

Racial and ethnic trends in mental health service utilisation and perceived unmet need in the USA

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ABSTRACT

Background Two decades ago, the Surgeon General issued a report highlighting concerning disparities in mental healthcare among racial and ethnic minority populations. The present study characterised national trends in mental health treatment utilisation by race and ethnicity across a 13-year period.

Methods Nationally representative data were drawn from the National Survey on Drug Use and Health from 2008 through 2020 (unweighted n=4 41 993). Trends in mental health treatment utilisation and perceived unmet treatment need among individuals with and without psychiatric illness were stratified by race and ethnicity.

Results Logistic regression analyses revealed most racial/ethnic minority groups were less likely to receive treatment than white individuals, regardless of mental health status. Treatment utilisation increased among those with (annual per cent change (APC)=0.83, 95% CI=0.41 to 1.26) and without psychiatric illness (APC=1.39, 95% CI=0.53 to 2.26). Among individuals with psychiatric illness, treatment use increased among white (APC=0.88, 95% CI=0.51 to 1.24), Hispanic (APC=2.12, 95% CI=0.70 to 3.57) and black adults (APC=1.07, 95% CI=0.11 to 2.04). White (APC=1.88, 95% CI=0.86 to 2.91) and Hispanic (APC=2.45, 95% CI=0.02 to 4.93) individuals without psychiatric illness also saw increased treatment use. Although increases in perceived unmet treatment need were observed for all racial and ethnic groups except blacks and Native Americans with psychiatric illness, rates remained low across all groups.

Conclusions Although national rates of mental health treatment utilisation have risen, this was almost entirely observed among white and Hispanic individuals with and without psychiatric illness, highlighting the limited progress made towards eliminating disparities in care.

INTRODUCTION

Two decades ago, the Surgeon General released a report documenting striking disparities in minority populations in mental health services and calling for the redistribution of available services to address these gaps in the US healthcare system.¹ Work evaluating racial/ethnic trends in mental health treatment utilisation subsequent to this report suggests virtually no improvement has been made.^{2,3} A decade after the Surgeon General's 2001 report, the Affordable Care Act introduced several provisions specifically aimed at reducing health disparities among racial/ethnic minority populations (eg, improving affordability and access to healthcare).⁴ Furthermore, given recent evidence of general health and treatment disparities exposed by the

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Concerning disparities in mental healthcare among racial/ethnic populations have been well documented calling for the redistribution of resources to address these gaps.

WHAT THIS STUDY ADDS

⇒ The present study documents trends in mental healthcare utilisation with a nationally representative sample of adults (unweighted n=4 41 993) to find prevalence rates of mental health treatment utilisation have risen over the past 13 years. This was almost entirely observed among white and Hispanic individuals, with little indication of improvement in lowering unmet need among other racial and ethnic minority populations.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ These findings call for immediate action to enact long-term systemic changes across microscale and macroscale. This includes changes in public policy (eg, advocating for and ensuring availability of culturally and linguistically appropriate services), practice (eg, increasing workforce diversity) and research (eg, evaluating culturally tailored evidence-based mental health treatments).

COVID-19 pandemic, the National Institute of Mental Health has identified research focusing on mental health disparities among racial/ethnic groups as one of its priorities.⁵ Therefore, updated epidemiological research is necessary to evaluate whether our efforts to eliminate disparities have been successful.

Racial/ethnic minority groups are less likely than whites to receive mental health services.^{6,7} The causes of these disparities are driven by a wide range of social and historical factors.⁸ For example, members of racial/ethnic minority groups are more likely to be socioeconomically disadvantaged, uninsured and treatment utilisation may be suppressed by systemic issues involving racism and discrimination.⁹ To date, a relatively sparse literature on racial/ethnic differences in treatment utilisation exists, indicating an urgent need to evaluate and update mental health treatment utilisation patterns using nationally representative data.

It remains unclear whether racial/ethnic patterns in mental healthcare differ as a function of mental illness severity. There is evidence of general increases

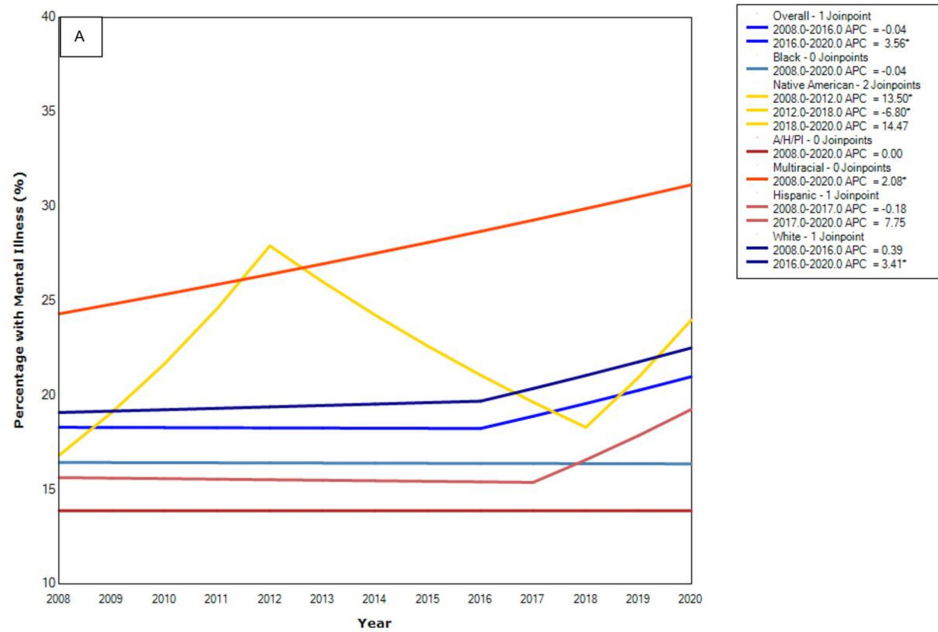


Figure 1 Racial and ethnic trends in past year mental illness from 2008 to 2020. AHPI, Asian/Hawaiian/Pacific Islander individuals; iAPC, annual percent change. *The APC is significantly different from zero at the $\alpha = .05$ level.

in mental health service utilisation in the USA over time,¹⁰ and individuals are more likely to access psychiatric care as symptom severity increases. However, one study found approximately 50% of adults who received mental healthcare did not have a psychiatric disorder.¹¹ Determining whether racial/ethnic differences in early prevention and intervention service utilisation exist is important, as early prevention and intervention have been associated with a more favourable mental health course trajectory.¹²

Racial/ethnic minority individuals with mental health conditions may be more likely to defer treatment until their conditions become severe.¹³ Perceived need for psychiatric care, a significant

predictor of receipt of mental health services and an earlier step in the help-seeking process, may partially explain these disparities.¹⁴ Specifically, racial/ethnic minority individuals are less likely to perceive a need for mental healthcare,³ which may reflect cultural differences in perceptions of mental health, including viewing psychological symptoms as normative responses to experiences of discrimination or stress,^{15 16} differences in expressions of distress¹⁷ and shortcomings in cultural competency among providers in detecting psychological distress among racial/ethnic minority groups.^{18 19} Therefore, research is needed to examine trends in mental health service utilisation as a function of psychiatric illness across racial/ethnic minority status.

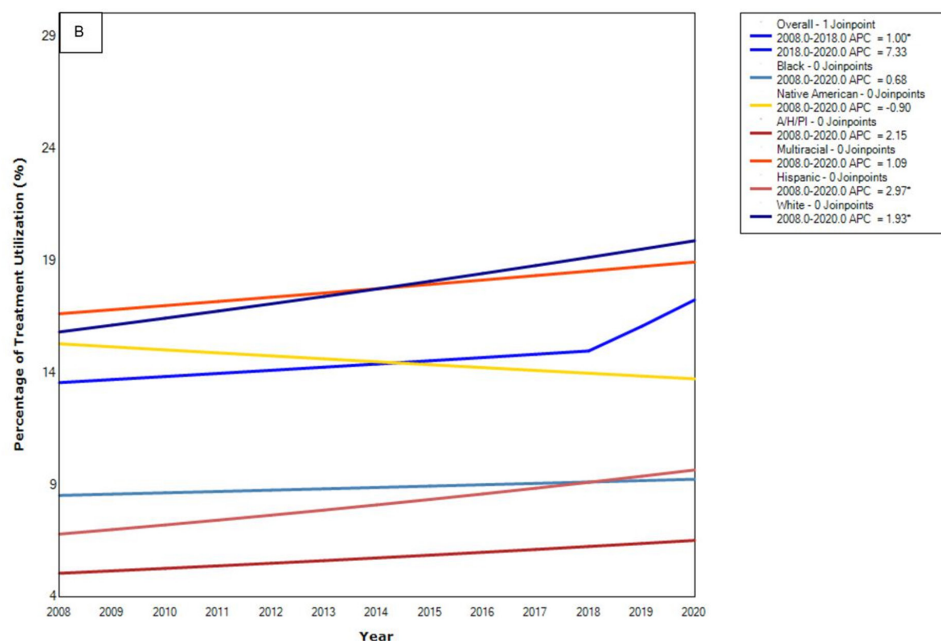


Figure 2 Racial and ethnic trends in past year mental health treatment utilisation from 2008 to 2020. AHPI, Asian/Hawaiian/Pacific Islander individuals. APC, annual percent change. *The APC is significantly different from zero at the $\alpha = .05$ level

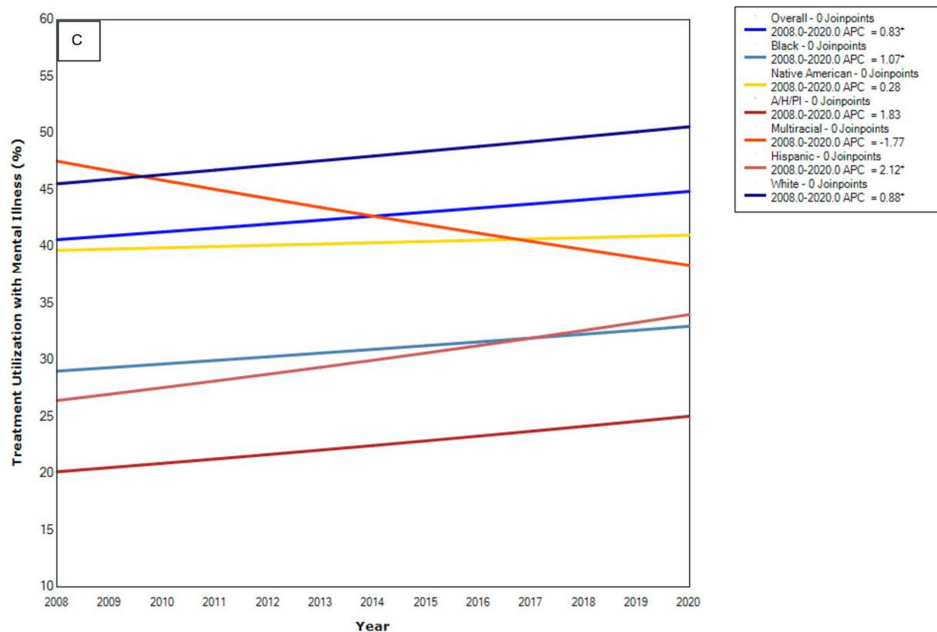


Figure 3 Racial and ethnic trends in past year mental health treatment utilisation among adults with mental illness from 2008 to 2020. AHPI, Asian/Hawaiian/Pacific Islander individuals; APC, annual percent change. *The APC is significantly different from zero at the $\alpha = .05$ level.

The current study sought to characterise temporal trends in mental health treatment utilisation by race and ethnicity in a nationally representative sample over a 13-year period, building on prior work^{2 20} in several ways. First, we assessed trends in 12-month prevalence rates of psychiatric illness and psychiatric treatment utilisation stratified by race and ethnicity. Next, we examined trends in 12-month prevalence rates of mental health treatment utilisation among those *with* and *without* psychiatric illness, respectively, stratified by race and ethnicity. Finally, we evaluated temporal trends in self-perceived unmet need for mental healthcare among those with mental illness stratified by race and ethnicity. In summary, findings from the present study

substantially build on the literature documenting persistent disparities in care, providing an evaluation of progress reducing them since policy efforts to reduce healthcare disparities.

METHODS

Data source and study sample

Data were drawn from the National Survey on Drug Use and Health (NSDUH) from 2008 through 2020.²¹ The Substance Abuse and Mental Health Services Administration (SAMHSA) conducts this survey annually and employs a multilevel, stratified, hierarchical sampling procedure to

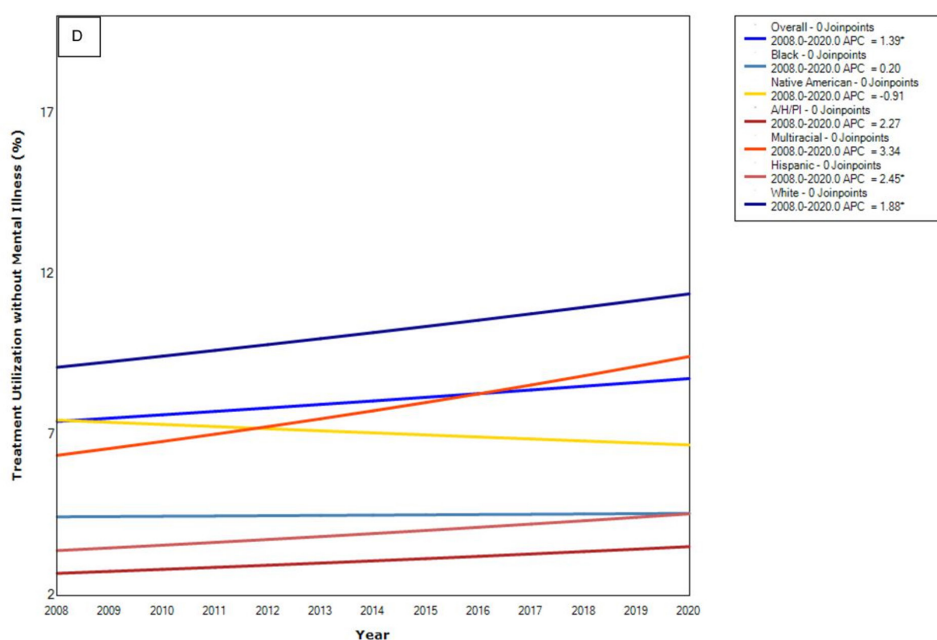


Figure 4 Racial and ethnic trends in past year mental health treatment utilisation among adults without mental illness from 2008 to 2020. AHPI, Asian/Hawaiian/Pacific Islander individuals; APC, annual percent change. *The APC is significantly different from zero at the $\alpha = .05$ level.

determine the prevalence of substance use and related disorders in the USA. Multistate area probability is used to ensure a nationally representative sample is obtained. Data were collected from residents across all 50 states and Washington, DC (for more information, see Substance Abuse and Mental Health Services Administration²²). The current study analysed data from adults aged 18 years and over (unweighted $n=4\,419\,933$). Although SAMHSA has cautioned about the possibility of non-comparability issues due to changes in sampling designs and data collection for 2020, sensitivity analyses from previous research did not detect significant issues with mental health service use data.²³

Procedure

Study items were administered by interviewers through computer-assisted personal interviewing for sociodemographic information and audio computer-assisted self-interviewing for more sensitive data, increasing the likelihood of honest reporting for sensitive questions.²⁴

Study variables

Past year mental health treatment utilisation (AMHTXRC3) was based on endorsement of the following items: 'During the past 12 months, have you stayed overnight or longer in a hospital or other facility to receive treatment or counselling for any problem you were having with your emotions, nerves or mental health?', 'During the past 12 months, did you receive any outpatient treatment or counselling for any problem you were having with your emotions, nerves or mental health at any of the places listed below?: (1)

outpatient mental health clinics, (2) outpatient medical clinics, (3) partial day hospital or day treatment programmes, (4) private therapists, psychologists, psychiatrists, social workers or counsellors, (5) doctor offices and (6) other treatment centres' and 'During the past 12 months, did you take any prescription medication that was prescribed for you to treat a mental or emotional condition?'

The presence of any mental illness within the past 12 months (AMIYR_U) was determined using a predictive algorithm combining information on psychological distress using the Kessler 6 and abbreviated WHO Disability Assessment Schedule to provide model estimates of mental illness status to each participant.^{25 26}

Perceived unmet need for mental healthcare in the past year was assessed with the following item (AMHTXND2): 'During the past 12 months, was there any time when you needed mental health treatment or counselling for yourself but did not get it?' (see NSDUH codebooks for additional information).

Data analysis

First, to estimate racial/ethnic differences in mental illness, treatment use and perceived unmet need, a series of logistic regression analyses were conducted for first (2008) and last (2020) study years included in our analyses.

Joinpoint regression analysis was then used to calculate annual per cent change (APC) with 95% CIs.²⁷ Trends are presented as linear segments connected at the years (ie, joinpoints) whenever the slope of a given trend changed significantly. In joinpoint analysis, the best fitting points, called 'joinpoints', are determined where the rate changes significantly. If no significant change in trend was observed,

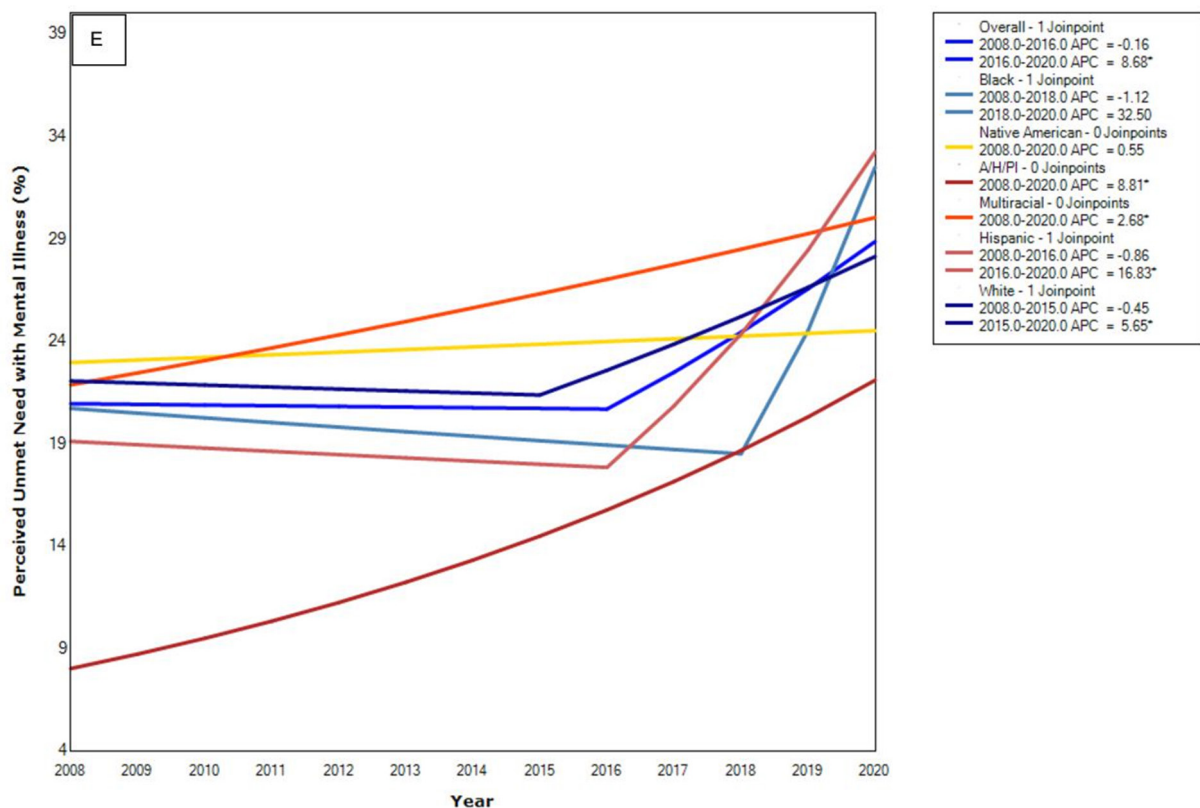


Figure 5 Racial and ethnic trends in past year perceived unmet need for treatment among adults with mental illness from 2008 to 2020. AHPI, Asian/Hawaiian/Pacific Islander individuals; APC, annual percent change. *The APC is significantly different from zero at the $\alpha = .05$ level.

a straight line is fitted over the full period based on a simple loglinear model. First, joinpoint regression analyses were conducted for prevalence of mental illness. Next, the same analyses were conducted to assess temporal trends in the prevalence of mental health treatment utilisation over time. We then examined mental healthcare utilisation rates first among those *with* and *without* mental illness in the past 12 months. Temporal trends in rates of unmet treatment need among those with mental illness in the past 12 months were also calculated. Analyses were stratified by race and ethnicity. Finally, to evaluate differences in trends, direct comparison of APC rates for each racial/ethnic minority group were compared to White APC rates across analyses over the same period.

Weighting procedures were incorporated in all analyses to accommodate the complex sampling frame of the surveys.

RESULTS

In a series of logistic regression analyses to identify racial/ethnic disparities at the start (2008) and end of the study period (2020), a general pattern emerged for prevalence of mental illness, as well as mental health treatment overall and stratified by individuals with and without mental illness (online supplemental table 1). Lower prevalence of these outcomes was consistently observed for black, Asian, Hawaiian, Pacific Islander and Hispanic individuals than for non-Hispanic white individuals at both timepoints. For perceived unmet treatment need, lower prevalence was only observed for Hispanic individuals at both timepoints and Asian, Hawaiian and Pacific Islanders in 2008. For multiracial individuals, lower prevalence was only found for mental illness.

Joinpoint regression analyses examining temporal trends in 12-month prevalence of any mental illness started at 18.09% in 2008 and ended at 20.67% in 2020, with a significant increase from 2016 (18.26%) to 2020 (see figure 1 and online supplemental table 2). Prevalence rates were generally lowest among Asian, Hawaiian and Pacific Islander individuals, from 14.63% in 2008 and ending at 13.56% in 2020, and highest among multiracial individuals increasing significantly from 2008 (27.67%) to 2020 (36.17%). There was a significant increase in prevalence rates of mental illness among white adults from 2016 (19.83%) to 2020 (22.28%) and Native Americans from 2008 (17.64%) to 2012 (29.26%). Among Native Americans, however, this was followed by a significant decrease to 19.40% in 2018.

There was a significant increase in mental health treatment from 13.28% in 2008 to 15.00% in 2018 (see figure 2 and online supplemental table 3). Treatment utilisation was generally lowest among Asian, Hawaiian and Pacific Islander adults, from 4.70% in 2008 to 5.88% in 2020, and highest among multiracial adults, from 18.56% in 2008 to 22.06% in 2020. Significant increases were observed from 2008 to 2020 only among white (15.77%–21.19%) and Hispanic adults (6.78%–11.03%).

Mental health treatment utilisation among individuals with mental illness significantly increased from 40.05% in 2008 to 46.00% in 2020 (see figure 3 and online supplemental table 3). Treatment utilisation was generally lowest among Asian, Hawaiian and Pacific Islander adults, from 18.01% in 2008 to 20.44% in 2020, and highest among white individuals, increasing significantly from 45.86% in 2008 to 52.06% in 2020. Significant increases from 2008 to 2020 were also observed among black (29.65%–38.47%) and Hispanic adults (21.64%–31.84%).

Among adults without any past year mental illness, mental health treatment increased significantly from 7.37% in 2008 to 9.44% in 2020 (see figure 4 and online supplemental table 3). Rates of treatment utilisation were generally the lowest among

Asian, Hawaiian and Pacific Islander adults from 2.41% in 2008 to 3.56% in 2020, and highest among white adults, increasing significantly from 8.82% in 2008 to 12.13% in 2020. Hispanic adults also saw significant increases in treatment rates between 2008 (3.85%) and 2020 (6.09%).

Prevalence rates of perceived unmet need for mental healthcare among adults with mental illness started at 20.58% in 2008 with significant increases from 21.11% in 2016 to 30.15% in 2020 (see figure 5 and online supplemental table 4). Rates of perceived unmet need were generally lowest among Asian, Hawaiian and Pacific Islanders, with significant increases from 10.03% in 2008 to 21.06% in 2020, and highest among multiracial individuals, increasing significantly from 19.85% in 2008 to 33.19% in 2020. Significant increases were also observed for white adults over the 6-year period from 2015 to 2020 (21.42%–29.16%) and Hispanic adults between 2016 and 2020 (17.48%–34.69%).

A statistical comparison of APC rates among racial/ethnic minority individuals in (1) past year mental illness, (2) past year treatment utilisation, (3) past year treatment utilisation among individuals with mental illness, (4) past year treatment utilisation among individuals without mental illness and (5) perceived need of treatment among individuals with a mental illness largely did not differ significantly from white individuals (online supplemental table 5).

DISCUSSION

The current study provided an analysis of 13-year trends in mental healthcare utilisation at the national level, stratified by race and ethnicity. Our findings suggest that disparities in this area remain a critical concern. First, we found an overall increase in mental health treatment utilisation from 2008 to 2018 in the general population. Increases did not appear to be exclusively a product of increases in prevalence of psychiatric illness, as the latter remained unchanged for most of this period (ie, 2008–2016). Observed increases in mental illness starting in 2016, coinciding with the increase in stressors felt by more than half US adults at the national level starting with the 2016 presidential election.^{28 29} This stress at the national level may have been prolonged with the onset of the COVID-19 pandemic.³⁰ Additionally, stratification by race and ethnicity revealed that increases in psychiatric treatment use were significant only for white and Hispanic individuals. Although APC rates did not differ significantly, when taken together with the persistent disparities at both the start and end of the study period among most of the minoritised groups in the data (black, Hispanic, Asian, Hawaiian and Pacific Islander), these updated findings highlight the lack of progress towards improving psychiatric care in under-represented populations and are timely, emerging during a period of increased national dialogue surrounding issues of inequity and the associated public health consequences.³¹

Chronic shortages of mental health providers and resources call for more effective distribution of available mental health resources to those with greater levels of need.^{32 33} It is important to evaluate patterns of use relative to level of need. Towards this end, we assessed temporal trends in mental health treatment among those *with* and *without* a mental illness. Among individuals *with* a mental illness, we found an overall growth in treatment utilisation at the national level over the 13-year period, with increases observed among Hispanic, black and white individuals. Despite these observed increases, Hispanic and black individuals (as well as Asian, Hawaiian and Pacific Islander individuals) still had significantly lower treatment use

than white individuals across the 13-year period. Furthermore, white individuals also saw significant growth in treatment use over time irrespective of current mental illness. These findings align with earlier work suggesting individuals with mental illness are less likely to receive treatment within the year and racial/ethnic minority groups were less likely to receive needed care.³⁴ Also striking is that across almost all study years and all racial/ethnic groups, most individuals with psychiatric illness did not receive any mental health treatment, even with the aforementioned increases in psychiatric care over time, indicative of large and persistent gaps in needed care.

When temporal trends in mental health treatment were examined among those *without* mental illness, an overall rise in treatment was observed among Hispanic and white individuals. Although prevalence of treatment use among white individuals without psychiatric illness was relatively low, these individuals make up a large majority of the general population and therefore cumulative service utilisation in this group was substantial. Reasons for treatment use in this group may be manifold, possibly reflecting preventive efforts to address mild symptoms, support coping with stressful life events or maintenance treatment for individuals with a history of mental health disorders. However, when taken together with the patterns in treatment use among individuals with mental illness, these findings signal the need for allocating appropriate levels of care to individuals with mental illness in populations with historic treatment underutilisation. This is not to discourage preventive intervention or maintenance sessions in individuals with subthreshold symptoms. Rather, to optimise utilisation of limited resources, it is important to ascertain the needs of individuals and assign the appropriate level, type and timing of care accordingly.

Finally, examination of temporal trends in perceived unmet need among individuals with mental illness highlight increases only from 2016 to 2020. When stratified by racial and ethnic identity, however, there was an increase in perceived unmet need among multiracial and Asian, Hawaiian and Pacific Islander individuals across the 13-year period, Hispanic individuals starting in 2016 and white persons starting in 2015. Increases in perceived need were observed over the time period, across nearly every racial/ethnic group, potentially reflecting positive trends and increased acceptability towards seeking mental healthcare. Alternatively, general increases in perception of need starting around 2016 coincide with the timing of increases in prevalence of mental illness in the sample, where increasing perception of need could be attributed to elevated symptom severity requiring professional intervention. Further, minoritized individuals displayed persistently lower rates of perceived unmet need compared with white individuals despite historical disparities in care, signalling an ongoing barrier to care potentially contributing to low rates of treatment utilisation observed. Collectively, these findings may reflect the need for culturally sensitive training among healthcare providers to recognise symptoms of psychological distress among racial and ethnic minority individuals.¹³ Implementation of policies mandating cultural competency training among mental health providers and ensuring the availability of culturally and linguistically appropriate services are critical.^{35 36} Insofar as these findings are a function of hesitancy to seek treatment stemming from a mistrust by minoritised communities of healthcare systems,³⁷ robust efforts towards increasing workforce diversity are needed to reduce this hesitancy.³⁸ This need is especially critical in the context of longstanding under-representation of racial and ethnic minority groups in healthcare professions.³⁸ Finally, the lack of treatments tailored to specific racial and

ethnic groups may also affect perceived need for mental health services.³⁹

The current findings should be interpreted within the context of several limitations. First, treatment utilisation based on self-report could not be corroborated by medical records.⁴⁰ Nevertheless, self-report provided the unique advantage of more comprehensively assessing sources of treatment than may be feasible with medical records in a nationally representative study spanning 13 years. Second, our study did not stratify analyses by age and sex assigned at birth, as doing so while also stratifying for racial/ethnic identity and presence of mental illness resulted in very small subsamples for some demographics. Nonetheless, even without stratifying by age and sex assigned at birth, relevant research on temporal trends for certain minority populations (eg, Native Americans) has been lacking, and the current study therefore offers important and unique contributions to the literature on inequity in these understudied populations. Finally, our study did not directly assess the relative influence of structural versus attitudinal barriers to further characterise the nature of these disparities in treatment utilisation, but rather focused on perceived unmet need of care. Identification of how barriers to care have changed over time among racial/ethnic groups represents a critical area of future research to inform intervention efforts.

Our findings suggest that although the national rates of mental health treatment utilisation have risen over the past decade, this increase was observed almost solely among white and Hispanic individuals, and racial/ethnic disparities persist. These findings add to concerns regarding racial and ethnic disparities in mental health treatment and highlight the limited progress made to eliminate these inequalities. Given the societal and economic costs of psychiatric disorders, our findings call for immediate action and reallocation of resources to individuals historically under-represented by systems of care.

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Contributors AS: Guarantor. AS and RL: study conception and design. All authors: analysis and interpretation of results, draft manuscript preparation, reviewed the results and approved the final version of the manuscript.

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Competing interests RL serves as a consultant with Relmada Therapeutics and is on the advisory board for Launch2Life.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants. Participants gave informed consent to participate in the study before taking part. IRB approval was not required for the use of publicly available deidentified data. This study followed all guidelines outlined in the Declaration of Helsinki.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available in a public, open access repository. The manuscript uses data from the National Survey on Drug Use and Health, conducted annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) for study years 2008 through 2020. Data can be found at <https://www.datafiles.samhsa.gov/dataset/national-survey-drug-use-and-health-2020-nsduh-2020-ds0001>. All material appearing in this manuscript is in the public domain and may be reproduced or copied without permission from SAMHSA.

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