



Comprehensive and Integrated Services in Specialty Mental Health Treatment Facilities in the US: Differences by the Racial/Ethnic Composition of the Facility's Clientele, 2020

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Abstract

The integration of multiple ancillary services into mental health treatment settings may improve outcomes, but there are no national studies addressing whether comprehensive services are distributed equitably. We investigated whether the availability of a wide range of service types differs based on the facility's racial/ethnic composition. We used the 2020 National Mental Health Services Survey to identify twelve services offered in outpatient mental health treatment facilities (N=1,074 facilities). We used logistic regression to model each of the twelve services, predicted by the percentage of a facility's clientele that was White, Black, and Hispanic, adjusted for covariates. Facilities with the highest proportions of Black and Hispanic clientele demonstrated the lowest predicted probabilities of offering comprehensive and integrated services. Our findings offer context around upstream factors that may, in part, drive treatment disparities. We orient our findings around frameworks of structural racism and inequities in mental healthcare.

Keywords Health service research · Mental health · Public health · Race & ethnicity · Social epidemiology

Introduction

Mental health treatment outcomes are disproportionately worse among underrepresented racial/ethnic minority groups (SAMHSA Center for Mental Health Services, 2001). Mental health services and epidemiologic literature has focused largely on disparities in healthcare utilization, with a majority of research focused on individual-level predictors of

success such as age, gender, attitudes and readiness, and symptom severity (Bucher, Suzuki, & Samuel, 2019; Cross et al., 2022; Green et al., 2020). For example, Black and Hispanic individuals with mental health diagnoses are less likely than White individuals to initiate treatment (Le Cook, Trinh, Li, Shu-Yeu Hou, & Progovac, 2017; Le Cook et al., 2014). Social and environmental determinants of health outside of the treatment setting have also been shown to be strong influences on mental health and treatment outcomes (Alegria, NeMoyer, Bague, Wang, & Alvarez, 2018). While treatment use and individual predictors of treatment outcomes are important pieces of the overall story of disparities in mental health services, there remains a dearth of national research investigating the upstream causes of racial disparities in access to appropriate mental health treatment facilities.

All mental health treatment is not equal. Whether a facility offers comprehensive, integrated, and/or co-located services is an indicator of the overall structural clinical environment that likely affects multiple treatment endpoints. Co-located ancillary and physical health services have been shown to improve health among mental health treatment clients (Annamalai, Staeheli, Cole, & Steiner, 2018; Pirraglia et al.,

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2012), but no national epidemiologic studies have reported on the pace of service integration or whether emerging trends in integration are distributed equally across mental health facilities. The extent to which mental health treatment facilities are expanding the breadth of services offered may depend on the socioeconomic status and the racial/ethnic composition of their clientele. People typically receive healthcare where they live, and healthcare services are generally more limited, under-resourced, and more strained in communities that are predominately Black, Hispanic, or low income (Agurs-Collins et al., 2019; Artiga et al., 2020; Chan et al., 2020; Perry Crear et al., 2021). Consequently, there is a need to look beyond individual-level characteristics and explore upstream barriers to treatment access and ultimately successful treatment outcomes.

Our approach to investigating disparities in mental health systems is underpinned by Link and Phelan's Fundamental Causes Theory (Link & Phelan, 1995; Phelan et al., 2010), which provides a framework for addressing the upstream and systematic factors that create health disparities. Recognizing and measuring downstream disparities in mental health treatment outcomes is an important piece of the narrative, including research findings that Black patients are more likely to terminate treatment early (Delphin-Rittmon et al., 2015; Lester et al., 2010; Olfson et al., 2009). However, long-term and sustainable solutions to reducing health and healthcare disparities must address higher-level systems of wealth and power. For example, structural racism is defined by the National Institutes of Health as "the macro-level conditions (e.g. residential segregation and institutional policies) that limit opportunities, resources, power and well-being of individuals and populations based on race/ethnicity and other statuses" (National Institutes of Health, 2022). These conditions are fundamental causes of inequities in health through the perpetuation of policies and practices that deny comprehensive health resources to minority and low-income communities while enhancing access in privileged White communities (Gee & Hicken, 2021; Phelan & Link, 2015). Our study aims to provide additional context around structural determinants in mental health treatment by investigating whether the quality of services is conditional on the racial/ethnic composition of a given treatment facility. We hypothesized that facilities with the least comprehensive services would serve higher concentrations of Black and Hispanic patients. Importantly, we chose to investigate a wide range of possible ancillary services offered in mental health treatment settings to approximate the comprehensiveness of a facility's services. The motivation behind selecting diverse service types – from smoking cessation counseling to crisis intervention teams – was to highlight a common thread of disparities across a broad range of services, regardless of which specific service

is under study. Such a service-agnostic approach is useful when focusing attention on the disparities without delving into the specific implications or merits of one service type over another. Taken together, commonalities in the direction and size of racial/ethnic differences across service types were the central to our research findings.

Methods

Data Source and Sample

We used cross-sectional data from the 2020 National Mental Health Services Survey (N-MHSS) to identify a range of characteristics of specialty outpatient treatment facilities in the US. N-MHSS is planned and directed by the Center for Behavioral Health Statistics and Quality, which is housed within the Substance Abuse and Mental Health Services Administration. In brief, N-MHSS includes data on characteristics of all known public and private facilities in the US that provide specialty mental health treatment, defined by SAMHSA as any facility or entity that provides mental health treatment services to people with mental illness. Administrative representatives from each facility completed an annual survey about services provided. In 2020, the response rate among facilities eligible to participate was 89% (Substance Abuse and Mental Health Services Administration, 2020). This study was a secondary analysis of publicly available administrative data describing characteristics of mental health facilities. As such, no human subjects were involved in this study and no individual-level data was available or used.

N-MHSS collects aggregate demographic information about treatment clientele demographics on even years. Respondents are asked about the racial/ethnic composition of their clientele by reporting either the number *or* percentage of clients in each racial/ethnic group, but not both. Although more facilities opted to report the raw number of clients, we used the percentage of clients in each racial/ethnic group as our primary predictor because the total facility size (denominator) is integrated into the pre-calculated percentage estimate. Moreover, counting the number of clients in each racial/ethnic group is likely an indication of the overall facility size and fails to accurately capture the racial/ethnic distribution of a facility's patient population. There is no way to accurately derive a racial/ethnic percentage using the raw frequency variable with N-MHSS data; as such, we opted to only include the facilities that reported percentages. Our final sample included 1,074 facilities that had complete data for all study variables, which was 22% of all 4,835 outpatient facilities included in the 2020 N-MHSS. We used chi-square tests to determine whether our sample of

facilities (those that reported demographics as percentages) was statistically significantly different from the remaining facilities that were excluded from our analysis (those that reported demographics as raw frequencies in ranges). Nine out of 12 study outcomes were not significantly different between facilities included and excluded from our sample ($p > 0.05$; Table 1), suggesting that our analytic sample is broadly representative of outpatient facilities in N-MHSS and our results are generalizable to the wider population of outpatient mental health treatment facilities in the US.

Study Outcomes, Focal Predictors, and Covariates

Our study was designed to investigate the relationship between the distribution of racial/ethnic groups served by the facility and whether facilities offered a variety of multiple services, which we contextualized as indicators of more comprehensive and integrated mental health services. As such, we developed twelve separate models each with a different binary outcome to identify differences in the probability of each service being offered (yes/no). These outcomes were selected to assess racial/ethnic differences across a wide range of mental health service types, as the goal was not to investigate any one domain of mental health treatment but rather to showcase the breadth of possibilities. Our twelve outcomes included whether a mental health facility: (1) offers family and couple therapy; (2) offers family psychoeducation; (3) offers telehealth; (4) uses a sliding fee scale; (5) offers integrated dual disorders treatment; (6) offers suicide prevention services; (7) offers dialectical behavior therapy; (8) offers substance use treatment; (9) offers smoking/tobacco cessation counseling; (10) offers consumer-run peer support services; (11) offers eye movement desensitization and reprocessing (EDMR), and; (12) is

accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF).

We considered three focal predictors in our models, each represented by three variables with pre-defined response options in the N-MHSS dataset. Specifically, we looked at the percentage of a facility's clientele that was White, Black, and Hispanic (1–10%, 11–20%, 21–30%, 31–40%, 41–50%, 51–75%, and 76–100%). We also included several covariates in our models based on *a priori* understanding of factors related to our outcomes. Covariates drawn from the N-MHSS data included the facility owner type (private non-profit, private for-profit, or public agency or department) and whether the facility accepts Medicaid as payment for services (yes or no). We also considered three state-level variables sourced externally that described the state environment in which each facility was located, including whether the facility was located in a Medicaid expansion state (Henry J. Kaiser Family Foundation, 2020), the percentage of a state's population living in a rural area (Iowa Community Indicators Program, 2020), and the percentage of a state's population that is White (U.S. Census Bureau, 2020).

Analysis

We used summary statistics to describe the distribution of our outcomes and predictors, reporting frequencies, proportions, and means depending on the variable type. We further stratified each outcome by the proportion of each facility that was White, Black, and Hispanic. We used multiple logistic regression to model each study outcome, predicted by facility demographic estimates for racial/ethnic composition (percent White, Black, and Hispanic) and adjusted for covariates. We treated the seven race/ethnicity categories as

Table 1 Differences in study outcomes based on inclusion criteria

Study outcomes	Included	Excluded	χ^2 p
	<i>reported population as percentage</i> n = 1,074	<i>reported population as number</i> n = 3,761	
	col %	col %	
1. Offers family and couples therapy	88.36	82.05	< 0.0001
2. Offers family psychoeducation	78.31	71.60	< 0.0001
3. Offers telehealth	76.54	73.81	0.07
4. Uses a sliding fee scale	69.55	65.81	0.02
5. Offers integrated dual disorders treatment	63.41	60.65	0.10
6. Offers suicide prevention services	61.73	59.24	0.14
7. Offers dialectical behavior therapy	61.36	60.65	0.67
8. Offers substance use treatment	58.10	56.87	0.47
9. Offers smoking/tobacco cessation counseling	40.78	38.83	0.25
10. Offers consumer-run peer support services	31.10	29.19	0.23
11. Offers eye movement desensitization and reprocessing	23.28	23.08	0.89
12. Accredited by the Commission on Accreditation of Rehabilitation Facilities	21.51	20.85	0.64

linear (i.e., 1–10%, 11–20%, 21–30%, 31–40%, 41–50%, 51–75%, and 76–100%) as the ranges between each ordinal level are nearly equivalent and may be expressed as a quasi-linear approximation. This approach of using pre-defined ordered categorical bins as proxy indicators of a linear scale substantially facilitates interpretation of trends as the racial/ethnic composition of each facility changes. Several studies have discussed the appropriateness and usefulness of treating ordinal variables as continuous in regression-based models (Li, 2016; Rhemtulla et al., 2012; Robitzsch, 2020). Finally, to visualize the adjusted trends in health service availability and services integration, we used estimates generated from our logistic models to plot the predicted probability of each outcome (y-axis) across facility-level percentages of White, Black, and Hispanic clientele (x-axis).

The N-MHSS includes administrative, aggregate, facility-level data and does not include individual-level data. Analysis of such data is not defined as human subjects research under the Common Rule as described by the US Health and Human Services Office for Human Research Protections (U.S. Department of Health and Human Services, 2022). The authors report no known conflicts of interest. All authors certify responsibility for this manuscript.

Results

Our analytic sample included 1,074 outpatient mental health treatment facilities. The most common services and administrative offerings were family and couples therapy (88%), family psycho-education (78%), telehealth (77%), and offering a sliding fee scale (70%) (Table 2). Fewer than one-in-three facilities offered consumer-run peer support (31%), EDMR (23%), or had CARF accreditation (22%). Over a quarter of all facilities (27%) had more than 75% White clientele, while only 2% had more than 75% Black or Hispanic clientele. Hispanic clientele were the least represented group, with half of all treatment facilities (50%) having only 1–10% Hispanic clients, followed by 41% of treatment facilities having only 1–10% Black clients.

In our fully adjusted models (Table 3), higher proportions of Black clients were associated with facilities being less likely to offer family-based psycho-education (adjusted odds ratio [aOR]=0.81, 95% confidence interval [CI]=0.70–0.92, $p < 0.01$), suicide prevention (aOR=0.87, 95% CI=0.78–0.97, $p = 0.01$), consumer-run peer support (aOR=0.86, 95% CI=0.78–0.97, $p < 0.01$), and EDMR (aOR=0.84, 95% CI=0.74–0.95, $p < 0.01$). An increasing proportion of Hispanic clients was positively associated with offering family-based psycho-education (aOR=1.21, 95% CI=1.06–1.39, $p < 0.01$) and suicide prevention (aOR=1.11, 95% CI=1.00, 1.22, $p = 0.04$)

and negatively associated with offering family and couples therapy (aOR=0.87, 95% CI=0.76–0.99, $p = 0.03$), smoking/tobacco cessation (aOR=0.92, 95% CI=0.84, 1.01, $p = 0.06$), and CARF accreditation (aOR=0.84, 95% CI=0.74–0.95, $p < 0.01$). Higher proportions of White clients were negatively associated with family psycho-education (aOR=0.82, 95% CI=0.70–0.96, $p = 0.01$) and positively associated with offering a sliding scale fee (aOR=1.14, 95% CI=1.02–1.28, $p = 0.02$). Our adjusted results can also be visualized as predicted probabilities for each of the twelve outcomes (Fig. 1). In ten out of the 12 models, the predicted probability of offering a comprehensive service in a mental health treatment setting was lowest among facilities with high proportions of Black or Hispanic clientele (blue and green lines).

Discussion

This study evaluated a national sample of mental health facilities in the US and found that for several of outcomes assessed, service availability decreased as the proportion of Black and Hispanic clients increased. There were no positive relationships between offered services with an increase in Black clientele. These findings help contextualize previous research that identified racial/ethnic differences in mental health treatment success (Delphin-Rittmon et al., 2015; Lester et al., 2010; Olfson et al., 2009) given our finding of reduced access to more comprehensive clinical services among Black and Hispanic clients. While the twelve measured outcomes may provide specific interpretations for the services themselves, they likely serve as a proxy for an overall clinic environment and the range of services offered as well as proxies for healthcare funding, health policy, or community investment, all of which are upstream factors affecting how people navigate healthcare and thrive in mental health treatment. Our study contributes to the mental health disparities literature, in part, by suggesting mechanisms for how and why disparities in mental health outcomes exist.

Our findings of less comprehensive mental health services for Black and Hispanic client populations align with the concept of structural determinism, articulated by Ford and Airhihenbuwa (2010) in their introduction to public health critical race methodology. In the context of our study, the structural nature of racialization in healthcare drives inequities and reinforces existing power structures. The systematic denial of robust and quality mental health care for communities of color – or conversely, the systematic construction of comprehensive mental healthcare for White and wealthy populations – serves to exacerbate morbidity among the former and thriving among the latter. Such

Table 2 Characteristics of specialty mental health treatment facilities (NMHSS 2020; N = 1,074 facilities)

Variables	n	%
Study outcomes		
1. Offers family and couples therapy	949	88.36
2. Offers family psychoeducation	841	78.31
3. Offers telehealth	822	76.54
4. Uses a sliding fee scale	747	69.55
5. Offers integrated dual disorders treatment	681	63.41
6. Offers suicide prevention services	663	61.73
7. Offers dialectical behavior therapy	659	61.36
8. Offers substance use treatment	624	58.10
9. Offers smoking/tobacco cessation counseling	438	40.78
10. Offers consumer-run peer support services	334	31.10
11. Offers eye movement desensitization and reprocessing (EDMR)	250	23.28
12. Accredited by the Commission on Accreditation of Rehabilitation Facilities (CARF)	231	21.51
Focal predictors		
Percentage of a facility's clientele that is White		
1–10%	38	3.54
11–20%	62	5.77
21–30%	82	7.64
31–40%	104	9.68
41–50%	164	15.27
51–75%	331	30.82
76–100%	293	27.28
Percentage of a facility's clientele that is Black		
1–10%	435	40.50
11–20%	183	17.04
21–30%	134	12.48
31–40%	113	10.52
41–50%	99	9.22
51–75%	89	8.29
76–100%	21	1.96
Percentage of a facility's clientele that is Hispanic		
1–10%	540	50.28
11–20%	207	19.27
21–30%	124	11.55
31–40%	73	6.80
41–50%	46	4.28
51–75%	64	5.96
76–100%	20	1.88
Covariates		
Facility owner		
Private non-profit	666	62.01
Private for-profit	247	23.00
Public agency or department	161	14.99
Accepts Medicaid as payment for services		
Yes	991	92.27
No	83	7.73
Facility is located in a Medicaid expansion state		
Yes	824	76.72
No	250	23.28

Table 2 (continued)

Variables	n	%
Percentage of a state's population living in a rural area (mean/SD)	18.49 (11.39)	
Percentage of a state's population that is White (mean/SD)	75.23 (9.82)	

morbidity and thriving may subsequently be passed down across generations and help sustain social stratification and further the racialization of group differences.

In our adjusted regression model, not all service types were significantly associated with the racial/ethnic composition of the clinic, and some relationships were in the opposite direction of our hypothesis. For example, offering family psychoeducation was more likely in clinics that had higher proportions of Hispanic clients. While definitions of family psychoeducation vary, it generally refers to the involvement of family members in the day-to-day management of a loved one's mental health symptoms, financial management of mental health care, and addressing the stress often involved in caring for someone with a mental health disorder (Substance Abuse and Mental Health Services Administration, 2009). A lack of access to Spanish-speaking and bilingual providers is a major barrier to mental health treatment use among Hispanic adults (Pro et al., 2022; Rastogi et al., 2012), which is likely driving the continued decline in mental health treatment among Hispanic men in particular (Manuel, 2017). While language and culturally humble care are vital characteristics of evidence-based family psychoeducation programs (Substance Abuse and Mental Health Services Administration, 2009), professional Spanish language interpreter services are not always reimbursed or available across healthcare settings (Showstack, Guzman, Chesser, & Keene Woods, 2018), resulting in family members often stepping in as informal medical interpreters (Ginde, Clark, & Camargo, 2009). The pre-existing necessity of family involvement may aid in the success of family psychoeducation among Hispanic families. However, family psychoeducation in Hispanic populations is not without challenges, as participants have noted the competing elements of strong Hispanic family ties (*familismo*) and stigma towards mental illness by family members (Hackethal et al., 2013).

We noted several other strong associations with increased Black clientele in our adjusted models, including declines in facilities offering suicide prevention services as the proportion of Black mental health clients increased. Nationally, age-adjusted suicide rates increased by 30% among Black individuals between 2014 and 2019, and by 47% among Black youth specifically (Ramchand, Gordon, & Pearson, 2021). Mental health service use is universally low among adolescents at risk for suicide (Wu, Katic, Liu, Fan, & Fuller, 2010). Furthermore, Black adolescents are less likely than their White counterparts to receive suicide prevention

services or consult with a mental health professional before their suicide attempt (Freedenthal, 2007). Importantly, in a study validating prediction models in a national sample, Coley and colleagues (2021) found that the rate for suicide within 90 days of a visit to an outpatient mental health facility was lowest among Black individuals. These findings suggest that mental health services may have a strong protective effect for Black clients in particular. Our study is aligned with others who have found disproportionately low access to suicide prevention services among Black populations, while also providing support for the strengthening suicide prevention services in clinics that predominately serve Black clients.

We also found that the availability of peer support services decreased as the proportion of Black clients increased. Peer support models vary, but generally peer support workers are people who have been successful in their own recovery process and help others navigate similar situations through understanding, respect, and mutual empowerment (Substance Abuse and Mental Health Services Administration, 2022). Peer support services have been shown to improve a range of recovery indicators (Chinman et al., 2014). In one systematic review of peer support in behavioral health, the authors concluded that the evidence was strong enough to call for peer support to be embedded into routine mental health and addiction care (Hameed Shalaby & Agapong, 2020). In two additional systematic reviews, peer support demonstrated effectiveness at improving psychosocial outcomes like hope, recovery, and empowerment, while showing mixed or modest results for other clinical outcomes (Lloyd-Evans et al., 2014; White et al., 2020). Our study contributes a novel finding to the peer support literature, as there is a dearth of national studies that address racial/ethnic disparities in peer support availability within outpatient mental health settings. Zemore and colleagues (2021) conducted a literature review investigating a related intervention of self-help group attendance for people with substance use problems. The authors arrived at a similar conclusion that racial/ethnic disparities research in this domain was sparse, inconsistent, and dated. Further research is needed to better understand peer support outcomes for Black mental health clients, as well as identifying strategies to bolster components of the peer support model that are relevant to Black communities.

Finally, while offering a sliding scale fee was one of the most common services offered, it was only positively

Table 3 Racial/ethnic composition of treatment facility clientele predicting the availability of multiple comprehensive services (NMHSS 2020; N = 1,074 facilities)

Mental health service models	aOR	95% CI	p
1. Offers family and couples therapy			
<i>Percentage of clientele that is...</i>			
White	0.91	0.78, 1.07	0.25
Black	0.90	0.77, 1.04	0.14
Hispanic	0.87	0.76, 0.99	0.03
2. Offers family psychoeducation			
White	0.82	0.70, 0.96	0.01
Black	0.81	0.70, 0.92	<0.01
Hispanic	1.21	1.06, 1.39	<0.01
3. Offers telehealth			
White	1.00	0.88, 1.12	0.99
Black	0.92	0.82, 1.03	0.15
Hispanic	0.97	0.87, 1.07	0.53
4. Uses a sliding fee scale			
White	1.14	1.02, 1.28	0.02
Black	1.06	0.95, 1.17	0.31
Hispanic	1.03	0.93, 1.13	0.61
5. Offers integrated dual disorders treatment			
White	1.09	0.98, 1.21	0.13
Black	1.08	0.98, 1.19	0.14
Hispanic	1.05	0.95, 1.16	0.30
6. Offers suicide prevention services			
White	0.92	0.82, 1.03	0.15
Black	0.87	0.78, 0.97	0.01
Hispanic	1.11	1.00, 1.22	0.04
7. Offers dialectical behavior therapy			
White	1.05	0.95, 1.17	0.33
Black	1.02	0.92, 1.12	0.74
Hispanic	0.93	0.85, 1.02	0.13
8. Offers substance use treatment			
White	1.05	0.95, 1.17	0.36
Black	1.06	0.96, 1.17	0.27
Hispanic	1.03	0.94, 1.13	0.46
9. Offers smoking/tobacco cessation counseling			
White	1.04	0.94, 1.16	0.43
Black	1.01	0.91, 1.11	0.90
Hispanic	0.92	0.84, 1.01	0.06
10. Offers consumer-run peer support services			
White	0.90	0.81, 1.02	0.09
Black	0.86	0.78, 0.97	<0.01
Hispanic	0.95	0.86, 1.05	0.29
11. Offers EDMR			
White	1.06	0.93, 1.22	0.37
Black	0.84	0.74, 0.95	<0.01
Hispanic	0.96	0.85, 1.07	0.42
12. CARF-accredited			
White	1.12	0.97, 1.29	0.13
Black	1.11	0.98, 1.26	0.09
Hispanic	0.84	0.74, 0.95	<0.01

Note: Models adjusted for facility ownership, Medicaid payment acceptance, location in a Medicaid expansion state, the percentage of a state's population that lives in a rural area, and the percentage of a state's population that is White

associated with increasing proportions of White clientele (1–10% White, predicted probability = 63%; 75–100% White, predicted probability = 72%). Sliding scale fees are used to calculate a fee for services based on a person's

income, and were broadly developed in the US to act as a safety-net payment structure for people in need of treatment but who cannot afford care at the standard rates (Smith, Kuramoto-Crawford, & Lynch, 2016). The value

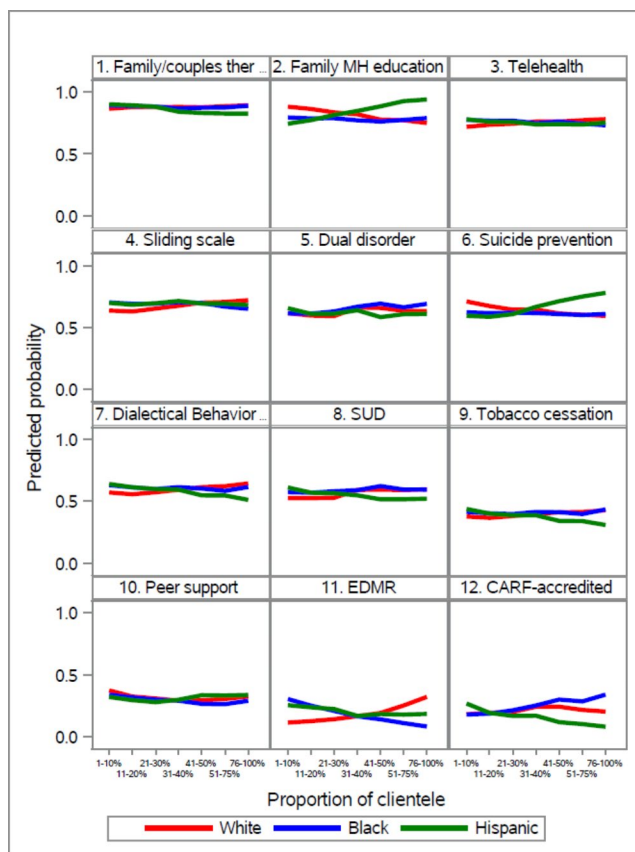


Fig. 1 Predicted probability of offering a wide variety of services in specialty mental health treatment facilities (NMHSS 2020; N = 1,074 facilities). Note: Models adjusted for facility ownership, Medicaid payment acceptance, location in a Medicaid expansion state, the percentage of a state's population that lives in a rural area, and the percentage of a state's population that is White

and importance of sliding scale fees was codified in the Fees and Business Practices section (A.10.c) of the Code of Ethics in the Affordable Care Act in 2014, which stated that, “*In establishing fees for professional counseling services, counselors consider the financial status of clients and locality. If a counselor’s usual fees create undue hardship for the client, the counselor may adjust fees, when legally permissible, or assist the client in locating comparable, affordable services*” (American Counseling Association, 2014). The high cost for services and medications has been reported as disproportionately affecting lower mental health services use among Black and Hispanic individuals (Bogue-Kawaii, Williams, & MacNear, 2017; Dridges, Andrews III, & Deen, 2012; Mojtabai, 2005), which may be an indicator of a higher need for sliding scale fees in treatment facilities located in minoritized communities. However, we identified an increase in sliding scale fees only in relation to increases in White clientele, which supports our hypothesis of fewer comprehensive services for clients in predominately Black and Hispanic facilities. Several reports have identified the

prevalence of mental health disorders to be highest among White individuals (McGuire & Miranda, 2008; Miranda et al., 2008; Panchal et al., 2022). At the same time, morbidity and mortality from mental health- and substance abuse-related diseases have increased most drastically among White populations, referred to as an epidemic of despair (Brignone et al., 2020; Case & Deaton, 2015; Stein et al., 2017). In this environment of growing poverty and debt and the diminishing accumulation of wealth among many White Americans, lowering the cost of mental healthcare through sliding scale fees is a positive reaction to a growing need. At the same time, our study identified that offering sliding scale fees is not changing for facilities that cater to Black and Hispanic majorities. Such notable differences in sliding scale access is a clear disparity that negatively affects Black and Hispanic groups who have experienced generational poverty, discrimination, and structural racism in healthcare settings for centuries (Yearby, 2020; Yearby et al., 2022). Such a swift response by the mental healthcare system to address the growing financial burden of mental health services may be duly applauded, while simultaneously acknowledging that changes in payment structures were only recently driven by an emerging need for White clients – it is rare when such consensus is reached in response to behavioral health burdens unique to communities of color.

Limitations

Our sample included outpatient mental health treatment facilities that opted to report patient demographics as percentages rather than raw numbers, which was 22% of all outpatient facilities in the 2020 N-MHSS dataset. For facilities that reported raw numbers for both client demographics and the total number of clients, N-MHSS provides pre-constructed variables that represent ranges, not the raw number. Thus it is not possible to derive the percentage of clients from these categories. For example, one may not calculate a proportion of Black clients using categories such as 51–75 Black clients as the numerator and 101–250 total clients as the denominator. We considered calculating the most conservative estimate by using the smallest Black frequency (51) divided by the largest total facility population (250), which equates to an estimate of 20% Black clients in a facility. However, equally likely would be 75 divided by 101, which is 74% Black clients. With such a drastic gap between calculations we were not confident that this approach would approximate the real percentage of Black clients in a facility. Despite the limitation, we identified that the facilities included in our sample were not statistically different than those excluded on nine out of the 12 outcomes tested. Thus, we are confident that this novel application of national data

is useful in drawing generalizable conclusions about racial/ethnic disparities in mental health treatment in the US.

Conclusion

We identified differences in the availability of a wide range of integrated, comprehensive mental health services among treatment clinics with varying proportions of White, Hispanic, and Black clientele. Broadly, facilities with higher proportions of Black and Hispanic clients offered fewer services. We conceptualized the treatment environment as an upstream factor that likely influences racial disparities in treatment outcomes. Clinical and administrative resources that are availed or withheld from certain groups shape the trajectory of treatment success and recovery. Funding and mental health policy must support multilevel interventions that dismantle structural racism and promote equitable distribution of comprehensive, evidence-based care.

Author Contributions GP conceived of the study, analyzed the data, and drafted the first manuscript version. CB assisted with data analysis and provided substantive feedback on all manuscript sections. OJ, BM, and NZ provided substantive feedback on all manuscript sections and provided expert insight around interpreting study results.

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Data Availability This study did not use human subjects or individual-level data. Only publicly available, aggregate, administrative, facility-level data was used. The N-MHSS dataset is free and publicly available through SAMHSA (<https://www.datafiles.samhsa.gov/dataset/national-mental-health-services-survey-2020-n-mhss-2020-ds0001>).

Declarations

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