A Systematic Review Examining Patient and Provider Attitudes Toward Use of Medication

for Opioid Use Disorder

An EBP Capstone Project submitted to the St. David's School of Nursing at Texas State

University in partial fulfillment of the requirements for the degree of Master of Science in

Nursing

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NURS 5391: Translational Science for Evidence-Based Practice and Innovation (Capstone)

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November 19th, 2023

Abstract

Introduction: Despite drastically rising rates of opioid overdose related deaths, rigid opinions of both patients and providers against the use of medication for opioid use disorder persist in the face of well-established evidence indicating that medication for opioid use disorder is the gold standard of care. The purpose of this systematic review of the literature is to examine the source and effect of negative perceptions and to make recommendations to providers to improve treatment and outcomes for this population.

Methods: A systematic review of the literature was conducted to identify the source and extent of perceptions of both patients with opioid use disorder and their providers regarding medication for opioid use disorder. The Neuman Systems Model was used to guide the review to see the patient as a system with many parts that responds to environmental stressors and to bring providers' focus back to the client's well-being.

Results: Seven articles were included to identify two major themes describing patient and provider attitudes toward medication for opioid use disorder. The first theme identified was that providers and patients carry negative perceptions toward medication for opioid use disorder. The second theme indicated that medication for opioid use disorder is perceived as a replacement drug by providers and patients.

*Discussion***:** It is apparent that there is a negative view towards medication for opioid use disorder by both healthcare providers and patients struggling with opioid use disorder. Negative attitudes upheld by healthcare providers and patients continue to prevent access to effective treatment for those struggling with opioid use disorder.

Keywords: opioid use disorder, substance use disorder, negative stigma, provider attitudes, medication for opioid use disorder

A Systematic Review Examining Patient and Provider Attitudes Toward Use of Medication for Opioid Use Disorder

In the United States, opioids were found to be involved in over 80,000 overdose deaths in 2021, ten times the number of opioid overdose-related deaths in 1999 (Centers for Disease Control and Prevention, 2023). The Food and Drug Administration (FDA) has approved several medications to treat opioid use disorder (Cioe et al., 2020). Although controversial, medications to treat opioid use disorder (MOUD) have been proven to prevent opioid related deaths and abuse (Cioe et al., 2020). Despite drastically rising rates of opioid overdose related deaths, rigid opinions of both patients and providers against the use of MOUD exist. The evidence regarding the use of MOUD addresses the perceptions and attitudes of patients and their providers, how these perceptions influence patients' access to treatment and whether they seek treatment, and how to improve treatment outcomes for those struggling with opioid use disorder (OUD). A systematic review was indicated to determine the extent and effects of negative stigma providers and patients attribute to MOUD and to make recommendations to combat those beliefs and improve treatment outcomes for this population.

Background and Significance

It is estimated that 2 to 5 million adults suffer from OUD in the U.S. each year and deaths due to opioid overdose were the number one cause of accidental death in 2018 (Wakeman et al., 2020). However, over 65% of people suffering from OUD do not receive treatment (McGinty, 2020). FDA-approved MOUD include buprenorphine, methadone, and naltrexone (Cioe et al., 2020). These medications are effective in reducing opioid cravings, the incidence of relapse, and most importantly, overdose, in those struggling with OUD (Cioe et al., 2020). Buprenorphine is a partial opioid agonist and methadone is a full agonist- both are used to limit the euphoric effects of other opioids by binding to brain receptors (Pasman et al., 2023). Naltrexone is an opioid antagonist which works by blocking opioid receptors to also limit euphoric effects.

In one study by Wakeman et al. (2020), when directly compared to naltrexone (an opiate antagonist) and nonpharmacologic treatment options such as inpatient detox, intensive behavioral health, and non-intensive behavioral health, buprenorphine and methadone proved superior in reducing overdose and opioid-related acute care. Additionally, other research has proven the strong efficacy of MOUDs over alternative treatment options when treating OUD (Cioe et al., 2020). Despite methadone and buprenorphine being established as the gold standard of treatment for OUD, there remains a negative stigma regarding MOUD among providers treating individuals with OUD and patients suffering from OUD (Wakeman et al., 2020). For providers, studies show that this is largely attributed to a lack of education regarding MOUD, a discomfort with prescribing MOUD, concerns for illegal distribution, a lack of empathy toward patients with OUD, and a false belief that they are simply replacing one addiction with another (Dickson-Gomez et al., 2022). For patients, much of their hesitancy and negative stigma stems from providers' beliefs and attitudes toward treatment. Similarly, their knowledge is limited if providers are not able to properly inform them about MOUD (Cioe et al., 2020).

Review of the Literature

In a systematic review by Cioe et al. (2020), a total of 152 articles from 1940 to 2019 were reviewed to identify international themes among adult patients' and providers' perspectives toward buprenorphine, naltrexone, methadone, and buprenorphine/naloxone. Themes identified by the research were misinformation and stigma associated with MOUD (for both providers and patients) and common barriers included lack of training and resources. They conclude by suggesting necessary changes in these areas to properly address the opioid epidemic. Madden et al. (2021) also conducted a systematic review of 28 studies from the year 1998 to 2018 examining themes regarding prejudice and discrimination toward MOUD among providers and patients seeking treatment for OUD. They found that intervention stigma among providers was

due to a inadequate training and restricted treatment preferences (Madden et al., 2021). They noticed that stigma also existed among patients due to a lack of knowledge (Madden et al., 2021). Both studies concluded that these negative perceptions acted as barriers to patients accessing and utilizing MOUD.

In a third systematic review by Cernasev et al. (2021), 21 articles from the year 2000-2020 conducted in the U.S. were analyzed for themes regarding patients' perspectives of barriers and providers' access, adherence, and persistence to MOUD. Their goal was to gain an understanding of the issues OUD patients face when seeking treatment. Results were analyzed for themes which included stigmatization toward MOUD, perceived barriers to MOUD by patients, and factors complicating the accessibility of MOUD such as provider shortages.

Although reviews of literature regarding this topic exist, the studies acknowledge that there is a need for more research on the subject which is evident by the persistence of stigma and the ongoing and growing opioid epidemic. These systematic reviews further highlight the undeniable presence of negative perceptions toward MOUD and how these serve as a barrier to treatment. Additionally, they bolster the need for more attention on this research to better identify the sources of negative perceptions by providers and patients and how to best address those sources.

Purpose and Clinical Question

Despite the proven efficacy of MOUD for the treatment of OUD, stigmas and negative perceptions of both providers and OUD patients can greatly impact the accessibility and utilization of treatment. The purpose of this systematic review of the literature is to examine the source and effect of negative perceptions of patients with OUD and their providers regarding MOUD to make recommendations to providers to improve treatment and outcomes for this

population. The research question guiding this review was: how do patients with opioid use disorder and their providers perceive the use of medication to treat opioid use disorder?

Conceptual Framework

Individuals suffering from substance use disorders are unique in that their mental and physical afflictions feed off each other, complicating their disease process. Their disorder has been a longstanding target of negative stigma which they must be prepared to receive from providers, loved ones, and society. Betty Neuman's Nursing Theory, The Neuman Systems Model is designed with nursing focused on the client as a system and his or her response to stressors (Nursing Theory, 2023).

The client's system is comprised of physiological, psychological, sociocultural, developmental, and spiritual components. This ideology is important to maintain when treating those with substance use disorder because their illness revolves around their poor response to stressors and their healing will be multifactorial. When opinions regarding MOUD or OUD patients are negatively stigmatized, providers and society are failing to prioritize the well-being of the patient. The literature in this systematic review will reveal the attitudes of providers and patients toward MOUD and The Neuman Systems Model can help determine if those attitudes are in the best interest of OUD patients by viewing them as victims of a disease.

Methods

Project Design

A systematic review of the literature was conducted to identify the source and extent of perceptions of both patients with OUD and their providers regarding MOUD. There is a lack of strong evidence in literature exhibiting the likely negative attitudes of both healthcare providers treating OUD and OUD patients. This lack of evidence prevents a progression in healthcare to address these skewed attitudes as they are surely serving as a barrier to necessary OUD

treatment. The Neuman Systems Model was used to guide the review to see the patient as a system with many parts that responds to environmental stressors and to bring providers' focus back to the client's well-being.

Search Strategy

Search terms used to gather appropriate studies for this systematic review included the terms: stigma, perceptions, providers, patients with opioid use disorder, medication for opioid use disorder, and barriers to treatment. Four databases were searched, PubMed, CINAHL, Science Direct and APA PsycInfo. Ancestry searching yielded a total of four articles. Studies were included in the review if they were: published within the last 5 years, primary research, peer-reviewed, addressed or related to the population of interest (those struggling with OUD or healthcare providers treating OUD patients), addressed the purpose of the systematic review, and helped to inform or solve the issue being discussed (perceptions of those struggling with OUD or healthcare providers treating OUD patients toward MOUD). There were no exclusion criteria identified. To properly appraise the quality of the studies, a quality appraisal tool questionnaire derived from Melnyk & Fineout-Overholt (2019) was utilized called Rapid Critical Appraisal Questions for Qualitative Evidence.

Selection Process

Using the databases and search terms mentioned prior, 363 articles were originally found. Articles were then screened by title for duplication, by abstract for publication date, and by full text for population and purpose. A quality and appraisal tool from Melnyk & Fineout-Overholt (2019) was used to determine the quality appraisal rating of each article depending on the type of article and using "Rapid Critical Appraisal Questions" appropriate for each article with a cutoff score of five out of ten. After quality appraisal, articles were excluded if they lacked clarity of results, had conflicting findings, or lacked an outcome of interest. This left

a total of seven articles that met all inclusion criteria. I was the sole author and appraiser of this project.

Synthesis Method

An Evidence Synthesis Table (Table 1) was constructed to organize the chosen articles evaluated in this project. The table displays each article's author, the purpose of the article, the framework and design used, the sample and setting of the study, the methods utilized, the article's findings, the quality appraisal, the study's limitations, and the conclusions and potential application of the findings. These categories were each acknowledged to summarize the characteristics of the studies and to analyze and synthesize the results across studies to effectively identify themes that helped to answer the research question.

Results

Search Results

In total, 363 articles were identified (see Figure 1). As shown in the Flow Diagram (Figure 1), articles were removed before screening for reasons including duplication (n=15) and title (n=149) leaving 199 articles. Next, screening removed more articles (n=154) for exclusionary criteria including publication over five years prior to 2023, articles that did not address the topic (attitudes toward MOUD by OUD patients or healthcare providers treating OUD) or the wrong population (OUD patients or healthcare providers treating OUD) leaving 45 articles. From the remainder, all 45 articles' reports were retrievable which were assessed for eligibility. These were selected by me and an ancestry search yielded four articles. After quality appraisal, 19 were removed for lacking clarity of results, 12 were removed for conflicting findings, and 18 were removed for lacking outcome of interest. This left seven articles to include in this systematic review.

Characteristics of Studies

The sample of seven studies had a variety of different qualities (see Figure 2). The sample consisted of three cross-sectional, quantitative studies (Adzrago et al., 2022; Carl et al., 2023; Pasman et al., 2022), three qualitative studies performed with interviews or focus groups (Bagley et al., 2023; Chou et al., 2022; Dickson-Gomez et al., 2022), and one quantitative survey (McGinty et al., 2020). Some of the studies' purposes were to evaluate the attitudes and beliefs of healthcare providers, including those who treat substance use disorder (SUD), toward medication for opioid use disorder (MOUD) (Adrazgo et al., 2022; Carl et al., 2023; McGinty et al., 2020; Pasman et al., 2022). The other studies' purposes focused on the attitudes and beliefs of those with opioid use disorder (OUD) and considering or receiving treatment (Bagley et al., 2023); Chou et al., 2022). One study's purpose was to examine both parties' attitudes and beliefs (Dickson-Gomez et al., 2022). Study sample sizes ranged from 17 participants (Chou et al., 2022) to 570 participants (Pasman et al., 2022) with a total sample size across studies of 1,905 participants.

Although the studies generally set out to evaluate the attitudes of healthcare providers' or OUD patients' attitudes toward MOUD, most of the studies were simultaneously evaluating potential stigma and discussed how this posed a barrier to providing or receiving MOUD (Adzrago et al., 2022; Bagley et al., 2022; Carl et al., 2023; Chou et al., 2022; Dickson-Gomez et al., 2022). One study focused on healthcare professionals' attitudes specifically concerning Naloxone (Adzrago et al., 2022), while another evaluated providers' views towards methadone (Carl et al., 2023), and a third determined different attitudes toward methadone vs. naltrexone (Pasman et al., 2022).

Synthesis Across Studies

Using the thematic analysis methods by Whittemore and Knafl (2005), two major themes describing patient and provider attitudes toward MOUD were identified across studies.

Theme 1: Providers and Patients Carry Negative Perception Toward MOUD

A common theme identified across each of the seven studies was that many healthcare providers and patients have persistent false beliefs regarding MOUD despite it being established as the gold-standard of care for OUD (Adzrago et al., 2022; Bagley et al., 2022; Carl et al., 2023; Chou et al., 2022; Dickson-Gomez et al., 2022; McGinty et al., 2020; Pasman et al., 2022). Each of the articles provides strong evidence that there continues to exist a stigma among healthcare providers, inhibiting the utilization and access to MOUD for patients with OUD (Adzrago et al., 2022; Bagley et al., 2022; Carl et al., 2023; Chou et al., 2022; Dickson-Gomez et al., 2022; McGinty et al., 2020; Pasman et al., 2022). All three of the articles that specifically evaluated patients' attitudes toward MOUD showed that the stigma among healthcare providers negatively influenced the opinions and perceptions of patients, which then acted as an additional barrier to treatment (Bagley et al., 2022; Carl et al., 2023; Dickson-Gomez et al., 2022). One article showed that 27.9% of their participants heard negative comments regarding MOUD specifically from substance use treatment providers (Carl et al., 2023). Findings showed that patients with OUD found it difficult to suppress these views for themselves, despite being successful in their recovery while receiving MOUD treatment (Bagley et al., 2022; Chou et al., 2022; Dickson-Gomez et al., 2022). This theme is not in alignment with The Neuman Systems Model and actually deters the progression and treatment of OUD patients and the necessary utilization of MOUD.

Theme 2: MOUD is Perceived as Replacement Drug by Providers and Patients

In three studies, evidence showed that a common perception among providers and patients is that treatment involving MOUD is exchanging one drug for another (Adzrago et al., 2022; Bagley et al., 2022; Chou et al., 2022). This implication minimizes the recovery process and achievement required to manage OUD by patients being treated with MOUD. One study

found that prescribers who believed stigma against MOUD may serve as a barrier to treatment, were less likely to believe that MOUD could be a replacement drug (Adzrago et al., 2022). Two articles recognized that patients were regrettably influenced by others' perceptions of MOUD, despite their own progress in recovery (Bagley et al., 2022; Chou et al., 2022). Another gathered patient accounts that expressed they did not feel truly sober while being prescribed MOUD (Bagley et al., 2022). This misconception not only prevents providers from offering effective treatment options but discourages patients with OUD from seeking treatment. This theme clashes with the design of The Neuman Systems Model which proposes seeing the patient as a system that is responding to stressors. This theme does not prioritize the well-being of the patient and instead suggests that providers, and therefore their patients, are regimented in seeing MOUD in a negative light despite evidence presented in literature.

Discussion

This systematic review aimed to identify and summarize the attitudes of patients and providers towards MOUD. There was a unanimous theme across the studies that there exists a persistent stigma among healthcare providers and patients regarding MOUD despite it being the gold-standard treatment for OUD. There was a second theme identified that MOUD is regarded as a replacement drug by both patients and healthcare providers meaning that OUD patients are simply swapping one dependency for another. Both themes identified indicate that there is a barrier in what could potentially be much more effective treatment for OUD patients and furthermore, a way to address the opioid crisis in our country. Both themes contradict The Neuman Systems Model and imply that providers treating OUD and OUD patients are failing to bypass stigmas associated with MOUD and SUD in the interest of what is best for OUD treatment.

Recommendations

Based on the evidence gained and themes identified from these articles, it is apparent that there is a negative view towards MOUD by both healthcare providers and patients struggling with OUD. One recommendation for practice would be to incorporate educational seminars or classes led by individuals who support MOUD and can discuss the misconceptions found to be associated with MOUD treatment. Since the stigma surrounding MOUD is built on a foundation of stigma towards those struggling with OUD, education should be aimed towards evolving these perceptions with the intention of also altering attitudes toward MOUD.

Practices offering opioid use treatment should also bear in mind that stigma exists for patients as well. Education should be provided to these patients to encourage their progress and reverse the mentality that MOUD is simply swapping one dependency for another. MOUD needs to be recognized as a path to recovery because it can aid in the opioid epidemic and improve quality of life for those with OUD. If tactics are geared towards repairing attitudes and correcting misinformation of both providers and patients regarding MOUD, this can be a step toward overcoming the mountain of stigma.

Limitations

There were three limitations to this study that may impede the applicability of the results to a larger population. One limitation was the lack of studies available that provided a high level of evidence. Due to the nature of the topic, many studies were performed qualitatively and required subjective reports from participants. Another limitation was the small sample size of most of the articles that were appraised. This was likely due to the sensitive nature of the topic and stigmatized populations involved. Finally, many of the studies gathered their findings from their participants on a volunteer basis meaning that this potentially eliminated many subjects experiencing stigma surrounding OUD. To improve these limitations, research providing higher levels of evidence would need to be performed with larger sample sizes. This might be

accomplished with larger compensation for participants or alternative approaches to advertising the intention of the study.

Conclusions and Implications

Research has established evidence-based treatment solutions to the ongoing opioid epidemic. However, negative attitudes toward MOUD upheld by healthcare providers and patients continue to prevent access to effective treatment for those struggling with OUD. Often, patients' stigma is secondhand from providers that have influenced their attitudes toward MOUD. Additionally, both providers and patients do not view MOUD as recovery at all, but instead trading one addiction for another.

Healthcare providers including advanced practice nurses, have a responsibility to be well-informed and resistant to long-standing misconceptions that inhibit the progression of healthcare. Healthcare providers' attitudes must be adjusted as they have a strong influence on OUD patients and their own belief systems. Efforts must be initiated to better educate professionals with the ability to provide or refer patients to MOUD so that they can better support and treat those with OUD. Education must be more widespread and accessible to begin dismantling the stigma associated with OUD, and more specifically MOUD. One goal of research would be to re-evaluate policies in areas such as those regulating the dispensing of methadone which may be more stigmatizing to the drug then promoting treatment outcomes and ensuring safe administration. All studies utilized in this review acknowledge a need for further, higher quality research to better address the negative attitudes toward MOUD by both providers and patients.

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Figure 1

Flow Diagram of Systematic Review Process

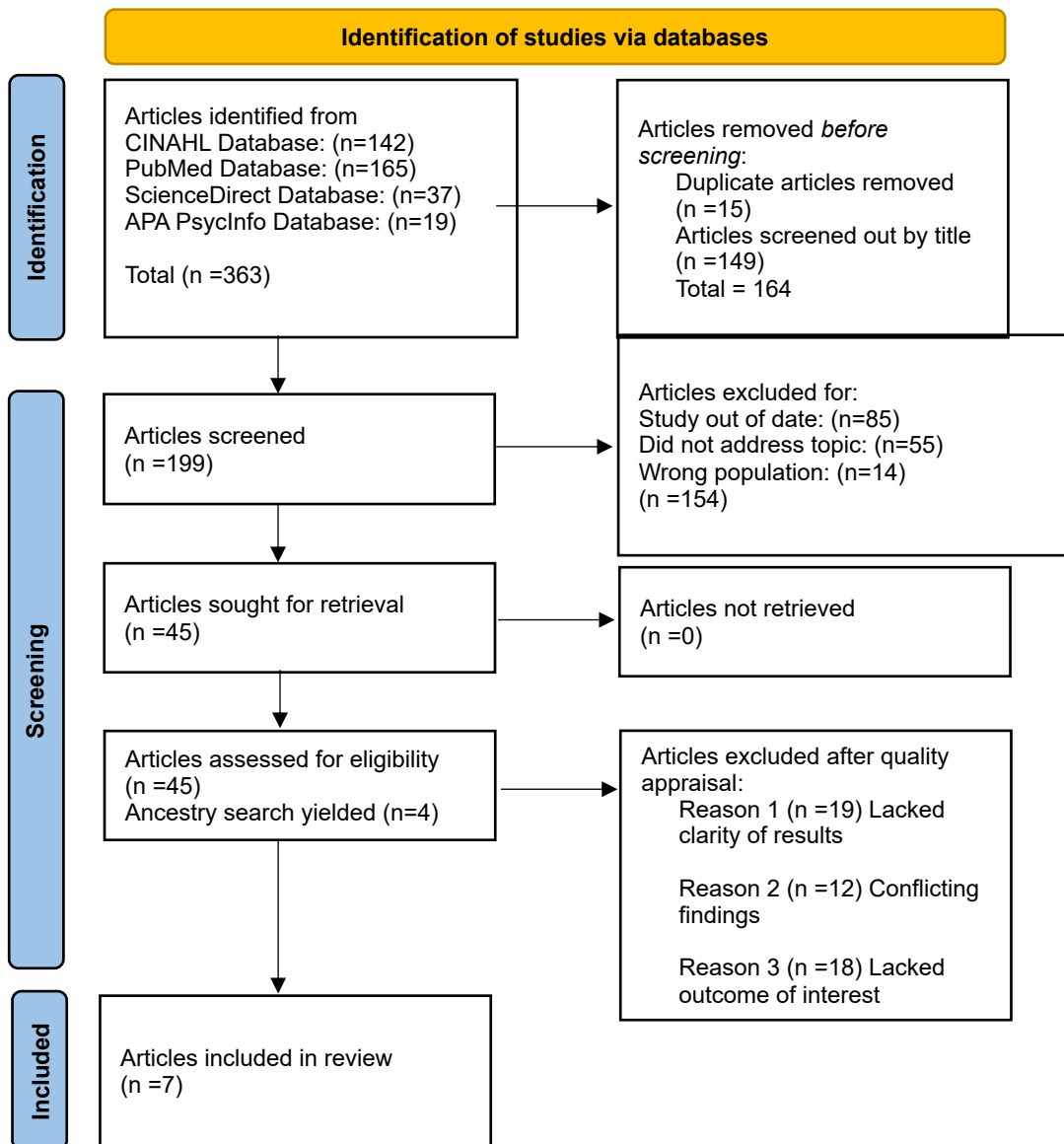| **Identification of studies via databases**	

Articles identified from
CINAHL Database: (n=142)
PubMed Database: (n=165)
ScienceDirect Database: (n=37)
APA PsycInfo Database: (n=19)
 	
Total (n =363)
	Articles removed *before screening*:
	    Duplicate articles removed (n =15)
	    Articles screened out by title (n =149)
	    Total = 164

	Articles excluded for: Study out of date: (n=85) Did not address topic: (n=55) Wrong population: (n=14) (n =154)
Articles screened (n =199)	
Articles sought for retrieval (n =45)	Articles not retrieved (n =0)

Articles assessed for eligibility
(n =45)
Ancestry search yielded (n=4)
	Articles excluded after quality appraisal:
	    Reason 1 (n =19) Lacked clarity of results
	    Reason 2 (n =12) Conflicting findings
	    Reason 3 (n =18) Lacked outcome of interest

Articles included in review (n =7)	

Figure 2

Evidence Synthesis Table

Author	Purpose	Framework	Design	Sample/ Setting	Methods	Findings	Quality Appraisal/Limitations	Conclusions/Application
Adzrago, 2022	To examine the perceptions and knowledge of medical and pharmacy professionals regarding MOUD	None	Cross-sectional survey, quantitative	542 participants; mean age was 35 y.o.; 50.93% were males; medical and pharmacy professionals selected at their respective pharmacies in Houston and Harris County, Tx	Participants' perceptions of MOUD surveyed via telephone or REDCap online survey using 5-point Likert agreement responses; results analyzed using a multinomial logistic regression analysis to evaluate attitudes and beliefs concerning Naloxone Standing Order Training for Certification and Dispensing of Naloxone/Narcan, and their attitudes/ beliefs about dispensing these medications	More than 1/3 of medical and pharmacy professionals reported they do not believe MOUD leads to abstinence or recovery (36.1%)	**Quality Appraisal Rating: 4 Recommended for use within a body of evidence?** Yes **Limitations:** participants from smaller clinics and privately owned pharmacies may limit generalizability of results; could not establish causal relationships	**Conclusion:** results confirm presence of negative perceptions among medical and pharmacy professionals and identifies potential causes **Application:** further research is necessary to identify how to develop interventions effective for promoting medical and pharmacy professionals' positive attitudes regarding MOUD
Bagley, 2022	To evaluate the beliefs and attitudes regarding MOUD among young adults which	None	Qualitative interviews	20 participants in treatment for OUD; ages 21-29 y.o.; 12 male, 7 female, 1 nonbinary; 15 non-Hispanic	Open ended questions involving domains: experience with MOUD, sources and impact of stigma, interactions with family, healthcare professionals, and social networks; hybrid inductive and deductive approach for analysis	One of three themes identified showed that young adults hold internalized stigmatized beliefs	**Quality Appraisal Rating: 8/10 Recommended for use within a body of evidence?** Yes **Limitations:** sample were mostly White males which does not accurately represent general	**Conclusion:** Results indicate a stigma present among young adults due to internalized beliefs and impressions from treatment providers/ social networks; identified multiple potential explanations for low engagement in treatment by young adults including ambivalence and stigma

Author	Purpose	Framework	Design	Sample/Setting	Methods	Findings	Quality Appraisal/Limitations	Conclusions/Application
	may be contributing to low engagement in OUD treatment			White, 2 Hispanic/Latino, 2 multiracial, 1 Asian American; recruited from outpatient substance use programs; urban safety-net hospital in Boston		about MOUD and experienced stigma from treatment providers and social networks	population receiving MOUD; sample included only those seeking treatment while those not seeking treatment may be more stigmatized; most participants treated with buprenorphine which may carry a more negative stigma than naltrexone due to misuse potential	**Application:** intervention development may want to focus on reported barrier of ambivalence identified in this study; open, nonjudgmental and compassionate environment should be standard of care with young adults seeking OUD treatment to encourage retention and engagement
Carl, 2023	To examine provider-based stigma toward MOUD and identify factors associated with people receiving methadone and experiencing providers' stigma	None	Cross-sectional survey, quantitative	N=247 participants; 98 male, 149 female; 36 person of color, 211 White; patients receiving methadone recruited onsite at an opioid treatment program in Jackson, Michigan	94% of participants self-administered the computer-based survey (researchers assisted those requiring accommodations due to difficulty with reading, technology, or vision); survey evaluated socio-demographics, substance use, depression and anxiety symptoms, self-stigma, and recovery supports/barriers; logistic regression was used for analysis of factors	27.9% and 56.7% of participants reported sometimes/often hearing negative comments about MOUD from healthcare providers	**Quality Appraisal Rating:** 6/10 **Recommended for use within a body of evidence?** Yes **Limitations**: cannot make causal interpretations; does not evaluate if stigmatizing methadone misperceptions vary across time or at different stages of treatment/recovery; sample was representative of community but not racial minority	**Conclusion**: results confirm presence of misconceptions among healthcare providers; suggests strategies such as greater knowledge of the evidence supporting MOUD may lead to increased treatment utilization and improved treatment outcomes **Application**: results indicate the need to change MOUD misconceptions among healthcare providers and strategies to reduce stigma; strategies such as greater knowledge of the evidence supporting MOUD may lead to increased treatment

Aut hor	Purpose	Fra mew ork	Desig n	Sample/ Setting	Methods	Findings	Quality Appraisal/Limitati ons	Conclusions/Application
							groups who may experience increased stigma	utilization and improved treatment outcomes
Cho u, 202 2	To analyze focus group data to understan d stigma associated experienc es in women with OUD who were receiving MOUD	Non e	Focus group qualit ative study	N=17 females; mean age 39.1 y.o.; all had received MOUD; conducted at two substance use treatment centers located in large metropolitan area of northeastern USA	Self-report surveys followed by focus groups to discuss experiences with MOUD, social support, family support, stigma, and treatment needs; thematic analysis based on Braun and Clarke's (2006) thematic analysis approach	One of three themes identified showed that the majority of participant s described experienci ng stigma from themselves , complicati ng their treatment options	**Quality Appraisal Rating: 8/10 Recommended for use within a body of evidence?** Yes **Limitations:** generalizability is limited due to small sample; results excluded perceptions of partners and family members	**Conclusion:** findings confirm negative misconceptions and evidence of stigma among women and an influence of misinformation while seeking treatment for OUD **Application:** findings can help to better understand the impact of stigma on women in order to modify treatment approach; future research should examine perspectives of families and partners; determine the impact of psychoeducation on these relationships
Dic kson - Go mez , 202 2	To examine MOUD related stigma by those with OUD and their key informant s who provide or refer them	Non e	Qualit ative interv iews	N=148 participants over 18 y.o.; urban, suburban, and rural areas of Connecticut, Kentucky, and Wisconsin, recruited from harm	Phone or face-to-face interviews; asked about perceptions of the role of MOUD in drug treatment, goals of drug treatment, which types most effective along with experiences in relation to MOUD	Themes identified 1) interventio n stigma (fear of using MOUD or diversion) exacerbate d by condition stigma	**Quality Appraisal Rating: 8/10 Recommended for use within a body of evidence?** Yes **Limitations:** none identified	**Conclusion:** results confirm presence of MOUD stigma among key informants and providers and patients with OUD; stigma acts as barrier to providing proper treatment; both providers and patients prove to be misinformed on MOUD **Application:** findings support need to educate both providers and patients to change evident stigma and

Aut hor	Purpose	Fra mew ork	Desig n	Sample/ Setting	Methods	Findings	Quality Appraisal/Limitati ons	Conclusions/Application
	to treatment			reduction services or upon entry to drug treatment facilities		(negative perceptions of patients with OUD) 2) stigma influenced providers' perceptions of goals and length of treatment 3) patients expressed mistrust of MOUD related to opioid epidemic beginning in 1990s		promote better, evidence-based treatment; suggests integration of behavioral health services, policy changes, and training
Mc Gint y, 202 0	To examine primary care physicians ' beliefs and attitudes about MOUD	Non e	Quant itative surve y	N=361; 41.2% female, 58.8% male; 7.6% over 35 y.o., 19.1% 35-44 y.o., 29.4% 45-54 y.o., 28.5% 55-64 y.o., 15.5 over 65 yo.; actively practicing	Self-administered surveys delivered and returned by mail	1/3 of primary care physicians did not perceive OUD medication treatment to be more effective than nonmedica tion	**Quality Appraisal Rating:** 6/10 **Limitations:** potential nonresponse bias	**Conclusion:** primary providers do not view MOUD as effective or safe as it has proven to be; suggests that policy changes alone are unlikely to make a difference and training and specialty providers may be necessary **Application:** findings indicate urgent need to increase providers' endorsement of MOUD and

Aut hor	Purpose	Fra mew ork	Desig n	Sample/ Setting	Methods	Findings	Quality Appraisal/Limitati ons	Conclusions/Application
				family, internal, or general medicine practitioners in the U.S.		treatment or safe for long-term use; physicians reported low interest in treating OUD and low support for policy proposals allowing office-based physicians to prescribe methadone and eliminate buprenorph ine waiver		their willingness to prescribe it
Pas man , 202 2	To examine substance use treatment providers' attitudes toward MOUD and	Non e	Cross - sectio nal surve y, quanti tative	N=570; 73.2% female; 78.5% White, 14.5% Black, 7% other; providers working at	Self-administered web-based surveys used to report socio-demographics, professional experience, and attitudes toward MOUD; linear regression used to identify factors associated with attitudes toward MOUD; three logistic regression models	53% of providers considered methadone effective; 62.9% considered buprenorph ine effective;	**Quality Appraisal Rating:** 6/10 **Recommended for use within a body of evidence?** Yes **Limitations:** sample limited to Michigan and results may not be generalizable;	**Conclusion:** despite strong empirical support, stigma and misinformation remain barrier to broader usage of MOUD; providers' attitudes misaligned with evidence despite efforts; findings indicate a greater need for education among providers

Aut hor	Purpose	Fra mew ork	Desig n	Sample/ Setting	Methods	Findings	Quality Appraisal/Limitati ons	Conclusions/Application
	identify personal and profession al characteri stics associated with more positive attitudes			publicly funded substance use programs in Michigan	calculated to identify factors associated with perceptions of each medication	70.3% considered naltrexone effective	non-response bias may have been a factor; sample may not have been racially diverse enough; self-reported data may be limited by social desirability bias; underreporting of negative stigma by providers	**Application:** Results point toward specific, potential interventions to improve provider attitudes regarding MOUD; this study may help identify training content to shift providers' perceptions toward MOUD

Legend: MOUD = Medication for opioid use disorder; OUD = Opioid use disorder; SUD = Substance use disorder