# UC Davis UC Davis Previously Published Works

# Title

Pathways Through Early Psychosis Care for U.S. Youths From Ethnically and Racially Minoritized Groups: A Systematic Review

Permalink https://escholarship.org/uc/item/98f5t6g4

**Journal** Psychiatric Services, 74(8)

# ISSN

1075-2730

# Authors

Myers, Neely Hutnyan, Matthew Daley, Tamara C et al.

# **Publication Date**

2023-08-01

# DOI

10.1176/appi.ps.20220121

Peer reviewed



# **HHS Public Access**

Author manuscript *Psychiatr Serv.* Author manuscript; available in PMC 2023 September 28.

## Published in final edited form as:

Psychiatr Serv. 2023 August 01; 74(8): 859–868. doi:10.1176/appi.ps.20220121.

# Pathways Through Early Psychosis Care for U.S. Youths From Ethnically and Racially Minoritized Groups: A Systematic Review

## Neely Myers, Ph.D.,

Department of Psychiatry, University of Texas Southwestern Medical Center, Dallas, Department of Anthropology, Southern Methodist University, Dallas

# Matthew Hutnyan, B.S.,

Department of Anthropology, Southern Methodist University, Dallas

# Tamara C. Daley, Ph.D.,

Abt Associates, Durham, North Carolina

# Iruma Bello, Ph.D.,

New York State Psychiatric Institute, Department of Psychiatry, Columbia University Vagelos College of Physicians and Surgeons, New York City

# Marne Chacon, M.A.,

Department of Anthropology, Southern Methodist University, Dallas

# Ariel Currie, M.B.S.,

Department of Psychiatry and Behavioral Sciences, University of Minnesota Medical School, Minneapolis

# **Beshaun J. Davis, Ph.D.**, Department of Psychiatry, University of Maryland School of Medicine, Baltimore

# Lisa B. Dixon, M.D., M.P.H.,

New York State Psychiatric Institute, Department of Psychiatry, Columbia University Vagelos College of Physicians and Surgeons, New York City

# Preethy E. George, Ph.D.,

Westat, Rockville, Maryland

# Anna Giannicchi,

New York State Psychiatric Institute, New York City

# Anita N. Kwashie, B.S.,

Department of Psychology, University of Minnesota, Minneapolis

# Katie A. McCormick, L.M.S.W.,

Steve Hicks School of Social Work, University of Texas at Austin, Austin

# Piper Meyer-Kalos, Ph.D.,

Send correspondence to Dr. Myers (namyers@smu.edu).

Dr. Dixon is Editor of the journal. Jeanne Miranda, Ph.D., served as decision editor on the manuscript.

The authors report no financial relationships with commercial interests.

Department of Psychiatry and Behavioral Sciences, University of Minnesota Medical School, Minneapolis

### Arundati Nagendra, Ph.D.,

Department of Psychiatry, Massachusetts General Hospital and Harvard Medical School, Boston

# Swati Nayar, B.S, Department of Psychiatry, University of Pittsburgh, Pittsburgh

## Deepak K. Sarpal, M.D.,

Department of Psychiatry, University of Pittsburgh, Pittsburgh

## Tiana Y. Sepahpour, M.B.E.,

Department of Psychiatry and Behavioral Sciences, Johns Hopkins University School of Medicine, Baltimore, and Department of Medical Humanities and Ethics, Columbia University Vagelos College of Physicians and Surgeons, New York City

#### Daniel I. Shapiro, Ph.D.,

Department of Psychiatry and Behavioral Sciences, University of California, Davis, Davis

## Jessica Taylor-Zoghby, B.A.

Department of Psychiatry, University of Maryland School of Medicine, Baltimore

# Abstract

**Objective:** The authors of this systematic review examined service utilization and outcomes among youths from ethnoracially minoritized groups after the youths initiated treatment for a psychotic disorder—that is, the youths' "pathway through care." Also examined were potential moderating variables in pathways through care for these youths at the clinic, family, and cultural levels. The goal was to describe methodologies, summarize relevant findings, highlight knowledge gaps, and propose future research on pathways through care for young persons from ethnoracially minoritized groups who experience early psychosis.

**Methods:** The PubMed, PsycInfo, and Web of Science literature databases were systematically searched for studies published between January 1, 2010, and June 1, 2021. Included articles were from the United States and focused on young people after they initiated treatment for early psychosis. Eighteen studies met inclusion criteria.

**Results:** Sixteen of the 18 studies were published in the past 5 years, and 11 had an explicit focus on race and ethnicity as defined by the studies' authors. Studies varied in terminology, outcomes measures, methodologies, and depth of analysis. Being an individual from an ethnoracially minoritized group appeared to affect care utilization and outcomes. Insufficient research was found about potential moderating variables at the clinic, family, and cultural levels.

**Conclusions:** Studies of pathways through care for persons from minoritized groups warrant further funding and attention.

Systemic inequalities, oppression, and marginalization place individuals into a socially constructed "minority" status, thereby rendering them "minoritized" individuals (1, 2). At least one review about early psychosis care for diverse populations reports that being a member of an ethnoracially minoritized group shapes inequities in pathways to care (3).

However, previous reviews about psychosis among ethnoracially minoritized individuals have focused on studies that stop at the first point of contact with care (4–6) (Figure 1). Continuing this analysis, this review focuses on how being a member of an ethnoracially minoritized group affects care for young people with early psychosis and their families on the "pathway through care," or the period of treatment after the initiation of mental health specialty care for early psychosis (7) (Figure 2). Ideally, young people entering specialty care for early psychosis and their families would engage with and benefit from supports that are accessible, useful, and meaningful for their own pathway through care to recovery (7).

Building on the studies showing that belonging to a group with an ethnoracially minoritized status shapes inequities in pathways to care, we sought to determine what we know about the influence of such status on pathways through care. Individuals from ethnoracially minoritized groups in the United States—henceforth called "ethnoracially minoritized youths"—have a higher risk for developing psychosis symptoms and psychotic disorders (8–13) and encounter difficulties finding a pathway to and accessing appropriate services (3, 14–16). U.S. mental health services can improve access to high-quality mental health care and resources that help people prevent, manage, and recover from early psychosis (3, 15–17). Such goals require acknowledging and addressing the power dynamics that sustain racism in mental health care (18), such as the differential distribution of mental health resources for individuals from minoritized groups, which negatively affects families trying to navigate institutional pathways to care (3, 8, 19).

Early psychosis interventions have demonstrated cost-effectiveness (20) and show promise for preventing the negative sequelae of the onset of psychotic disorders (e.g., psychiatric hospitalization, greater symptom severity, lower quality of life, and less participation in work and school) (21, 22). Even so, between 20% and 40% of young people drop out of early psychosis programs, and the risk for dropout may be higher for ethnoracially minoritized youths if services are not designed to be accessible, attractive, and meaningful for them, thereby providing them with a clear pathway through care (23).

Because of a moral imperative to better serve minoritized populations who have been disproportionately affected by racist policies in the United States (e.g., redlining, over-policing, and the war on drugs) (16, 24–27), we focused on research related to utilization and outcomes and potentially relevant characteristics at the clinic, family, and cultural levels that may shape the pathway through care. This review aimed to identify patterns across studies indicating what is known while also identifying gaps in the literature to propose future research priorities.

# METHODS

We systematically reviewed peer-reviewed research related to pathways through care (i.e., utilization and outcomes) for persons with first-episode and early psychosis that reported on or analyzed results based on the race and ethnicity of participants. We also reviewed peer-reviewed studies that examined potential moderating clinical, family, and cultural variables that might affect care after treatment initiation (and thus during the pathway through care). Searches were split across four teams led by individuals who had expertise in the four areas

of interest (domains) in our pathways-through-care model: utilization (D.K.S.), outcomes (P.M.-K.), clinic factors (D.I.S.), and culture and family (I.B.). Terms for these searches were generated by experts in early psychosis care. (Detailed information about search terms is included in the online supplement to this review.)

Reporting in this systematic review was guided by the standards of the PRISMA statement (28) (see PRISMA diagram in the online supplement). The PubMed, PsycInfo, and Web of Science databases were systematically searched for literature published between January 1, 2010, and June 1, 2021—a period during and after the initial RAISE (Recovery After an Initial Schizophrenia Episode) studies established that early psychosis interventions seemed helpful and standardized approaches to care. Articles from outside the United States—the focus of this review—were excluded. After duplicate articles were excluded, article titles and abstracts were screened for inclusion criteria, and the full text of included articles was also screened.

# RESULTS

#### Study Characteristics

Of the 1,699 potentially relevant studies, we reviewed 342 full-text articles in detail, 18 of which satisfied our eligibility criteria (7, 29–45) (Table 1) (see flowchart in the online supplement). Each article was then reviewed for domain-specific results. Most studies addressed more than one domain. Most of the 18 articles (N=16, 89%) were published within the past 5 years. More than half (N=11, 61%) had an explicit focus on race and ethnicity (as defined by the study authors), and the remainder (N=7, 39%) analyzed race or ethnicity among other factors. The proportions of ethnically and racially minoritized groups in the samples of these studies ranged from 21% in one study to 90% in four studies. Among the studies having more than one racial group in the sample population, eight included information about participant ethnicity. Four used "Hispanic" or "Latino" as a race category, and four used it in conjunction with race, creating categories of "non-Hispanic White," "Hispanic White," and "non-Hispanic Black." In most studies, results fell into more than one of the four domains, and we discuss them in each relevant domain below.

## Utilization

Twelve of the 18 articles discussed early psychosis and utilization (7, 29, 31, 34, 37, 38, 40–45). None were pilot studies or randomized controlled trials (RCTs) that directly tested interventions for subpopulations of individuals receiving services for first-episode psychosis (FEP).

In one study, African American participants who had begun using coordinated specialty care (CSC) services were less likely at baseline to have private insurance, more likely to be homeless, and had significantly poorer quality of life, compared with Caucasian participants (41). Black and Latino patients were reluctant to use the mental health care options of pharmacologic treatments (7) and had lower rates of outpatient behavioral health care utilization (including outpatient visits with mental health professionals and claims for psychotherapy or pharmacologic interventions), compared with White participants (34).

Hispanic participants were less likely to utilize inpatient services than were non-Hispanic White participants (43). Instead, individuals sought accessible treatments focused on building social relationships and helping them thrive in school- or work-related activities (7).

When Black participants did use services, they disengaged earlier from treatment programs, despite higher rates of outreach efforts to retain them in FEP treatment (42, 45). Even so, findings of other studies suggested that race did not predict the therapeutic alliance in FEP care (29) or treatment satisfaction (31). Additionally, when analyses factored in and matched intervention services by race, early intervention services continued to reduce overall health care costs (37), which can be a factor in utilization (7).

#### Outcomes

Six studies (30, 32, 35, 36, 39, 44) met our inclusion criteria for the outcomes domain. All were focused on outcomes, and none were about recovery. Most studies (N=4, 67%) included data from a naturalistic sample of youths who were followed up after an inpatient hospitalization or initiation of outpatient treatment (32, 35, 36, 39). Only two (33%) presented data from an RCT—both from the same national RCT (30, 44).

The studies presenting results in this domain addressed disparate research questions, and few common outcomes were reported across them, making it difficult to compare their findings. Studies focused on individuals undergoing treatment as usual (36, 44) or participating in CSC (39) and other early intervention programs (32, 35). In general, it appeared that ethnoracially minoritized youths experienced worse outcomes. Symptoms data were the most commonly reported outcome (in N=3 articles, 50%), with two articles each reporting on positive symptoms (36, 44) and on negative symptoms (32, 36) and one each on affective symptoms (36) and thought disorder (44).

Three articles reported differences between African American and Caucasian participants (32, 36, 44). In a study of individuals hospitalized for FEP (32), social functioning of Black participants was negatively associated with negative symptoms, depressive symptoms, and general psychopathology. In a 1-year follow-up study of inpatient and outpatient participants who received care as usual in the community (medication management and community-based supportive individual or group therapy), no significant racial differences in positive symptoms were noted (36). However, African American participants had significantly less improvement, compared with Caucasian participants, in thought disorder, negative symptoms (avolition and anhedonia in particular), affective symptoms, and global functioning. In another study (44), which compared 2-year outcomes among participants in a CSC program and in treatment as usual (nonspecialized services in the community), Black participants in the treatment-as-usual group had significantly higher scores (indicating worse outcomes) on measures of positive symptoms, disorganized thoughts, uncontrolled hostility, and anxiety-depression but not on negative symptoms, compared with non-Hispanic White participants in the treatment-as-usual group. For participants who received CSC, symptom outcomes were similar in all groups.

Two studies (35, 39) reported differences between non-Hispanic White and Black participants, and one also included Hispanic and Asian participants. In one study (35), White participants were more likely than other participants to indicate that they had "met all goals" (e.g., symptom remission or an ability to manage any existing or residual symptoms, and full-time employment). One study of CSC clients (39) found that after 1 year, non-Hispanic White and non-Hispanic Black participants were more likely to report persistent cannabis use, compared with Hispanic and Asian participants, and that persistent cannabis use was associated with worse symptoms for all groups, compared with reduced use.

#### **Clinic-Level Moderators**

Two articles discussed the relevance of clinic-level characteristics (29, 33). Neither were pilot studies or RCTs. In one RAISE trial (29), race did not significantly predict the quality of the therapeutic alliance, as measured by video ratings of individual resilience therapy. More severe positive symptoms, less severe negative symptoms, and female gender were significantly associated with a better therapeutic alliance (29). Provider characteristics, including race, were not investigated.

In the other study (33), efforts to recruit Latino research participants with early psychosis and their family members were described and thematically summarized. The researchers found that using bilingual and bicultural clinicians and administrative staff, explicit efforts to focus on "relationship building," and procedures designed to engage family members were important elements in the recruitment of participants and families who decided to participate in the research study after the outside clinical care that led to their referral had ended. Relationship building included help explaining mental health systems, connecting with families while they were still in treatment, and supporting general resource needs.

#### **Family-Level Moderators**

We identified six relevant studies focused on understanding family-level factors in the pathway through care (7, 33, 38, 42, 44, 45). None of these interventions were for families receiving services for FEP; rather, the focus was on understanding family perspectives and ways to enhance family engagement and level of participation in services.

Three studies (7, 33, 38) focused on the initial part of the pathway through care, identifying issues that were important to families and their experiences. One study examined young people experiencing early psychosis and their key supporters after an initial hospitalization but before they engaged in treatment (7). That study identified and ranked factors that youths and key supporters indicated as important when making treatment decisions. The top three identified factors included a desire that the young person "get back to normal," with a focus on work and school goals; concerns that the mental health care on offer was insufficient; and distress related to police involvement in the pathway to care.

In a cohort of Latino persons with a first episode of psychosis and their caregivers, poor psychosis literacy was observed among young persons, whereas caregivers showed greater psychosis literacy (38). Moreover, young persons with early psychosis and their caregivers who reported having a greater knowledge of psychosis and who attributed those symptoms to serious mental illness reported being more likely to seek out professional help (38).

Engaging caregivers was important, because they were more likely than the young person with psychosis to recognize that the individual had a significant mental health problem and were also more likely to seek help. In addition, sustained engagement occurred more often when providers ensured that the information they gave to patients and their families about the nature of follow-up care directly addressed immigrant Latino families' fears about rehospitalization, financial burden, or involvement of law enforcement (33). The authors noted that delivering information about psychosis in the primary language of the main support person, and that directly addressed concerns and misconceptions and helped with concrete needs, seemed essential for initial and continued engagement.

Three additional studies focused on family treatment and consistently found that Black families engaged less in care (42, 44, 45). In OnTrackNY and NAVIGATE programs, providers had less success engaging Black families and providing ongoing psychoeducation, compared with White families (44, 45). In another study, even though teams made significantly more outreach attempts to Black families than to White families, Black families were scheduled for significantly fewer psychoeducation sessions (42).

#### **Culture-Level Moderators**

Even though we conducted our searches with many culture-level terms, we did not find any studies focused on early psychosis at the cultural level. In many studies, family and culture seemed to be conflated such that "family," and its identity as being from an ethnoracially minoritized group, was a stand-in for "culture."

# DISCUSSION

#### **Key Findings**

Several of the reviewed studies highlighted problems with engaging ethnoracially minoritized youths in early psychosis care (34, 43). Structural barriers to care (e.g., cost of care and police involvement in the pathway to care) may cause many Black youths and family members to avoid treatment (7, 40), and even when Black youths initially engage with care, they disengage earlier than their White counterparts (42, 45). Studies estimate that 30% of Black people, 20% of Latino people, and 23% of Indigenous people avoid any medical care because of experiences of ethnoracially based discrimination in health care settings (16, 46).

Decisions to engage in or disengage from care may hinge on access and availability of services, stigma, and financial strain. Findings from one study suggested that race and ethnicity did not predict the strength of the therapeutic alliance (29), and results from another study suggested a lack of identifiable differences across diverse groups in terms of treatment satisfaction (31). Early intervention also reduced health care costs across all racial groups (37), an outcome that was thought to be important for treatment engagement (7, 33). Designing, implementing, and ensuring access to affordable services that focus on improving engagement are important for mental health equity and may enhance treatment utilization (7, 31).

Research with Latino and Black youths and their families, "supporters," or "key supporters" suggested that more culturally sensitive care may better engage people in treatment. Two studies highlighted that families from minoritized groups have fear of the police (7, 33), which are often reported to be part of emergency pathways to care (5, 47). This observation is consistent with those of other literature (3, 48, 49). Police involvement has a negative impact on the mental health of Black Americans (50) and contributes to health inequities for Latino populations (51, 52), including those who are undocumented (27, 38, 53). Black youths and their supporters feared being perceived as a threat (3), and undocumented Latino individuals feared deportation (27, 38). Police violence, because it is state sanctioned, may be especially distressing (8, 53). The role of the police in the pathway to early psychosis care needs further attention.

Another engagement issue involved the inability of early psychosis programs to connect with Black families to provide ongoing psychoeducation (44, 45), even when extra outreach attempts were made (42). Delivering information about psychosis while addressing misconceptions and concrete needs in a language that the primary supporter could understand was important for engaging Latino youths and families (33)—and likely other cultural groups. Black families may also need information tailored to their questions and concerns, as well as more flexibility on when and where family education is provided to accommodate their schedules and facilitate access.

Gaps

Our review found limited discussion focused on ethnoracially minoritized status, even when samples consisted primarily of persons from ethnoracially minoritized groups. We also found no studies about pathways through care for early psychosis that focused on Asians (although one study included an Asian sample), Native Americans, refugees, asylum seekers, and other groups that experience discrimination in the United States, resulting in negative health and mental health impacts. For example, Muslim individuals would be classified as White but may not identify that way (54, 55), and they also face numerous barriers to representation in health care studies (56). Similarly, the studies we reviewed had difficulty identifying whether "Hispanic" was a racial category or an ethnicity; some reported the percentage of Hispanic participants separately from race but did not incorporate it into analyses, whereas others created a Hispanic racial category if participants self-identified as Hispanic. Survey data suggest that when asked about their race in an open-ended format, Latino individuals often use pan-ethnic terms (e.g., Hispanic or Latino) or responses that linked their racial origin to the country or region of their ancestors (57). More conversation about these issues is important.

Moreover, studies focusing on non–English-speaking populations were almost completely absent from the eligible literature. Services and written materials were rarely available in a language other than English, and there was little discussion of efforts to recruit clinical staff who look and speak like their clients or to place services and treatment milieus in the communities they seek to reach. The most frequent form of language accommodation was the use of a translator, which is not ideal for helping families feel affirmed and welcomed in a new treatment context or to help them understand how to navigate and

manage complicated cultural formulations around stigma and persons deemed "mentally ill" (58–60).

To the best of our knowledge, almost no research has been done on how clinic-level factors, such as the race or ethnicity of providers, affect care utilization or outcomes. Even the modest literature on the therapeutic alliance in psychosis omitted individual-level characteristics of the provider beyond age and sex or gender (61).

Culture-level moderators were limited to research on families, rather than the contours of the broader social context that affect everyday life. Moreover, although stigma among Black and Latino families is well documented, we found no research discussing how to address stigma within the family in culturally relevant ways. In fact, we found few evidence- and family-based interventions. One family-based intervention that has not yet been widely implemented for Latino families includes a focus on family collectivism and spiritual beliefs and practices (62), which may be more culturally appealing to families and thus more effective.

#### Limitations

We note three primary limitations of this review. First, using "first-episode psychosis" and "early psychosis" to identify young people with psychotic symptoms typically within the first 2 years of symptom onset is a relatively new construct in the United States, and therefore the opportunity to do this kind of research has been limited. Second, many other minoritized statuses should be considered, including those of women, individuals identifying as LGBTQIA+, and persons with disabilities (e.g., deafness) (63). Serious mental illness, with the social stigma and socioeconomic marginalization that often accompanies it, is also a minoritized status (64, 65). These statuses likely intersect to create further health inequities for ethnoracially minoritized groups required us to use terms that are social constructs and that were often used in inconsistent ways across articles, which limits the generalizability and consistency of findings.

#### **Future Research**

This review supports researchers arguing for a need to clarify and standardize use of the terms and categories of "race" and "ethnicity" in research, which warrants a larger conversation (1). Race is a social construct, and we run the risk of playing into biological essentialism. Ideally, we would move toward a disaggregation of factors that compose "race," such as socioeconomic status, higher rates of stigma, and so on. Current racial categories required by the NIH, for example, are based on self-report data, and we note issues with how the categories in use have been constructed. For example, one study (34) used race-ethnicity data from the Optum database, which reported race via algorithmic calculations based on items such as zip code.

Research that promotes mental health equity by engaging with more diverse groups and using more inclusive samples, such as pilot studies of interventions that map onto cultural preferences and studies with the statistical power to test racial-ethnic differences, is now within reach. The EPINET (Early Psychosis Intervention Network;

https://nationalepinet.org) platform, which includes 101 clinics across 17 states and eight regional hubs, presents new opportunities for recruiting diverse samples to engage in sufficiently powered research that is explicitly focused on persons from ethnoracially minoritized groups (and persons from other minoritized groups) and pilot interventions for specific populations across hubs.

Future research on "culture" might more explicitly study the ways in which history, economics, politics, stigma, stereotypes, cognitive bias, and other such factors are relevant for youths with early psychosis and their families. Studies could be more explicitly designed to examine the impacts of structural racism, intersectionality, or social determinants of mental health. For example, issues related to discrimination against persons with a minority status, general mistrust of the mental health system among individuals from minoritized groups, and structural barriers that prevent such individuals from engaging in research and clinical care (e.g., transportation) may affect study results, but they are often not considered in investigations. Intersectionality of minority status and disadvantage (e.g., sexual or gender minority status, disability status, and socioeconomic status) could also be attended to more often. Rather than being mostly descriptive (as these studies were), future studies might focus on naming the cultural systems and their mechanisms of harm that perpetuate inequity and mental health disparities for youths with early psychosis and their families (67).

It is also difficult to disentangle variables related to socioeconomic status and ethnoracially minoritized status on the basis of the studies available, and more evidence is needed to better understand these differences. Around 70% of the studies in a systematic review of pathways to care for Black youths focused on no- to low-income Black youths (3), suggesting that a socioeconomic gradient may be involved in differential outcomes in these studies, including in family engagement. Findings from a recent analysis of the RAISE study suggest that Black individuals are more likely to have lower socioeconomic status and that higher socioeconomic status positively correlates with better outcomes (68), prompting long-standing questions about the intersections of race and socioeconomic status (69). Even so, results from most outcomes studies indicate that people from ethnoracially minoritized groups generally experience worse outcomes. We need tools and research to better understand the implications of such findings.

Young Black and Latino people diagnosed as having early psychosis and their families also wanted to better understand how to manage the social use of substances in everyday life without exacerbating symptoms or losing social opportunities (7). Substance use interventions can focus on helping youths with early psychosis overcome social and structural barriers (such as the overconcentration of alcohol outlets in Black neighborhoods) (70) to cutting back or quitting.

Given that providers of early psychosis services (including some U.S. providers) have reported many issues related to a lack of cultural understanding and culturally meaningful and sensitive support in their clinics (71), it is also important to have more U.S.-based research on these issues, with diverse populations. More research is needed on the therapeutic alliance and provider characteristics, such as gender and race-ethnicity, as well as how work roles may be subject to minoritization (e.g., White male psychiatrists vs. Black

female social workers), staff turnover of providers from minoritized groups, and how to recruit and retain diverse providers in the mental health workforce.

# CONCLUSIONS

Research on how ethnoracially minoritized youths experience pathways through care in the United States is very limited. A positive finding of this review was the number of articles published in the past 5 years that were highlighting the more recent emergence of attention to the needs of persons from ethnoracially minoritized groups within the early psychosis treatment paradigm. The future use of national research platforms, such as the EPINET hubs, might allow for more cross-sectional pilot studies, comparative research across populations, and, ultimately, RCTs of psychosocial services interventions that serve larger and more diverse populations. It would also be helpful to incentivize pilot studies of early psychosis interventions that map onto cultural preferences (e.g., Black families have religious and spiritual considerations that are important to them). A top priority should be future studies of all minoritized populations that help us develop pathways through care that are accessible and attractive, better serve and engage youths and their families, and thereby promote recovery outcomes more consistently.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

## Acknowledgments

Dr. Myers received research support from NIMH (grant R01 MH-120599). Ms. Currie received research support from NIMH (1R01 MH-120589) and the Frederick B. Wells Jr. Schizophrenia Research Endowment Fund. Dr. Davis received research support from NIMH (1P50 MH-115846–01A1) and the Massachusetts Department of Mental Health (SCDMH822018082610000). Drs. Dixon and Bello received research support from NIMH (5R01 MH-120597–02). Dr. George received research support from NIMH (1U24 MH-120591–01). Dr. Meyer-Kalos received research support from NIMH (1R01 MH-120589–01) and the State of Minnesota. Dr. Sarpal received research support from NIMH (R01 MH-124705), the Brain and Behavior Foundation, and the Pittsburgh Foundation. Dr. Shapiro received funding from NIMH (R01 MH-120555) and the California Mental Health Services Oversight and Accountability Commission.

# REFERENCES

- Shim RS: Dismantling structural racism in psychiatry: a path to mental health equity. Am J Psychiatry 2021; 178:592–598 [PubMed: 34270343]
- 2. Sotto-Santiago S: Time to reconsider the word minority in academic medicine. J Best Pract Health Prof Divers 2019; 12:72–78
- 3. Oluwoye O, Davis B, Kuhney FS, et al. : Systematic review of pathways to care in the US for Black individuals with early psychosis. NPJ Schizophr 2021; 7:58 [PubMed: 34857754]
- Steel Z, Mcdonald R, Silove D, et al. : Pathways to the first contact with specialist mental health care. Aust N Z J Psychiatry 2006; 40:347–354 [PubMed: 16620317]
- Compton MT, Esterberg ML, Druss BG, et al. : A descriptive study of pathways to care among hospitalized urban African American first-episode schizophrenia-spectrum patients. Soc Psychiatry Psychiatr Epidemiol 2006; 41:566–573 [PubMed: 16604270]
- 6. Cabassa LJ, Piscitelli S, Haselden M, et al. : Understanding pathways to care of individuals entering a specialized early intervention service for first-episode psychosis. Psychiatr Serv 2018; 69:648–656 [PubMed: 29493414]

- Myers N, Sood A, Fox KE, et al. : Decision making about pathways through care for racially and ethnically diverse young adults with early psychosis. Psychiatr Serv 2019; 70:184–190 [PubMed: 30554560]
- Anglin DM, Ereshefsky S, Klaunig MJ, et al. : From womb to neighborhood: a racial analysis of social determinants of psychosis in the United States. Am J Psychiatry 2021; 178:599–610 [PubMed: 33934608]
- Bresnahan M, Begg MD, Brown A, et al. : Race and risk of schizophrenia in a US birth cohort: another example of health disparity? Int J Epidemiol 2007; 36:751–758 [PubMed: 17440031]
- Olfson M, Lewis-Fernández R, Weissman MM, et al. : Psychotic symptoms in an urban general medicine practice. Am J Psychiatry 2002; 159:1412–1419 [PubMed: 12153836]
- Paksarian D, Merikangas KR, Calkins ME, et al. : Racial-ethnic disparities in empirically-derived subtypes of subclinical psychosis among a US sample of youths. Schizophr Res 2016; 170:205– 210 [PubMed: 26711527]
- Leaune E, Dealberto MJ, Luck D, et al. : Ethnic minority position and migrant status as risk factors for psychotic symptoms in the general population: a meta-analysis. Psychol Med 2019; 49: 545–558 [PubMed: 30178719]
- 13. Cohen CI, Marino L: Racial and ethnic differences in the prevalence of psychotic symptoms in the general population. Psychiatr Serv 2013; 64:1103–1109 [PubMed: 23904054]
- López SR, Barrio C, Kopelowicz A, et al. : From documenting to eliminating disparities in mental health care for Latinos. Am Psychol 2012; 67:511–523 [PubMed: 23046302]
- 15. Mental Health: Culture, Race, and Ethnicity Rockville, MD, US Department of Health and Human Services, Office of the Surgeon General, 2001
- Mensah M, Ogbu-Nwobodo L, Shim RS: Racism and mental health equity: history repeating itself. Psychiatr Serv 2021; 72: 1091–1094 [PubMed: 33430652]
- 17. APA's Apology to Black, Indigenous and People of Color for Its Support of Structural Racism in Psychiatry Washington, DC, American Psychiatric Association, 2021. https://www.psychiatry.org/ newsroom/apa-apology-for-its-support-of-structural-racism-in-psychiatry. Accessed Dec 30, 2022
- Giscombé CL, Lobel M: Explaining disproportionately high rates of adverse birth outcomes among African Americans: the impact of stress, racism, and related factors in pregnancy. Psychol Bull 2005; 131:662–683 [PubMed: 16187853]
- Metzl J: The Protest Psychosis: How Schizophrenia Became a Black Disease Boston, Beacon Press, 2010
- 20. Aceituno D, Vera N, Prina AM, et al. : Cost-effectiveness of early intervention in psychosis: systematic review. Br J Psychiatry 2019; 215:388–394 [PubMed: 30696495]
- Correll CU, Galling B, Pawar A, et al. : Comparison of early intervention services vs treatment as usual for early-phase psychosis: a systematic review, meta-analysis, and meta-regression. JAMA Psychiatry 2018; 75:555–565 [PubMed: 29800949]
- 22. Kane JM, Robinson DG, Schooler NR, et al. : Comprehensive versus usual community care for first-episode psychosis: 2-year outcomes from the NIMH RAISE early treatment program. Am J Psychiatry 2016; 173:362–372 [PubMed: 26481174]
- 23. Doyle R, Turner N, Fanning F, et al. : First-episode psychosis and disengagement from treatment: a systematic review. Psychiatr Serv 2014; 65:603–611 [PubMed: 24535333]
- 24. Kendi IX: How to Be an Antiracist New York, One World, 2019
- 25. Farber D: Crack: Rock Cocaine, Street Capitalism, and the Decade of Greed Cambridge, UK, Cambridge University Press, 2019
- 26. Taylor KY: Race for Profit: How Banks and the Real Estate Industry Undermined Black Homeownership Chapel Hill, University of North Carolina Press, 2021
- 27. Kline N: Pathogenic Policing: Immigration Enforcement and Health in the US South New Brunswick, NJ, Rutgers University Press, 2019
- Page MJ, McKenzie JE, Bossuyt PM, et al. : The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Int J Surg 2021; 88:105906

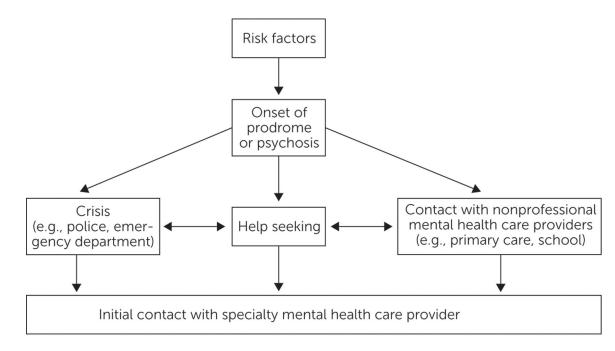
- Browne J, Bass E, Mueser KT, et al. : Client predictors of the therapeutic alliance in individual resiliency training for first episode psychosis. Schizophr Res 2019; 204:375–380 [PubMed: 30057099]
- 30. Brunette MF, Mueser KT, Babbin S, et al. : Demographic and clinical correlates of substance use disorders in first episode psychosis. Schizophr Res 2018; 194:4–12 [PubMed: 28697856]
- Cruz LN, Kline E, Seidman LJ, et al. : Longitudinal determinants of client treatment satisfaction in an intensive first-episode psychosis treatment programme. Early Interv Psychiatry 2017; 11:354– 362 [PubMed: 26969527]
- 32. Goulding SM, Franz L, Bergner E, et al. : Social functioning in urban, predominantly African American, socially disadvantaged patients with first-episode nonaffective psychosis. Schizophr Res 2010; 119:95–100 [PubMed: 20060685]
- Hernandez M, Franco R, Kopelowicz A, et al. : Lessons learned in clinical research recruitment of immigrants and minority group members with first-episode psychosis. J Immigr Minor Health 2019; 21:123–128 [PubMed: 29368059]
- Heun-Johnson H, Menchine M, Axeen S, et al. : Association between race/ethnicity and disparities in health care use before first-episode psychosis among privately insured young patients. JAMA Psychiatry 2021; 78:311–319 [PubMed: 33355626]
- Jones N, Godzikovskaya J, Zhao Z, et al. : Intersecting disadvantage: unpacking poor outcomes within early intervention in psychosis services. Early Interv Psychiatry 2019; 13:488–494 [PubMed: 29076244]
- 36. Li H, Eack SM, Montrose DM, et al. : Longitudinal treatment outcome of African American and Caucasian patients with first episode psychosis. Asian J Psychiatr 2011; 4:266–271 [PubMed: 23051160]
- Liffick E, Mehdiyoun NF, Vohs JL, et al. : Utilization and cost of health care services during the first episode of psychosis. Psychiatr Serv 2017; 68:131–136 [PubMed: 27691375]
- López SR, Gamez D, Mejia Y, et al. : Psychosis literacy among Latinos with first-episode psychosis and their caregivers. Psychiatr Serv 2018; 69:1153–1159 [PubMed: 30220245]
- Marino L, Scodes J, Richkin T, et al. : Persistent cannabis use among young adults with early psychosis receiving coordinated specialty care in the United States. Schizophr Res 2020; 222: 274–282 [PubMed: 32473930]
- 40. Myers N, Bhatty S, Broussard B, et al. : Clinical correlates of initial treatment disengagement in first-episode psychosis. Clin Schizophr Relat Psychoses 2017; 11:95–102 [PubMed: 25367162]
- Nagendra A, Schooler NR, Kane JM, et al. : Demographic, psychosocial, clinical, and neurocognitive baseline characteristics of Black Americans in the RAISE-ETP study. Schizophr Res 2018; 193:64–68 [PubMed: 28709773]
- 42. Oluwoye O, Stokes B, Stiles B, et al. : Understanding differences in family engagement and provider outreach in New Journeys: a coordinated specialty care program for first episode psychosis. Psychiatry Res 2020; 291:113286 [PubMed: 32763547]
- van der Ven E, Susser E, Dixon LB, et al. : Racial-ethnic differences in service use patterns among young, commercially insured individuals with recent-onset psychosis. Psychiatr Serv 2020; 71: 433–439 [PubMed: 31931683]
- Oluwoye O, Stiles B, Monroe-DeVita M, et al. : Racial-ethnic disparities in first-episode psychosis treatment outcomes from the RAISE-ETP study. Psychiatr Serv 2018; 69: 1138–1145 [PubMed: 30152275]
- Jones N, Basaraba C, Piscitelli S, et al. : Clients' preferences for family involvement and subsequent family contact patterns within OnTrackNY early psychosis services. Psychiatr Serv 2021; 72: 399–407 [PubMed: 33530730]
- 46. Discrimination in America: Final Summary Washington, DC, National Public Radio, Robert Wood Johnson Foundation, T. H. Chan School of Public Health, 2018. https://cdn1.sph.harvard.edu/wp-content/uploads/sites/94/2018/01/NPR-RWJF-HSPH-Discrimination-Final-Summary.pdf
- 47. Commander MJ, Cochrane R, Sashidharan SP, et al. : Mental health care for Asian, Black and White patients with non-affective psychoses: pathways to the psychiatric hospital, in-patient and after-care. Soc Psychiatry Psychiatr Epidemiol 1999; 34:484–491 [PubMed: 10541669]

- 48. Franz L, Carter T, Leiner AS, et al. : Stigma and treatment delay in first-episode psychosis: a grounded theory study. Early Interv Psychiatry 2010; 4:47–56 [PubMed: 20199480]
- Bergner E, Leiner AS, Carter T, et al. : The period of untreated psychosis before treatment initiation:: a qualitative study of family members' perspectives. Compr Psychiatry 2008; 49:530– 536 [PubMed: 18970900]
- McLeod MN, Heller D, Manze MG, et al. : Police interactions and the mental health of Black Americans: a systematic review. J Racial Ethn Health Disparities 2020; 7:10–27 [PubMed: 31482464]
- Nichols VC, Lebrón AMW, Pedraza FI: Policing us sick: the health of Latinos in an era of heightened deportations and racialized policing. PS Polit Sci Polit 2018; 51:293–297
- 52. Geller A, Fagan J, Tyler T, et al. : Aggressive policing and the mental health of young urban men. Am J Public Health 2014; 104: 2321–2327 [PubMed: 25322310]
- 53. DeVylder J, Fedina L, Link B: Impact of police violence on mental health: a theoretical framework. Am J Public Health 2020; 110: 1704–1710 [PubMed: 32941068]
- 54. Samari G, Alcalá HE, Sharif MZ: Islamophobia, health, and public health: a systematic literature review. Am J Public Health 2018; 108:e1–e9
- 55. Maghbouleh N, Schachter A, Flores RD: Middle Eastern and North African Americans may not be perceived, nor perceive themselves, to be White. Proc Natl Acad Sci U S A 2022; 119: e2117940119 [PubMed: 35131945]
- Laird LD, de Marrais J, Barnes LL: Portraying Islam and Muslims in MEDLINE: a content analysis. Soc Sci Med 2007; 65:2425–2439 [PubMed: 17767988]
- 57. Noe-Bustamente L, Gonzalez-Barrera A, Edwards K, et al.: Majority of Latinos Say Skin Color Impacts Opportunity in America and Shapes Daily Life Washington, DC, Pew Research Center, 2021. https://www.pewresearch.org/hispanic/2021/11/04/majority-of-latinos-sayskin-color-impacts-opportunity-in-america-and-shapes-daily-life. Accessed Dec 30, 2022
- Villalobos BT, Bridges AJ, Anastasia EA, et al. : Effects of language concordance and interpreter use on therapeutic alliance in Spanish-speaking integrated behavioral health care patients. Psychol Serv 2016; 13:49–59 [PubMed: 26349073]
- 59. Patel SG, Firmender WM, Snowden LR: Qualitative evaluation of mental health services for clients with limited English proficiency. Int J Ment Health Syst 2013; 7:27 [PubMed: 24295426]
- 60. Bauer AM, Chen CN, Alegría M: English language proficiency and mental health service use among Latino and Asian Americans with mental disorders. Med Care 2010; 48:1097–1104 [PubMed: 21063226]
- 61. Evans-Jones C, Peters E, Barker C: The therapeutic relationship in CBT for psychosis: client, therapist and therapy factors. Behav Cogn Psychother 2009; 37:527–540 [PubMed: 19728901]
- 62. Weisman de Mamani A, Weintraub MJ, Gurak K, et al. : A randomized clinical trial to test the efficacy of a family-focused, culturally informed therapy for schizophrenia. J Fam Psychol 2014; 28:800–810 [PubMed: 25286175]
- Linszen MMJ, Brouwer RM, Heringa SM, et al. : Increased risk of psychosis in patients with hearing impairment: review and meta-analyses. Neurosci Biobehav Rev 2016; 62:1–20 [PubMed: 26743858]
- 64. Hopper K, Jost J, Hay T, et al. : Homelessness, severe mental illness, and the institutional circuit. Psychiatr Serv 1997; 48:659–665 [PubMed: 9144820]
- 65. Ware NC, Hopper K, Tugenberg T, et al. : Connectedness and citizenship: redefining social integration. Psychiatr Serv 2007; 58: 469–474 [PubMed: 17412847]
- 66. Crenshaw WK: On Intersectionality: Essential Writings New York, New Press, 2017
- 67. Adams LM, Miller AB: Mechanisms of mental-health disparities among minoritized groups: how well are the top journals in clinical psychology representing this work? Clin Psychol Sci 2022; 10:387–416 [PubMed: 35602543]
- 68. Bennett D, Rosenheck R: Socioeconomic status and the effectiveness of treatment for first-episode psychosis. Health Serv Res 2021; 56:409–417 [PubMed: 33231881]
- Farmer MM, Ferraro KF: Are racial disparities in health conditional on socioeconomic status? Soc Sci Med 2005; 60:191–204 [PubMed: 15482878]

- 70. . Scott J, Danos D, Collins R, et al. : Structural racism in the built environment: segregation and the overconcentration of alcohol outlets. Health Place 2020; 64:102385 [PubMed: 32755812]
- 71. Jones N, Kamens S, Oluwoye O, et al. : Structural disadvantage and culture, race, and ethnicity in early psychosis services: international provider survey. Psychiatr Serv 2021; 72:254–263 [PubMed: 33430649]

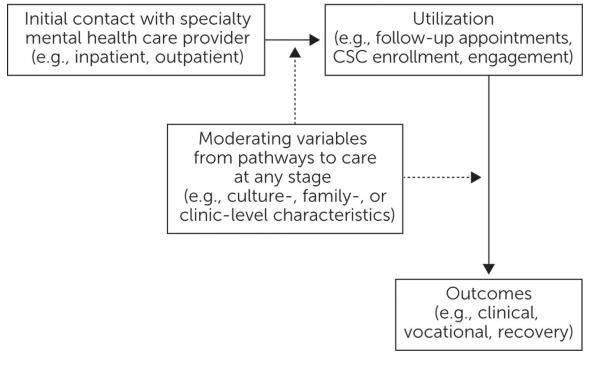
#### HIGHLIGHTS

- Studies suggest that engaging youths from ethnoracially minoritized groups in mental health services is challenging and that ensuring access to affordable and culturally sensitive services focused on improving engagement is important for mental health equity.
- Little research is available on provider characteristics and their effects on early psychosis service delivery and the therapeutic alliance and how to support families of youths with early psychosis in culturally relevant ways.
- This review found limited discussion around challenges facing youths from ethnoracially minoritized groups, even when study samples consisted primarily of youths from such groups.
- No studies investigated pathways through care for early psychosis that focused on Asians, Native Americans, refugees, asylum seekers, non-English speakers, and other groups experiencing discrimination in the United States.



## FIGURE 1.

Pathways to initial contact with a specialty mental health care provider among persons experiencing early psychosis



## FIGURE 2.

Pathways through care, or the period of treatment after initiation of mental health specialty care, for early psychosis<sup>a</sup>

<sup>a</sup> CSC, coordinated specialty care.

			Sample	% of sample belonging to ethnoracially minoritized		Analysis	Reported race categories of	Hispanic or Latino as race or	
Study	Type <sup>a</sup>	Design	size	group	Use of race	using race	sample	ethnicity	Location
Browne et al., 2019 (29) $b,c$	Quant	Cross-sectional within cluster-randomized trial $d$	134	39	Analytical	Yes	Caucasian, African American, other	Ethnicity	17 clinics throughout the United States
Brunette et al., 2018 (30) <sup>e</sup>	Quant	Cross-sectional within cluster-randomized trial d	404	46	Focus	Yes	White, African American, other	Ethnicity	21 U.S. states
Cruz et al., $2017 (31)^b$	Quant	Observational, prospective	44	66	Not used	No	White, Black or African American, Asian, multiracial, other	Ethnicity	Boston
Goulding et al., 2010 (32) <sup>e</sup>	Quant	Observational, prospective $f$	109	94	Focus	>90% one race	African American, White/ Caucasian, Asian-American, African/Ethiopian	Not reported	Atlanta
Hemandez et al., 2019 $(33)^{\mathcal{C},\mathcal{B}}$	Qual	Observational, prospective	84	100	Focus	>90% one race	Latino	Racial-ethnic minority	San Fernando Valley, California
Heun-Johnson et al., 2021 (34) <sup>b</sup>	Quant	Observational, retrospective	3,017	21	Focus	Yes	Black, Hispanic, White	Race	Across United States
Jones et al., 2019 (35) $^{e}$	Mixed	Case-control, retrospective	130	67	Focus	Yes	White, African American, Latino/a, East Asian, Southeast Asian, South Asian, Samoan	Race	San Francisco Bay Area
Jones et al., 2021 (45) $b.\mathcal{E}$	Quant	Observational, prospective <i>h</i>	761	72	Analytical	Yes	White (non-Hispanic), Black (non-Hispanic), Hispanic, other	Ethnicity	New York State (multiple sites)
Li et al., 2011 (36) <sup>e</sup>	Quant	Observational, prospective	199	31	Focus	Yes	African American, Caucasian	Not reported	Pittsburgh
Liffick et al., 2017 (37) $^{b}$	Quant	Observational, retrospective, case- control	151	68	Not used	No	African American, Caucasian, other	Not reported	Indianapolis
López et al., 2018 (38) <i>b</i> , <i>g</i>	Mixed	Observational, prospective	148	100	Focus	>90% one race	Latino	Racial-ethnic minority	San Fernando Valley, California
Marino et al., 2020 (39) <sup>e</sup>	Quant	Observational, prospective <sup><i>h</i></sup>	938	74	Analytical	Yes	White (non-Hispanic), Black (non-Hispanic), Hispanic, other	Ethnicity	New York State (multiple sites)

Characteristics of the studies of service utilization and outcomes among youths initiating treatment for a psychotic disorder included in the final review

TABLE 1.

Author Manuscript

				% of sample belonging to ethnoracially				Hispanic or Latino as	
Study	Type <sup>a</sup>	Design	Sample size	minoritized group	Use of race	Analysis using race	Reported race categories of sample	race or ethnicity	Location
Myers et al., 2019 (7) $b_rg$	Qual	Observational, prospective	18	89	Focus	Yes	Asian, Black or African American, Hispanic or Latino, White	Race	North Texas
Myers et al., 2017 (40) $^{b}$	Quant	Observational, prospective <sup>f</sup>	33	100	Analytical	>90% one race	African American, not specified	Not reported	Atlanta
Nagendra et al., 2018 $(41)^b$	Quant	Observational, case- control analysis of baseline data from cluster-randomized trial <sup>d</sup>	404	46	Focus	Yes	Caucasian, Black American	Not reported	21 states
Oluwoye et al., 2020 $(42)b_{\mathcal{B}}$	Quant	Observational, cohort, prospective	211	57	Analytical	Yes	White, Latino, Black, other (multiracial, Asian, American Indian/Alaska Native, Pacific Islander)	Race	Washington State (multiple sites)
Oluwoye et al., 2018 $(44)^{b,e,g}$	Quant	Subanalysis of cluster- randomized trial <sup>d</sup>	404	61	Focus	Yes	Non-Hispanic White, non- Hispanic Black, Asian, Alaska Native/Native American, Hawaiilan/Pacific Islander, Hispanic Black, Hispanic other	Ethnicity	21 states
van der Ven et al., 2020 $(43)^b$	Quant	Observational, retrospective	8,021	23	Focus	Yes	Non-Hispanic White, Hispanic, African American, Asian	Ethnicity	Across United States
<sup>a</sup> Mixed, mixed methods; qual, qualitative; quant, quantitative.	al, qualita	tive; quant, quantitative.							
bService utilization domain.									
${\cal C}_{{f Sarrive newsides characteristics (elinic) domain}$	etioe (olini	io) domain							

Psychiatr Serv. Author manuscript; available in PMC 2023 September 28.

 $^{c}$ Service provider characteristics (clinic) domain.

 $d_{
m Data}$  set used in the study originated from a RAISE-ETP (Recovery After an Initial Schizophrenia Episode early treatment program) trial.

<sup>e</sup>Outcomes domain, including recovery.

 $f_{\mathrm{Data}}$  set originated from the Atlanta Cohort on Early Course of Schizophrenia.

 $\mathcal{E}_{\mbox{Family}}$  and cultural factors domain.

 $h_{\text{Data set originated from OnTrackNY.}}$ 

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript