participants’ highest-rated terms were “client” (mean 5.90, SD 1.32), “patient” (5.08, SD 1.93), and “guest” (mean 4.24, SD 1.96), and their lowest-rated terms were “customer” (mean 3.27, SD 2.02), “service user” (mean 3.34, SD 2.02), and “consumer” (mean 3.38, SD 1.99). Sex, age, and race effects did not emerge for the top three rated terms.

Table 3 shows findings for personal descriptor preferences. Mean ratings ranged from 2.23 to 5.08 (a score of 2 corresponded to “Disagree,” and a score of 5 corresponded to “Somewhat Agree”). Participants’ highest-rated terms were “person with an addiction” (mean 5.08, SD 1.86), “person with substance use disorder” (mean 4.66, SD 1.93), and “substance-dependent person” (mean 4.59, SD 1.93), and their lowest-rated terms were “junkie” (mean 2.23, SD 1.79), “druggie” (mean 2.27, SD 1.83), and “drug user” (mean 3.81, SD 2.17). Neither age nor sex effects were found for the top three rated terms; however, patients self-identifying as a race other than White rated “person with substance use disorder” ($M_{\text{Other}} = 4.26, SD = 2.07; M_{\text{White}} = 4.77, SD = 1.88; F(4, 444) = 6.04, p = .014$) significantly lower than White participants.

In the ordinal logit regression analysis examining the potential impact of 12-step partiality on the personal descriptor term “addict,” race (OR 1.82, 95% CI 1.22–2.71, $p = 0.003$)

and 12-step partiality (OR 1.22, 95% CI 1.12–1.33, $p = <0.001$) were statistically significant. Sex ($p = 0.38$) and age ($p = 0.13$) were not. Both partiality for 12-step and White race were positively associated with preference for the term “addict.” The relationship between 12-step program partiality and preference for the term “addict” persisted even after controlling for demographics. The ordinal logit regression odds ratio (OR) provides information about the increase in odds of a predictor variable after holding the others constant. In the current study, for every additional point of preference for 12-step programs expressed, a patient was 1.22 times more likely to prefer the term “addict” by one more point.

DISCUSSION

This is the first study to examine clinician terminology preferences among patients receiving MMT and the largest to date to investigate terminology preference among people with SUDs. There were several main findings. First, on average, participants’ highest-rated presenting problem preferences were “addiction,” “substance use,” and “substance abuse,” and their lowest were “drug misuse,” “substance misuse,” and “substance-related disorder.” Second, on average, participants’ highest-rated collective noun preferences were “client,” “patient,” and “guest,” and their lowest were “customer,” “service user,” and “consumer.” Third, on average, participants’ highest-rated personal descriptor preferences were “person with an addiction,” “person with substance use disorder,” and “substance-dependent person,” and their lowest were “junkie,” “druggie,” and “drug user.” Fourth, there were significant differences in some terminological preferences based on respondent race and age. Finally, 12-step program partiality was positively associated with preference for the personal descriptor “addict” even after controlling for age, sex, and race.

Table 2 Descriptive Statistics for Collective Noun Preferences Among Patients with Opioid Use Disorder Enrolled in Outpatient Methadone Treatment (N = 450)

Term	M	SD	Participant agreement N (%)	Participant neutral N (%)	Participant disagreement N (%)
Client	5.90	1.32	371 (82.8)	61 (13.6)	16 (3.57)
Patient	5.08	1.93	287 (63.8)	86 (19.1)	77 (17.1)
Guest	4.24	1.96	191 (42.4)	131 (29.6)	126 (28.0)
Consumer	3.38	1.99	111 (24.8)	122 (27.3)	215 (48)
Service user	3.34	2.02	110 (24.4)	109 (26.6)	230 (49)
Customer	3.27	2.02	109 (24.5)	119 (24.3)	219 (51)

Note: Scale ranges from 1 to 7
M mean, SD standard deviation

The terminology used to describe SUDs matters since stigma may decrease the willingness of persons who have them to begin and remain in treatment.^{44,61} Generally, “addiction,” a diagnostic term used by the American Society of Addiction Medicine and the World Health Organization, was the highest-rated term by participants, while “drug misuse” was the lowest rated. Although many experts have advocated for replacing unofficial terms for SUDs with medically accurate language,^{25,29,33,34,62,63} it is noteworthy that the average range of ratings for presenting problem preference was narrow (between “Don’t Agree or Disagree” to “Agree”) in contrast to collective noun preference (between “Somewhat Disagree” and “Agree”) and personal descriptor preference (“Disagree” to “Agree”). The basis of this difference in the range of preferences across domains is unclear and merits further investigation.

The current study extends the literature on collective noun preference by demonstrating that among patients receiving MMT, the highest-rated collective noun terms were “client” and “patient.” A previous study of individuals receiving SUD treatment in the UK found participants preferred clinicians to use the term “patient,” followed by “client,” with few

preferring the term “service user”⁶⁴; preferences differed between individuals who used alcohol versus those who used other substances, suggesting patient terminological preference may differ based on SUD diagnosis. Similarly, in a study conducted in Canada, “patient” was the preferred term by individuals receiving mental healthcare.⁶⁵ Our findings extend those of Covell et al., who found patients with a non-SUD primary psychiatric disorder receiving mental health services preferred the term “client” over “patient” and other terms.⁶⁶ It is noteworthy that business terms such as “customer” and “servicer user” were least preferred by our participants. Future work should examine the relationship between preferred collective noun terminology, diagnosis, and treatment setting.

Our finding that, on average, participants most preferred clinicians to refer to them as “person with an addiction” and “person with substance use disorder” is consistent with guidelines recommending that clinicians use person-first and medically accurate terminology to reduce stigma and bias; this approach conveys that individuals are distinguishable from their diagnoses and they “have” a problem rather than they “are” the problem.^{15,25,34,67} Our results build off a prior study among individuals with heroin use disorder enrolling in

Table 3 Descriptive Statistics for Personal Descriptor Preferences Among Patients with Opioid Use Disorder Enrolled in Outpatient Methadone Treatment (N = 450)

Term	M	SD	Participant agreement N (%)	Participant neutral N (%)	Participant disagreement N (%)
Person with an addiction	5.08	1.86	293 (65.1)	87 (19.3)	70 (15.6)
Person with substance use disorder	4.66	1.93	248 (55.2)	105 (23.4)	96 (21.4)
Substance-dependent person	4.59	1.93	244 (54.3)	101 (22.5)	104 (23.2)
Addict	4.53	2.15	239 (53.1)	92 (20.4)	119 (26.4)
Substance user	4.52	2.02	237 (53.0)	92 (20.1)	118 (26.4)
Person with substance-related disorder	4.52	1.97	231 (51.3)	111 (24.7)	108 (24.0)
Drug-dependent person	4.44	2.00	221 (49.2)	109 (24.3)	119 (26.5)
Person with a drug problem	4.32	2.11	205 (46.5)	107 (24.3)	129 (29.3)
Person who uses drugs	4.31	2.06	215 (47.9)	99 (22.0)	135 (30.1)
Person with substance misuse disorder	4.30	1.98	204 (45.1)	121 (26.9)	126 (28.0)
Person in active addiction	4.21	2.12	209 (46.9)	92 (20.6)	145 (32.5)
Substance abuser	4.21	2.10	205 (45.7)	96 (21.4)	148 (33.0)
Drug abuser	3.84	2.16	171 (38.1)	89 (19.8)	189 (42.1)
Drug user	3.81	2.17	176 (39.2)	87 (19.4)	186 (41.4)
Druggie	2.27	1.83	56 (12.5)	63 (14.0)	330 (73.5)
Junkie	2.23	1.79	52 (11.6)	65 (14.4)	333 (74.0)

Note: Scale ranges from 1 to 7. All the terms/responses were listed in quotations (e.g., “Junkie”)
M mean, SD standard deviation

inpatient managed withdrawal showing high patient usage of the term “addict” with counselors and doctors, despite preferring patient-first terminology when asked what their language preference would be if they could choose how others labeled them.⁴⁹ While past studies found high usage of the term “addict” among people with SUDs,^{49,50} our results indicate this is not the most preferred term among patients receiving MMT for clinicians to use. Identifying as an “addict” rather than a “person with a SUD” has been associated with higher experience of stigma and lower recovery scores.⁵⁰ A prior study demonstrated that people who use both terms commonly use “addict” during 12-step program meetings and “person with a SUD” when speaking publicly, suggesting awareness of the stigma associated with the former term.⁴⁹ As hypothesized, personal descriptor preference for “addict” was significantly and positively correlated with 12-step program partiality, even after controlling for demographic variables. This finding extends prior work to suggest that preference for the personal descriptor “addict” among individuals endorsing 12-step meetings extends to clinician terminology preferences among patients receiving MMT.^{49,50}

This is the first study to examine demographic effects on terminology preferences among patients receiving MMT. These findings suggest an individual’s race or age may influence their terminological preferences, a potentially important consideration for clinicians and representatives of professional societies when writing guidelines about recommended language. Future work is needed to replicate our findings and investigate the underlying reasons for differences based on race, sex, and age in language preference.

Patient-centered approaches, which involve soliciting patient input, can facilitate MMT access and retention by attenuating stigma and enhancing perceived choice.^{10–12} While participants’ terminology preferences generally aligned with professional guidelines, some did not, and demographic effects based on race and age emerged for some preferred terms.^{25,33,34} Clinicians might benefit from soliciting patients’ terminology preferences and engaging in a dialogue as to why the clinician may not use terms that are not medically accurate or person-first.^{25,29,33,34,62,63} Such a dialogue offers an opportunity to discuss the stigma that patients may face from different sources, including clinicians, and may strengthen the therapeutic alliance.^{22,68,69} Future work should examine how preferred terminology use by clinicians impacts the therapeutic alliance and patient experience within MMT.

Limitations

Our study had limitations. It was conducted among adult English speakers attending MMT programs operated by the same non-profit treatment organization in one US state. Whether the findings generalize to other regions, languages, and settings is unclear. Preferences may differ among individuals with OUD not enrolled in MMT, or those not retained for the first month of MMT. Preferences may also be impacted by

normative terms used in different treatment settings or by healthcare providers, support staff, or peers. Whether our statistically significant findings of differences in mean term preference based on demographic factors are clinically significant is an important area for future investigation. We developed our own study survey, which although face-valid, has not been validated.

CONCLUSION

This study represents the first investigation of clinician terminological preferences among patients receiving MMT. Generally, our findings suggest that patients receiving MMT prefer terminology that is medically accurate and person-first, aligning with recommendations by professional societies. Apparent demographic differences for specific terminology preferences should be examined further.

Corresponding Author: Declan T. Barry, PhD; APT Pain Treatment Services, The APT Foundation, Inc., Yale School of Medicine, New Haven, CT, USA (e-mail: declan.barry@yale.edu).

Funding Funding for this research was supported by the APT Foundation, Inc. MGG was supported by the James G. Hirsch Endowed Medical Student Research Fellowship and the Yale School of Medicine Medical Student Fellowship during the study period. DTB was supported by NIH (U01 HL150596-01 and RM1 DA055310).

Declarations:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

REFERENCES

1. Ahmad FB, Rossen LM, Sutton P. Provisional drug overdose death counts: National Center for Health Statistics 2021. <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>.
2. Tsai AC, Kiang MV, Barnett ML, Beletsky L, Keyes KM, McGinty EE, et al. Stigma as a fundamental hindrance to the United States opioid overdose crisis response. PLOS Med. 2019;16(11):e1002969. <https://doi.org/10.1371/journal.pmed.1002969>.
3. National Academies of Sciences, Engineering, and Medicine. Medications for opioid use disorder save lives. Leshner AI, Mancher M, editors. Washington, DC: The National Academies Press; 2019.
4. Sordo L, Barrio G, Bravo MJ, Indave BI, Degenhardt L, Wiessing L, et al. Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ. 2017;357:j1550. <https://doi.org/10.1136/bmj.j1550>.
5. Wakeman SE, Laroche MR, Ameli O, Chaisson CE, McPheeters JT, Crown WH, et al. Comparative effectiveness of different treatment pathways for opioid use disorder. JAMA Netw Open. 2020;3(2):e1920622. <https://doi.org/10.1001/jamanetworkopen.2019.20622>.
6. Krawczyk N, Mojtabai R, Stuart EA, Fingerhood M, Agus D, Lyons BC, et al. Opioid agonist treatment and fatal overdose risk in a state-wide US population receiving opioid use disorder services. Addiction. 2020;115(9):1683–94. <https://doi.org/10.1111/add.14991>.
7. Tsui JL, Evans JL, Lum PJ, Hahn JA, Page K. Association of opioid agonist therapy with lower incidence of Hepatitis C virus infection in young adult injection drug users. JAMA Intern Med. 2014;174(12):1974–81. <https://doi.org/10.1001/jamainternmed.2014.5416>.
8. Johnson WD, Rivadeneira N, Adegbite AH, Neumann MS, Mullins MM, Rooks-Peck C, et al. Human immunodeficiency virus prevention

for people who use drugs: overview of reviews and the ICOS of PICOS. *J Infect Dis.* 2020;222 (Supplement_5):S278-S300. <https://doi.org/10.1093/infdis/jiaa008>.

- 9. SAMHSA. Key substance use and mental health indicators in the United States: Results from the 2019 National Survey on Drug Use and Health (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration; 2020.
- 10. **Madden L, Bojko MJ, Farnum S, Mazhnaya A, Fomenko T, Marcus R, et al.** Using nominal group technique among clinical providers to identify barriers and prioritize solutions to scaling up opioid agonist therapies in Ukraine. *Int J Drug Policy.* 2017;49:48-53.
- 11. **Madden LM, Farnum SO, Eggert KF, Quanbeck AR, Freeman RM, Ball SA, et al.** An investigation of an open-access model for scaling up methadone maintenance treatment. *Addiction.* 2018;113(8):1450-8. <https://doi.org/10.1111/add.14198>.
- 12. **Kolodny A, Courtwright DT, Hwang CS.** The prescription opioid and heroin crisis: a public health approach to an epidemic of addiction. *Annu Rev Public Health.* 2015;36. <https://doi.org/10.1146/annurev-publhealth-031914-122957>.
- 13. **Davis EL, Kelly PJ, Deane FP, Baker AL, Buckingham M, Degan T, et al.** The relationship between patient-centered care and outcomes in specialist drug and alcohol treatment: A systematic literature review. *Subst Abuse.* 2020;41(2):216-31. <https://doi.org/10.1080/08897077.2019.1671940>.
- 14. **Kelly JF, Dow SJ, Westerhoff C.** Does our choice of substance-related terms influence perceptions of treatment need? An empirical investigation with two commonly used terms. *J Drug Issues.* 2010;40(4):805-18. <https://doi.org/10.1177/002204261004000403>.
- 15. **Ashford R, Brown A, Curtis B.** Substance use, recovery, and linguistics: The impact of word choice on explicit and implicit bias. *Drug Alcohol Depend.* 2018;189:131-8. <https://doi.org/10.1016/j.drugalcdep.2018.05.005>.
- 16. **Goodey K, Haass-Koffler CL, Chavanne D.** Opioid use and stigma: The role of gender, language and precipitating events. *Drug Alcohol Depend.* 2018;185:339-46. <https://doi.org/10.1016/j.drugalcdep.2017.12.037>.
- 17. **Ashford R, Brown A, Curtis B.** Expanding language choices to reduce stigma. *Health Educ.* 2019;119:51-62.
- 18. **Goddu A, O'Conor KJ, Lanzkron S, Saheed MO, Saha S, Peek ME, et al.** Do words matter? Stigmatizing language and the transmission of bias in the medical record. *J Gen Intern Med.* 2018;33(5):685-91. <https://doi.org/10.1007/s11606-017-4289-2>.
- 19. **Anstice S, Strike CJ, Brands B.** Supervised methadone consumption: client issues and stigma. *Subst Use Misuse.* 2009;44(6):794-808. <https://doi.org/10.1080/10826080802483936>.
- 20. **Shidlansik L, Adelson M, Peles E.** Knowledge and stigma regarding methadone maintenance treatment among personnel of methadone maintenance treatment and non-methadone maintenance treatment addiction facilities in Israel. *J Addict Dis.* 2017;36(1):30-7.
- 21. **Biancarelli DL, Biello KB, Childs E, Drainoni M, Salhaney P, Edeza A, et al.** Strategies used by people who inject drugs to avoid stigma in healthcare settings. *Drug Alcohol Depend.* 2019;198:80-6. <https://doi.org/10.1016/j.drugalcdep.2019.01.037>.
- 22. **Meyerson BE, Russell DM, Kichler M, Atkin T, Fox G, Coles HB.** I don't even want to go to the doctor when I get sick now: Healthcare experiences and discrimination reported by people who use drugs, Arizona 2019. *Int J Drug Policy.* 2021;103112. <https://doi.org/10.1016/j.drugpo.2021.103112>.
- 23. **van Boekel LC, Brouwers EPM, van Weeghel J, Garretsen HFL.** Stigma among health professionals towards patients with substance use disorders and its consequences for healthcare delivery: systematic review. *Drug Alcohol Depend.* 2013;131(1):23-35. <https://doi.org/10.1016/j.drugalcdep.2013.02.018>.
- 24. **Stone EM, Kennedy-Hendricks A, Barry CL, Bachhuber MA, McGinty EE.** The role of stigma in U.S. primary care physicians' treatment of opioid use disorder. *Drug Alcohol Depend.* 2021;221:108627. <https://doi.org/10.1016/j.drugalcdep.2021.108627>.
- 25. **Saitz R, Miller SC, Fiellin DA, Rosenthal RN.** Recommended use of terminology in addiction medicine. *J Addict Med.* 2021;15(1):3-7.
- 26. **Saitz R.** International statement recommending against the use of terminology that can stigmatize people. *J Addict Med.* 2016;10(1):1-2. <https://doi.org/10.1097/adm.0000000000000178>.
- 27. **Kelly JF, Wakeman SE, Saitz R.** Stop talking 'dirty': clinicians, language, and quality of care for the leading cause of preventable death in the United States. *Am J Med.* 2015;128(1):8-9. <https://doi.org/10.1016/j.amjmed.2014.07.043>.
- 28. **Saitz R.** Things that work, things that don't work, and things that matter—including words. *J Addict Med.* 2015;9(6):429-30. <https://doi.org/10.1097/adm.0000000000000160>.
- 29. **Wakeman SE.** Medications for addiction treatment: changing language to improve care. *J Addict Med.* 2017;11(1):1-2. <https://doi.org/10.1097/adm.0000000000000275>.
- 30. **Ashford R, Brown A, McDaniel J, Curtis B.** Biased labels: An experimental study of language and stigma among individuals in recovery and health professionals. *Subst Use Misuse.* 2019;54(8):1376-84. <https://doi.org/10.1080/10826084.2019.1581221>.
- 31. American Psychiatric Association. Diagnostic and statistical manual of mental disorders : DSM-5. American Psychiatric A, American Psychiatric Association DSMTF, editors. Arlington, VA: American Psychiatric Association; 2013.
- 32. World Health Organization. ICD-10 : international statistical classification of diseases and related health problems : tenth revision. 2nd ed ed. Geneva: World Health Organization; 2004.
- 33. **Zgierska AE, Miller MM, Rabago DP, Hilliard F, McCarthy P, Cowan P, et al.** Language matters: it is time we change how we talk about addiction and its treatment. *J Addict Med.* 2021;15(1):10-2.
- 34. **Volkow ND, Gordon JA, Koob GF.** Choosing appropriate language to reduce the stigma around mental illness and substance use disorders. *Neuropsychopharmacology.* 2021; <https://doi.org/10.1038/s41386-021-01069>.
- 35. **Traxler B, Nicks S, Puckett M, Dunn K, Croff JM, Hartwell M.** The use of person-centered language in scientific research articles focusing on opioid use disorder. *Drug Alcohol Depend.* 2021;108965.
- 36. **McPherson S, Armstrong D.** Social determinants of diagnostic labels in depression. *Social Sci Med.* 2006;62(1):50-8.
- 37. SAMHSA. National Survey of Substance Abuse Treatment Services (N-SSATS): 2020. Data on Substance Abuse Treatment Facilities. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2021.
- 38. SAMHSA. Medications for Opioid Use Disorder. Treatment Improvement Protocol (TIP) Series 63. Rockville, MD: Substance Abuse and Mental Health Services Administration2020 Contract No.: Publication No. PEP20-02-01-006.
- 39. **Barry DT, Fulgieri MD, Lavery ME, Chawarski MC, Najavits LM, Schottenfeld RS, et al.** Research-and community-based clinicians' attitudes on treatment manuals. *Am J Addict.* 2008;17(2):145-8.
- 40. **Russell RL.** Language in psychotherapy: Strategies of discovery: Springer Science & Business Media; 2013.
- 41. **Caskey NH, Barker C, Elliott R.** Dual perspectives: clients' and therapists' perceptions of therapist responses. *Br J Clin Psychol.* 1984;23(4):281-90.
- 42. **Miller G.** Learning the language of addiction counseling. Hoboken, NJ: John Wiley & Sons; 2020.
- 43. **Blanco C, Volkow ND.** Management of opioid use disorder in the USA: present status and future directions. *Lancet.* 2019;393(10182):1760-72.
- 44. **Yang L, Wong LY, Grivel MM, Hasin DS.** Stigma and substance use disorders: an international phenomenon. *Curr Opin Psychiatry.* 2017;30(5):378-88.
- 45. **Marchand K, Beaumont S, Westfall J, MacDonald S, Harrison S, Marsh DC, et al.** Conceptualizing patient-centered care for substance use disorder treatment: findings from a systematic scoping review. *Subst Abuse Treat Prev Policy.* 2019;14(1):1-15.
- 46. **Schwartz RP, Kelly SM, Mitchell SG, Gryczynski J, O'Grady KE, Gandhi D, et al.** Patient-centered methadone treatment: a randomized clinical trial. *Addiction.* 2017;112(3):454-64.
- 47. **Costa DSJ, Mercieca-Bebber R, Tesson S, Seidler Z, Lopez AL.** Patient, client, consumer, survivor or other alternatives? A scoping review of preferred terms for labelling individuals who access healthcare across settings. *BMJ Open.* 2019;9(3):e025166. <https://doi.org/10.1136/bmjopen-2018-025166>.
- 48. **Christmas DM, Sweeney A.** Service user, patient, survivor or client... has the time come to return to 'patient'? *Br J Psychiatry.* 2016;209(1):9-13.
- 49. **Pivovarova E, Stein MD.** In their own words: language preferences of individuals who use heroin. *Addiction.* 2019;114(10):1785-90. <https://doi.org/10.1111/add.14699>.
- 50. **Ashford R, Brown A, Ashford A, Curtis B.** Recovery dialects: A pilot study of stigmatizing and nonstigmatizing label use by individuals in recovery from substance use disorders. *Exp Clin Psychopharmacol.* 2019;27(6):530-5. <https://doi.org/10.1037/ph0000286>.

51. **Humphreys K.** Circles of recovery: self-help organizations for addictions: 2003. <https://doi.org/10.1017/CBO9780511543883>.

52. **Garcia Coll C, Garcia Miranda A, Buzzetta Torres I, Nogueras Bermúdez J.** On becoming cultural beings: A focus on race, gender, and language. *Res Hum Dev.* 2018;15(3-4):332-44.

53. **Coulmas F.** Sociolinguistics: The study of speakers' choices: Cambridge University Press; 2013.

54. American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-IV. Washington, DC: Fourth edition. Washington, DC : American Psychiatric Association, [1994] 1994.

55. **Woo J, Bhalerao A, Bawor M, Bhatt M, Dennis B, Mouravská N, et al.** "Don't judge a book its cover": a qualitative study of methadone patients' experiences of stigma. *Subst Abuse.* 2017;11:1178221816685087. <https://doi.org/10.1177/1178221816685087>.

56. **Kelly JF, Westerhoff CM.** Does it matter how we refer to individuals with substance-related conditions? A randomized study of two commonly used terms. *Int J Drug Policy.* 2010;21(3):202-7. <https://doi.org/10.1016/j.drugpo.2009.10.010>.

57. **Eisen SV, Normand S-L, Belanger AJ, Spiro A, III, Esch D.** The Revised Behavior and Symptom Identification Scale (BASIS-R): reliability and validity. *Med Care.* 2004;42(12).

58. **McKelvey RD, Zavoina W.** A statistical model for the analysis of ordinal level dependent variables. *J Math Sociol.* 1975;4(1):103-20. <https://doi.org/10.1080/0022250X.1975.9989847>.

59. **Sullivan GM, Artino AR, Jr.** Analyzing and interpreting data from likert-type scales. *J Grad Med Educ.* 2013;5(4):541-2. <https://doi.org/10.4300/JGME-5-4-18>.

60. **Seabold S, Perktold J,** editors. Statsmodels: Econometric and statistical modeling with python. Proceedings of the 9th Python in Science Conference; 2010: Austin, TX.

61. **Hadland SE, Park TW, Bagley SM.** Stigma associated with medication treatment for young adults with opioid use disorder: a case series. *Addict Sci Clin Pract.* 2018;13(1):1-4.

62. **Wakeman SE.** Language and addiction: choosing words wisely. *Am J Public Health.* 2013;103(4):e1-2. <https://doi.org/10.2105/ajph.2012.301191>.

63. **Broyles LM, Binswanger IA, Jenkins JA, Finnell DS, Faseru B, Cavaiola A, et al.** Confronting inadvertent stigma and pejorative language in addiction scholarship: a recognition and response. *Subst Abuse.* 2014;35(3):217-21. <https://doi.org/10.1080/08897077.2014.930372>.

64. **Keaney F, Strang J, Martinez-Raga J, Spektor D, Manning V, Kelleher M, et al.** Does anyone care about names? How attendees at substance misuse services like to be addressed by health professionals. *Eur Addict Res.* 2004;10(2):75-9. <https://doi.org/10.1159/000076117>.

65. **Sharma V, Whitney D, Kazarian SS, Manchanda R.** Preferred terms for users of mental health services among service providers and recipients. *Psychiatric Serv.* 2000;51(2):203-9. <https://doi.org/10.1176/appi.ps.51.2.203>.

66. **Covell NH, McCorkle BH, Weissman EM, Summerfelt T, Essock SM.** What's in a name? Terms preferred by service recipients. *Adm Policy Ment Health.* 2007;34(5):443-7. <https://doi.org/10.1007/s10488-007-0123-1>.

67. **Botticelli M.** Memorandum to Heads of Executive Departments and Agencies: Changing Federal Terminology Regarding Substance Use and Substance Use Disorders. Executive Office of the President, Office of National Drug Control Policy. Washington, DC, January 9, 2017. Accessed on September 4, 2021. <https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/images/Memo%20-%20Changing%20Federal%20Terminology%20Regrading%20Substance%20Use%20and%20Substance%20Use%20Disorders.pdf>. 2020.

68. **Fong C, Mateu-Gelabert P, Ciervo C, Eckhardt B, Aponte-Melendez Y, Kapadia S, et al.** Medical provider stigma experienced by people who use drugs (MPS-PWUD): Development and validation of a scale among people who currently inject drugs in New York City. *Drug Alcohol Depend.* 2021;221:108589. <https://doi.org/10.1016/j.drugalcdep.2021.108589>.

69. **Muncan B, Walters SM, Ezzel J, Ompad DC.** "They look at us like junkies": influences of drug use stigma on the healthcare engagement of people who inject drugs in New York City. *Harm Reduct J.* 2020;17(1):53. <https://doi.org/10.1186/s12954-020-00399-8>.

Publisher's Note: Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.