

NIH Public Access

Author Manuscript

Ethn Health. Author manuscript; available in PMC 2012 December 1.

Published in final edited form as:

Ethn Health. 2011 December ; 16(6): 567-582. doi:10.1080/13557858.2011.586024.

Use and Quality of Mental Health Services for Haitian Youth

Nicholas J. Carson^{a,*}, Mark Stewart^b, Julia Y. Lin^c, and Margarita Alegria

^aCenter for Multicultural Mental Health Research, 120 Beacon Street, 4th floor, Somerville, MA 02143, USA

^bCambridge Health Alliance, 195 Canal Street, Malden, MA 02148, USA

^cCooperative Studies Program Coordinating Center, VA Palo Alto Healthcare System, 701 B. N. Shoreline Blvd. Mountain View, CA 94043-3208, USA

Abstract

Objective—To describe the mental health service use of Haitian, African American, and non-Latino White youth in a community mental health setting. Groups are compared on adherence to treatment guidelines for attention-deficit/hyperactivity disorder (ADHD) and depressive disorders.

Design—Retrospective review of outpatient mental health charts (n=252) from five community sites in an urban area of the Northeastern United States. We recorded total number and treatment type of sessions during the first six months of treatment. Guideline-adherent treatments were compared and predicted after controlling for clinical need.

Results—Most Haitian and African American youth stopped treatment by six months, with the majority attending less than eight sessions. One third of Haitian and African American patients attended just one session. Haitians patients who presented with less severe symptoms and dysfunction were more likely to have single-session treatments. Guideline-adherent treatment for ADHD and depression was less likely for Haitians. Older patients were more likely to receive adequate depression treatment. Haitian youth were relatively underinsured, had more family separations documented, and received Adjustment Disorder diagnoses more often.

Conclusions—Haitian youth use outpatient mental health services in similar proportion to African American youth, and at lower rates than White youth. Guideline-adherent treatment for ADHD and depression is limited by low retention in care for Black youth. Low insurance coverage is likely an important contributor to reduced use of services, especially for Haitians. These findings are discussed in the context of providing culturally sensitive mental health care to diverse communities.

Keywords

mental health services; Haitian; cross-cultural; treatment guidelines; youth

Introduction

As cultural diversity of youth in the United States increases, mental health care systems face challenges in eliminating disparities in use and quality of mental health services for children and adolescents (US Public Health Service 2000, Fuligni and Hardway 2004, Kataoka et al. 2002). There is little research examining intra-ethnic differences in mental health service use among Black youth in the United States. The use of socially defined racial categories in descriptive psychiatry (e.g. Black, White) is important for documenting health disparities,

^{*}Corresponding author. ncarson@charesearch.org .

but faces limits when planning individual treatment (Braun et al. 2007). Research methods that disaggregate the health status of Black Americans into sub-groups may reveal differences in service use based on, for example, context of origin, sociodemographic differences, or cultural preferences (Read et al. 2005). Accounting for such heterogeneity may improve the ability of mental health services to work effectively with cultural diversity, which in turn may lead to decreases in disparities and increases in service quality (Escarce 2005, Kirmayer 2006, Arthur and Katkin 2006).

The present study examines mental health service use of Haitian youth in comparison to that of African American and non-Latino White youth. Disparities research in mental health services has traditionally compared White youth with African American, Latino, or Asian youth. When studying a sub-ethnic within one of these broad Census categories, using two comparisons groups may reveal differences not only from the majority cultural group (i.e. White) but also from what has been assumed to be a culturally similar group (i.e. African American). Some studies of nationally representative datasets have not found differences in use of services between non-Latino White and African American youth (Kataoka et al. 2002, Alexandre et al. 2008), although findings among high-risk populations (Garland et al. 2005) and younger samples (Coker et al. 2009) show that White youth receive more, and better quality, mental health services than Black youth.

Haitians emigrating to the United States over the years have endured varying levels of political trauma, severe poverty, and natural disasters, meeting these with a variety of acculturative adaptations (Zéphir 2004, Stepick 1998). Estimates for the United States Census suggest there are approximately 814,000 persons of Haitian ancestry living in the US, making them the second largest foreign-born group of African descent (US Census Bureau 2006). Although Census data is reliable, it may reflect an undercount for all undocumented foreign-born groups, because they are considered hard-to-count populations (US Census Bureau 2010). In addition, Haitian youth may self-identify as African American due to pressures related to acculturation and marginalization. Hence, there is limited research to aid service planning for the mental health needs of this specific population. Relevant epidemiological studies include the National Study of American Life (NSAL), which reports that adult Caribbean immigrants use less psychiatric care than US-born Blacks (Jackson et al. 2007). The initial NSAL reports included low numbers of Haitians but excluded youth and French or Creole speakers; thus, Haitian immigrants may be underrepresented in the Caribbean cohort. Another NSAL study found that, compared to Whites, adult depression is more chronic, severe, and disabling for both Caribbean Blacks and African Americans, but Caribbean immigrants in particular receive less treatment than Whites (Williams et al. 2007).

There is a growing literature describing the mental health of Haitian youth. Family separation during the course of a chain family immigration occurs in over 85% of Black Caribbean families, presenting challenges for family cohesion, child development, and interaction with health services (Suarez-Orozco et al. 2002, Lashley 2000). The experience of racism by Caribbean Canadian youth has been correlated with symptoms of conduct disorder, although these youth as a group may experience less mental distress than non-immigrant White youth (Rousseau et al. 2008). Standardized interviews with immigrant Haitian youth have estimated the prevalence of depression at 14.0% and PTSD at 11.6%, with just 1.8% having sought mental health care (Fawzi et al. 2009). Childhood maltreatment (abuse or neglect) among Haitians living in Haiti has been estimated at over 60% in women and 85% in men (Martsolf 2004) and affects the mental health of Haitian youth in the United States (Desrosiers and St Fleurose 2002, Douyon et al. 2005). Devastation wrought by a major earthquake in Haiti in January, 2010, has introduced a

pervasive and persistent stressor for Haitian immigrants and their families in the United States (Levin 2010, Pierre et al. 2010).

Culturally relevant illness beliefs among Haitian families in the United States may involve natural or supernatural causes, leading individuals to seek relief from both Western and religious healers (Desrosiers and St Fleurose 2002, DeSantis and Thomas 1992). Expert opinions have been published with recommendations for culturally sensitive treatment of Haitians with mental disorders, in accord with professional guidelines on multicultural treatment (Nicolas et al. 2006). Haitian immigrant families have relatively low rates of health insurance even when compared to other ethnic minority immigrants (Saint-Jean and Crandall 2005, Carrasquillo et al. 2000). Thus, Haitian immigrants and Haitian Americans are likely underserved, relative to African American youth, who themselves receive less mental health care than Whites (Kataoka et al. 2002, Garland et al. 2005, Elster et al. 2003, Kodjo and Auinger 2004, Yeh et al. 2002, Hough et al. 2002). Prior research suggests that Haitian youth attend fewer psychopharmacology visits in community mental health settings, compared to African American and White youth, and may also be less likely to receive adequate mental health care when living in areas of poverty (Carson et al. 2010).

ADHD and depression are common disorders with evidence-based treatments to guide definitions of quality, although racial/ethnic differences in treatment persist (Huey and Polo 2008). They are therefore suitable candidate disorders to select in a study of appropriate treatment. Rates of medication treatment for African American youth with ADHD are half that of Whites, a difference that increases with age (Safer and Malever 2000, Griggins 2005). Across racial/ethnic groups, adequate depression treatment with medication and psychotherapy is less common among youth than adults (Harman et al. 2004). Some studies of youth show comparable rates of depression treatment between minorities and Whites, but these can be faulted for using a loose definition of depression treatment (one visit or one antidepressant prescription) (Richardson et al. 2003) or for aggregating all racial/ethnic groups into one broad "minority" variable (Curry et al. 2006).

We address these gaps in the literature with a descriptive analysis of mental health service use and treatment adequacy for Haitian youth treated in a community mental health system. We include both African American and non-Latino White comparison groups to explore intra-ethnic differences. The first aim is to compare mental health service use between the three groups. We hypothesize that Haitian youth will attend fewer visits than African American and White youth. A second aim is to compare these three groups on adherence to treatment guidelines for ADHD and depression. We expect that Haitian American youth will receive less guideline-adherent treatment than African American and White youth for ADHD and depression at similar levels of clinical need (Lyons et al. 1999).

Methods

We completed a retrospective review of 252 outpatient charts (81 Haitian, 82 African American, and 89 non-Latino White) from five clinical sites in a community mental health system in the Boston metropolitan area, which has a significant Haitian American population. The first two authors and a research assistant collected data from the first six months of treatment. There was no direct patient contact and approval was obtained from the health system's Institutional Review Board.

Study population

We selected three random samples of Haitian, African American, and White patients whose treatment began between 2000 and 2005. Inclusion criteria were Haitian, African American, or White ethnicity (identification described below), age two to twenty years at intake (the

range for which the CANS-MH is validated.) Once the lists of patients from each cultural group who were treated during the specified time period were determined, we randomly selected samples from within each group. We excluded those charts that were missing or did not meet inclusion criteria until we achieved a final sample of approximately 80 charts per group. Patients of mixed ancestry were excluded, given low numbers and to facilitate interpretation of findings. We refer to Haitian youth by that term, given that this is a conglomeration of immigrant children born in Haiti and children born to Haitian parents in the United States.

Charts needed at least one intake note by a clinician from the first six months of treatment. Although a single note does not necessarily represent an actual "treatment" (Kazdin et al. 1995), we decided it was important to capture any treatment episode. Brief treatments in particular may clarify problems in the delivery of services. Mental health treatments by psychiatrists, psychologists, social workers, and family therapists were included.

Ethnic and Racial Identification

The health system surveyed maintained records of patient race and language but not ethnicity. Therefore a triangulation of race, language, and direct review of charts was used to ascertain ethnicity. Between 2000 and 2005, there were 678 Black youth in outpatient mental health services within the system (12% of all outpatients below age 21). Of these, 186 registered as Haitian Creole-speaking and were assumed to be Haitian. The first and second authors reviewed the remaining charts. Those patients with Haitian surnames (the authors are familiar with Haitian culture, Haitian Creole, and French) had their ethnicity checked against clinician notes through direct chart review. Those listed as Black and English speaking (assumed to be non-Haitian) were reviewed to ascertain ethnicity; seven were reclassified as Haitian and one as White based on clinical documentation. Those excluded from this African American group were fourteen African Caribbeans (non-Haitian), four Africans, and five of mixed ethnicity. Identification of ethnicity is an acknowledged challenge in cultural research (Hahn 1992, Laws and Heckscher 2002). Clinicians explicitly documented nativity in 65% of charts in the study sample. Of those remaining, nativity status was not available in 20 African American charts (8%), 22 Haitian charts (9%), and 45 White charts (18%). These African American patients were assumed to be indigenous to the United States.

Demographics

We collected demographic variables that are correlated with mental health service use, including age, sex, grade level, insurance, and injured child reports (Garland et al. 2005, Farmer et al. 1999). Because family separations can be associated with depression and family dysfunction, we recorded the duration of longest separation and age at separation whenever these were noted in the chart (Suarez-Orozco et al. 2002, Lashley 2000). "Family" here was defined as biological parents or non-parental primary caretakers as defined in the chart. We recorded health insurance as an approximation of socioeconomic status. For the health care system as a whole, from 2000 to 2005, 20% of outpatients were covered by the state's "Free Care" pool for the uninsured, 11% by Medicaid, and 69% by private insurance.

Mental Health Need

The Child and Adolescent Needs and Strengths-Mental Health measure (CANS-MH) has 43 items assessing six clinical domains: Problem Presentation, Risk Behaviors, Functioning, Care Intensity/Organization, Family Needs/Strengths, and Strengths (Winters et al. 2005, Lyons 2006). Items are scored 0 (no need), 1 (watchful waiting), 2 (need for action), or 3 (immediate need for action). The CANS-MH has been used in research with ethnic minorities and in retrospective studies, with a clinician-researcher reliability of 0.73 and an

inter-rater reliability of 0.85 using clinical cases (Lyons et al. 1999, Winters et al. 2005, Rawal et al. 2004, Anderson et al. 2003). The authors and two research assistants were trained on the CANS-MH using CANS-MH videos and case vignettes. For this paper we analyze CANS-MH scores on two items, Attention-Deficit and Depression/Anxiety, which are meant to identify patients in need of treatment for ADHD and depressive disorders, and by definition include all patients given any of these diagnoses.

We assessed inter-rater reliability among the three raters on a random sample of 22 charts. We compared research assistant ratings against those of the first author, who reviewed the majority of charts. Reliability for the Attention-Deficit and the Depression/Anxiety items was calculated by grouping the CANS scores in three categories: no/minimal need (score 0 or 1); current/severe need (score 2 or 3); or not recorded. Inter-rater reliability between the primary rater and the other two raters was high for Attention-Deficit (kappa=0.82 - 0.91) and moderate to high for Depression/Anxiety (kappa=0.58 - 0.79).

Definitions of clinical need generally should reflect both psychiatric symptoms and functional impairment (Cabiya et al. 2006, Canino et al. 2004). Thus, to compare need across ethnic groups, we used a composite CANS-MH score that included at least one Problem Presentation item scored ≥ 2 (indicating criteria are met for a psychiatric disorder) and at least one Functioning item scored ≥ 2 (to include youth with moderate to severe dysfunction.) Concordance among both rater pairs was high for determination of clinical need (91%) despite a low kappa (-0.05). This paradox can occur with a large imbalance in the number of positive cases compared to the number of negative cases (Cicchetti and Feinstein 1990).

Clinical need was derived from two domains of the CANS-MH. The Problem Presentation domain covers major DSM-IV diagnostic domains: Psychosis, Attention Deficit/Impulse Control, Depression/Anxiety, Oppositional Behavior, Antisocial Behavior, Substance Abuse, Adjustment to Trauma, Attachment (capturing Attachment Disorders in children under six), Situational Consistency of Problems (representing symptoms across multiple situations and environments), and Temporal Consistency of Problems (representing duration of symptoms). The Situational and Temporal Consistency modifiers capture cases in which the diagnostic process is incomplete (e.g. due to clinical uncertainty) but there is clinical need due to consistency of symptoms over time or contexts. The Functioning domain includes Intellectual/Developmental, Physical/Medical, School Achievement, School Behavior, School Attendance, and Sexual Development.

Service Use

Mental health service use was defined as the total number of outpatient sessions with any mental health clinician during the first six months of service. Sessions were counted if there was a progress note from a mental health clinician, and sessions across multiple treatments (e.g. psychotherapy and psychopharmacology) were summed. All Axis I diagnoses were recorded from progress notes during that time (American Psychiatric Association 2000). The primary diagnosis was assumed to be the diagnosis most often listed first in clinician notes.

Adherence to Treatment Guidelines for ADHD and Depression

"Guideline-adherent" treatment for ADHD and depression were operationalized according to recent treatment guidelines and clinical evidence (Pliszka 2007, American Academy of Pediatrics 2001, MTA Cooperative Group 1999). Adequate treatment of pediatric ADHD requires treatment with a stimulant medication or atomoxetine; or, in the absence of medication, at least eight sessions of psychotherapy involving parent training. Adequate treatment of pediatric depression includes an antidepressant trial or at least eight sessions of

psychotherapy (Birmaher et al. 2007, Curry 2001, Olfson et al. 2003, Weisz et al. 1997). While guidelines recommend at least one month of medication compliance, our chart review methods cannot account for pharmacological treatment duration. Prior research on treatment quality defines antidepressant use as at least one pharmacy claim for an antidepressant (Richardson et al. 2004). Therefore, we similarly coded any documented use of stimulants, atomoxetine, or antidepressants as yes/no.

Analyses

Sociodemographic and clinical characteristics were compared with Fisher's exact tests due to small sample sizes. Differences in continuous demographic variables were assessed using pairwise t-tests, assuming the groups lack equal variance. The average number of visits in each group was stratified by Need versus No Need in order to control for the effect of clinical need on service use. Haitians were the comparison group for all tests.

To assess adherence to treatment guidelines, depression and ADHD treatments were categorized as adherent or non-adherent and compared using Fisher's exact test. We estimate the probability of adherence for each disorder using logistic regression models while adjusting for CANS-MH score of 2 or 3 on the corresponding item (Attention Deficit/ Impulse Control or Anxiety/Depression), race/ethnicity, age, and gender. In a sensitivity analysis, we repeated these analyses using clinician diagnoses of ADHD or depressive disorders instead of the corresponding CANS-MH score. This restricts the pool of patients to those with clinician-identified need, as opposed to researcher-identified need using CANS-MH criteria.

We tested for interactions between gender and clinical need because prior evidence suggests that gender moderates both expression and treatment of childhood psychiatric disorders. Girls with ADHD in clinically-referred samples have less hyperactivity, more inattention, and may be detected later in life, leading to potential differences in treatment (Staller and Faraone 2006). Gender differences in medication use among children with depression, anxiety, and ADHD have also been found (Leslie et al. 2003). Analyses were conducted using SAS version 9.1 (SAS Institute, Inc., Cary, North Carolina).

Results

There were significant demographic and clinical differences among the three groups (Table 1). Over one quarter of Haitian youth (27%) registered as uninsured or Free Care, greater than both African American youth (9%) and White youth (4.5%). African American youth were most likely to be insured under Medicaid (66%), with only 25% privately insured. Most White youth were privately insured (62%). Separations from caregivers were documented by clinicians in twice as many Haitian youth (56%) as African American or White. Haitian separations noted by clinicians were significantly longer (44 months) than those of African American (23 months) and White (20 months) youth. African American youth had significantly more Injured Child reports documented than Haitian youth.

There were trends suggestive of differences in clinical need and service use (Table 2), although some did not reach statistical significance. There were similar rates of clinical need across groups, but Haitian youth made fewer visits than Whites whether they met the definition of need (5.7 vs. 8.0, p=.05) or did not (2.1 vs. 5.0, p<.01). Single-session treatments were far more common among Haitian (29%) and African American (28%) than White (8%) youth. For Haitians, the most common diagnoses were adjustment disorder (27%), followed by depressive disorder (22%) and ADHD (16%). For White and African American youth, this order was reversed, with ADHD documented most often. Other common diagnoses for Haitians included learning disorders (LD, n=14, 17%), post-

traumatic stress disorder (PTSD, n=7, 9%), oppositional defiant disorder (ODD, n=6, 7%), and psychotic disorders (n=5, 6%). African American patients were also diagnosed with LD (n=11, 13%), PTSD (n=11, 13%), cannabis abuse (n=5, 6%), ODD (n=4, 5%), and bipolar disorder (n=4, 5%). Whites were also diagnosed with LD (n=10, 11%), bipolar disorder (n=10, 11%), pervasive developmental disorders (n=8, 9%), PTSD (n=5, 6%), and ODD (n=4, 5%).

Patients with single-session treatments were not significantly different from patients with longer treatments when compared by age group, gender, insurance, clinical need, or having the diagnosis of adjustment disorder, depression, or ADHD. However, Haitian youth who did not meet the definition of need were significantly more likely to have single-session treatments than those who did. This pattern was not observed among African American or White youth.

Haitian youth were significantly less likely to receive treatment from psychiatrists (41% vs. 66% for Whites) or social workers (12% vs. 28% for African Americans); and more likely to receive treatment from psychologists (43% vs. 16% for African Americans and 11% for Whites). A proportion of patients received treatment from more than one mental health provider. Multiple treatments were received by 25 (30%) African American patients, 23 (26%) White patients, and 13 (16%) Haitian patients. These treatments had a number referral sources documented. Of the 95 treatments documented for Haitian youth, the referral source was most often school (31%), another mental health clinician (such as a psychiatric intake team; 24%), primary care physician (20%), and family (7%). Of the 107 treatments documented for African American youth, referral source was most often mental health (27%), primary care physician (19%), school (14%), and family (10%). Of 116 treatments documented for White patients, the referral source was most often mental health (34%), family (18%), school (15%), and primary care physician (10%).

Guideline-adherent treatment was received significantly more often by White patients for ADHD (n=36, 88%) and depression (n=45, 76%) than for Haitians (n=6, 38% and n=16, 40%, respectively). Repeating this analysis for patients with clinician-identified diagnoses only, rather than high CANS-MH scores, similar results were found for White patients with ADHD (n=32, 89%) compared to Haitians (n=8, 53%; p=.009) and for White patients with depression (n=22, 85%) compared to Haitians (n=11, 56%; p=.05).

In the logistic regression (Table 3), White youth were four times more likely than Haitians to receive adequate ADHD treatment. Female patients with lower CANS-MH Attention-Deficit score were twice as likely to receive adequate ADHD treatment than male patients with similar Attention-Deficit score. A higher CANS-MH Depression/Anxiety score (2 or 3 vs. 0 or 1) strongly predicted adequate depression treatment, as did White race/ethnicity and age 16-20 years. Haitian and African American youth had similar odds of receiving guideline-adherent treatment for ADHD and depression. When the logistic regression was run again substituting in ADHD and Depressive Disorder diagnoses instead of CANS-MH item scores, similar results were found to those above. The presence of a diagnosis increased the odds of adequate treatment for ADHD (OR 8.94 [4.28-18.71]) and for depression (OR=2.84 [1.52-5.32]). Again, White ethnicity predicted greater odds of adequate treatment for ADHD (OR=4.86 [2.35-10.06]) and for depression (OR=6.42 [3.90-13.34]). Similarly, older age predicted adequate treatment (OR=3.90 [1.75-8.66]).

Because mental health may differ by nativity status (Harker 2001), we performed a sensitivity analysis comparing Haitian immigrant (n=34) to Haitian American (n=30) youth. Clinicians documented information on immigration status in 64 Haitian charts; we therefore limited our sensitivity analysis to this group. These two groups did not differ on any

sociodemographic, clinical, or service use variables except for the frequency of separations from caregivers. Separation was experienced by 17 immigrant Haitian youth as compared to 9 Haitian American youth (p<.05).

Discussion

This study contributes to the literature on differences in mental health service use among Haitian, African American, and White youth. Our findings are consistent with previous studies pointing to lower utilization of mental health services by minority youth (Kataoka et al. 2002, Garland et al. 2005, Elster et al. 2003, Kodjo and Auinger 2004, Yeh et al. 2002, Hough et al. 2002). Measuring intra-ethnic differences in use and quality of mental health services for ethnic and language minority youth addresses a documented gap in the research on service disparities (Arthur and Katkin 2006, Cauce et al. 2002). Haitian youth used services less and were less likely to receive guideline-adherent treatment for depression and ADHD. Our depression findings reflect national trends of less adequate depression treatment for Black Americans (Olfson et al. 2003).

The demographic and clinical differences between Haitians and African Americans may represent a distinct area of public health concern, namely of ethnic groups "hidden" within broader racial/ethnic categories. Awareness of such differences may help clinicians anticipate challenges in treatment. For example, the relatively lower rate of insurance coverage among Haitians may moderate service use through differences in socio-economic status or in knowledge about accessing health insurance. Indeed, living in areas of poverty or greater female-headed households has been associated with less adequate treatment among Haitian and African American youth (Carson et al. 2009). White families may have been employed at higher-paying jobs offering private insurance. African American families, who had more Medicaid coverage, may have been unemployed or working lower paying jobs without health insurance. Medicaid-insured youth have been shown to access emergency room services more frequently, particularly African American youth, which may affect use of outpatient services (Carson et al. 2009). The larger numbers of Haitian youth without insurance may indicate a lack of awareness of Medicaid benefits, or a reluctance to apply for government assistance.

Lower rates of service use by Black families may also be due to differences in health preferences or health literacy. We found that, in contrast to African American and White youth, Haitians were less likely to remain in treatment if they did not meet a standard of clinical need. This might suggest that Haitian families prefer not to access treatment except in the presence of a clear perceived need. Health preferences for Black families can be influenced by lack of trust (Whaley 2001) or poor fit between the perceptions of Black parents and those of providers (McMiller and Weisz 1996). Black families may be less likely to consent to psychopharmacological treatments for their children (Schnittker 2003). For example, Bussing's work suggests that African American parents are less likely than White parents to request medication or school-based treatments for ADHD (Bussing et al. 2003). African American parents may be more likely to use alternative treatments such as admonitions, religious practices, and mild corporal punishment for managing ADHD symptoms (Bussing and Gary 2001).

Differences in treatment between Haitian and White youth may also be related to clinical uncertainty. In cross-cultural treatments (e.g. White clinician and Haitian family), clinicians may have difficulty distinguishing pathology from normal reactions to, for example, stressful family separations or acculturation problems. The brevity of treatment duration for both Black groups allows less time to complete diagnostic formulations. To avoid stigmatizing the family, clinicians may avoid using major psychiatric categories or

prescribing medication. Finally, it is possible that the clinicians, who were mostly White at these clinics, were less able to recognize some variations in presentation of disorders in Black youth as compared to White youth. The higher prevalence of adjustment disorders among Haitian youth supports these hypotheses.

The frequency of adjustment disorders could, of course, indicate that Haitian youth present with less severe symptoms. Fewer Haitian youth met our criteria for clinical need compared to Whites. The inclusion of immigrant Haitian youth in the sample could partially account for this, given the research literature suggesting that first generation youth have fewer mental health difficulties (Fuligni 1998, Georgiades et al. 2007). It is also possible that help-seeking by Haitian families is driven by factors other than individual symptoms or dysfunction, such as disrupted attachment after family separation, academic problems, or acculturative stressors, better captured on Axis IV than Axis I.

Haitian youth experience a high rate of separation from parents, most often related to immigration. Some writers have described significant adjustment problems resulting from the separations and rejoining that accompany family immigration (Suarez-Orozco et al. 2002, Glasgow and Gouse-Sheese 1995, Arnold 1997). However, a recent review (Lashley 2000) suggests that, while separations may increase likelihood of depressive disorders, the context of the separation determines whether adverse psychological consequences will occur. Thus, a simple correlation between separation and psychopathology should not be assumed. In mental health evaluations of Haitian and other immigrant children, we recommend screening for family separations and the related interpersonal and economic circumstances. Family separations among African American youth may be related to more foster placements, given the significantly higher number of Injured Child reports filed on behalf of this group. National estimates of service use suggest that African American youth involved with child welfare are less likely to receive mental health services (Leslie et al. 2004). This is another reason to carefully screen for family separations, and their causes.

Our study results must be read in the context of important limitations. Chart review methods only yield data as perceived and recorded by clinicians, and thus are vulnerable to bias and missing data. This may lead to "false negative" findings if one variable is assessed more in one group than another. For example, the higher rate of separations documented among Haitian families may be due to a higher rate of eliciting separations. Documentation may be abbreviated due to time constraints, slanted towards safety evaluation due to legal concerns, or vague out of respect for privacy. Clinicians may not explore cultural health beliefs and behaviors out of respect for privacy or to avoid appearing disrespectful. We attempted to minimize these differences by selecting patients from the same health system treated by the same clinicians. The determination of treatment quality also faces limitations. Haitian families may present common disorders in different ways (Nicolas et al. 2006, 2007) which may not be readily detected by clinicians nor by the measure used in this study. Diagnoses were derived from charts and not structured interviews or cultural formulations. Medication use was inferred when clinicians recorded medication prescriptions, which may not correlate with actual compliance. Finally, the determination of race/ethnicity was complicated by the lack of systematic collection of this information by the health system under study. Reliable demographic information on cultural background and immigration history will enhance the capacity of health services research to address disparities in care.

As a study of Black youth in a safety-net health system, this study may not generalize to other ethnic groups or settings. However, the sample included youth from 53 different zip codes, thus representing a diversity of patients. The health system under study had a small number of Creole-speaking clinicians and prioritizes the cultural competency of its services through comprehensive interpreter services, patient resources, and clinician education. This

may have affected retention for Haitian youth and such resources may not always be available in other clinical settings. The salient cultural variables for this sample (family separations, social services involvement, and immigration patterns) are context specific. Finally, this sample is limited to families who either sought or were referred to treatment, or who had resources to overcome barriers to care. Therefore, this study may have missed those families in the community who are least able or willing to seek care.

Acknowledgments

The authors would like to acknowledge the help of Maria Saino, LICSW, and the support of the administrative staff at clinics involved in the study. This study was supported by a DuPont-Warren Fellowship and a Livingston Fellowship from the Department of Psychiatry, Harvard Medical School, and by NIH Research Grant #1P50 MH73469-01, funded by the National Institute of Mental Health

References

- Arthur CM, Katkin ES. Making a case for the examination of ethnicity of Blacks in United States Health Research. Journal of health care for the poor and underserved. 2006; 17(1):25–36. [PubMed: 16520504]
- Braun L, Fausto-Sterling A, Fullwiley D, et al. Racial categories in medical practice: how useful are they? PLoS Med. 2007; 4(9):e271. [PubMed: 17896853]
- Escarce JJ. How does race matter, anyway? Health services research. 2005; 40(1):1–7. [PubMed: 15663698]
- Fuligni A, Hardway C. Preparing diverse adolescents for the transition to adulthood. The Future of Children. 2004; 14(2):99–119.
- Kataoka SH, Zhang L, Wells KB. Unmet need for mental health care among U.S. children: variation by ethnicity and insurance status. Am J Psychiatry. 2002; 159(9):1548–1555. [PubMed: 12202276]
- Kirmayer LJ. Culture and psychotherapy in a creolizing world. Transcult Psychiatry. 2006; 43(2):163–168. [PubMed: 16893869]
- Read JG, Emerson MO, Tarlov A. Implications of black immigrant health for U.S. racial disparities in health. J Immigr Health. 2005; 7(3):205–212. [PubMed: 15900421]
- U.S. Public Health Service. Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. Department of Health and Human Services; Washington, DC: 2000.
- Alexandre PK, Stephens RM, Laris AS, Dowling K, Rely K. Predictors of Outpatient Mental Health Service Use by American Youth. Psychological services. 2008; 5(3):251. [PubMed: 19587845]
- Garland AF, Lau AS, Yeh M, McCabe KM, Hough RL, Landsverk JA. Racial and ethnic differences in utilization of mental health services among high-risk youths. The American Journal of Psychiatry. 2005; 162(7):1336–1343. [PubMed: 15994717]
- Coker TR, Elliott MN, Kataoka S, et al. Racial/ethnic disparities in the mental health care utilization of fifth grade children. Academic Pediatrics. 2009; 9(2):89–96. [PubMed: 19329099]
- Zéphir, F. The Haitian Americans. Greenwood Press; Westport, CT: 2004.
- Stepick, A. Pride Against Prejudice: Haitians in the United States. Allyn & Bacon; Boston: 1998.
- U.S. Census Bureau. The American Community Survey. Economics and Statistics Administration; 2006.
- U.S. Census Bureau. [Accessed August 31, 2009] Complete Count Committees Press Kit. 2010. 2010.census.gov/2010census/pdf/CompleteCountCommitteesEPK.pdf
- Jackson JS, Neighbors HW, Torres M, Martin LA, Williams DR, Baser R. Use of mental health services and subjective satisfaction with treatment among Black Caribbean immigrants: results from the National Survey of American Life. Am J Public Health. 2007; 97(1):60–67. [PubMed: 17138907]
- Williams DR, Gonzalez HM, Neighbors H, et al. Prevalence and distribution of major depressive disorder in African Americans, Caribbean blacks, and non-Hispanic whites: results from the National Survey of American Life. Arch Gen Psychiatry. 2007; 64(3):305–315. [PubMed: 17339519]

- Suarez-Orozco C, Todorova IL, Louie J. Making up for lost time: the experience of separation and reunification among immigrant families. Family process. 2002; 41(4):625–643. [PubMed: 12613121]
- Lashley M. The unrecognized social stressors of migration and reunification and in Caribbean families. Transcultural Psychiatry. 2000; 37(2):201–215.
- Rousseau C, Hassan G, Measham T, Lashley M. Prevalence and correlates of conduct disorder and problem behavior in Caribbean and Filipino immigrant adolescents. European Child & Adolescent Psychiatry. 2008; 17(5):264–273. [PubMed: 18431540]
- Fawzi MCS, Betancourt TS, Marcelin L, et al. Depression and post-traumatic stress disorder among Haitian immigrant students: implications for access to mental health services and educational programming. BMC Public Health. 2009; 9:482–492. [PubMed: 20028506]
- Martsolf DS. Childhood maltreatment and mental and physical health in Haitian adults. Journal of nursing scholarship : an official publication of Sigma Theta Tau International Honor Society of Nursing / Sigma Theta Tau. 2004; 36(4):293–299. [PubMed: 15636407]
- Desrosiers A, St Fleurose S. Treating Haitian patients: key cultural aspects. Am J Psychother. 2002; 56(4):508–521. [PubMed: 12520887]
- Douyon R, Marcelin L Herns, Jean-Gilles M, Page JB. Response to trauma in Haitian youth at risk. J Ethn Subst Abuse. 2005; 4(2):115–138. [PubMed: 16275637]
- Levin A. No Short-Term Solutions for Haitians' MH Issues. Psychiatric News. 2010; 45(5):4.
- Pierre A, Minn P, Sterlin C, et al. Culture and Mental Health in Haiti: A Literature Review. Santé Mentale en Haïti. 2010; 1:13–42.
- DeSantis L, Thomas JT. Health education and the immigrant Haitian mother: cultural insights for community health nurses. Public Health Nursing. 1992; 9(2):87–96. [PubMed: 1508834]
- Nicolas G, DeSilva AM, Grey KS, Gonzalez-Eastep D. Using a multicultural lens to understand illnesses among Haitians living in America. Professional Psychology: Research and Practice. 2006; 37(6):702–707.
- Saint-Jean G, Crandall LA. Sources and barriers to health care coverage for Haitian immigrants in Miami-Dade County, Florida. Journal of Health Care for the Poor and Underserved. 2005; 16:29– 41. [PubMed: 15741707]
- Carrasquillo O, Carrasquillo AI, Shea S. Health insurance coverage of immigrants living in the United States: differences by citizenship status and country of origin. Am J Public Health. 2000; 90(6): 917–923. [PubMed: 10846509]
- Elster A, Jarosik J, VanGeest J, Fleming M. Racial and ethnic disparities in health care for adolescents: a systematic review of the literature. Archives of Pediatrics & Adolescent Medicine. 2003; 157(9): 867–874. [PubMed: 12963591]
- Kodjo CM, Auinger P. Predictors for emotionally distressed adolescents to receive mental health care. The Journal of Adolescent Health. 2004; 35(5):368–373. [PubMed: 15488430]
- Yeh M, McCabe K, Hurlburt M, et al. Referral sources, diagnoses, and service types of youth in public outpatient mental health care: a focus on ethnic minorities. Journal of Behavioral Health Services & Research. 2002; 29(1):45–60. [PubMed: 11840904]
- Hough RL, Hazen AL, Soriano FI, Wood P, McCabe K, Yeh M. Mental health services for Latino adolescents with psychiatric disorders. Psychiatr Serv. 2002; 53(12):1556–1562. [PubMed: 12461215]
- Carson NJ, Cook BL, Alegria M. Social Determinants of Mental Health Treatment among Haitian, African American and White Youth in Community Health Centers. Journal of Healthcare for the Poor and Underserved. 2010; 21(2):32–48.
- Huey SJ Jr. Polo AJ. Evidence-based psychosocial treatments for ethnic minority youth. J Clin Child Adolesc Psychol. 2008; 37(1):262–301. [PubMed: 18444061]
- Safer DJ, Malever M. Stimulant treatment in Maryland public schools. Pediatrics. 2000; 106(3):533–539. [PubMed: 10969099]
- Griggins C. Dosing dilemmas: are you rich and white or poor and black? Am J Bioeth. 2005; 5(3):55– 57. [PubMed: 16006374]
- Harman JS, Edlund MJ, Fortney JC. Disparities in the adequacy of depression treatment in the United States. Psychiatr Serv. 2004; 55(12):1379–1385. [PubMed: 15572565]

- Richardson LP, DiGiuseppe D, Garrison M, Christakis DA. Depression in Medicaid-covered youth: differences by race and ethnicity. Arch Pediatr Adolesc Med. 2003; 157(10):984–989. [PubMed: 14557159]
- Curry J, Rohde P, Simons A, et al. Predictors and moderators of acute outcome in the Treatment for Adolescents with Depression Study (TADS). J Am Acad Child Adolesc Psychiatry. 2006; 45(12): 1427–1439. [PubMed: 17135988]
- Lyons, JS.; E, G.; M, F.; M.B, L. Child and Adolescent Needs and Strengths: an information integration tool for children and adolescents with mental health challenges (CANS-MH), manual. Buddin Praed Foundation; Chicago: 1999.
- Kazdin AE, Stolar MJ, Marciano PL. Risk factors for dropping out of treatment among white and black families. Journal of Family Psychology. 1995; 9(4):402–417.
- Hahn RA. The state of federal health statistics on racial and ethnic groups. JAMA : the journal of the American Medical Association. 1992; 267(2):268–271. [PubMed: 1727525]
- Laws MB, Heckscher RA. Racial and ethnic identification practices in public health data systems in New England. Public health reports (Washington, D.C.: 1974). 2002; 117(1):50–61.
- Farmer EM, Stangl DK, Burns BJ, Costello EJ, Angold A. Use, persistence, and intensity: patterns of care for children's mental health across one year. Community mental health journal. 1999; 35(1): 31–46. [PubMed: 10094508]
- Winters NC, Collett BR, Myers KM. Ten-year review of rating scales, VII: scales assessing functional impairment. J Am Acad Child Adolesc Psychiatry. 2005; 44(4):309–338. [PubMed: 15782079]
- Lyons JS. The complexity of communication in an environment with multiple disciplines and professionals: communimetrics and decision support. The Medical clinics of North America. 2006; 90(4):693–701. [PubMed: 16843769]
- Lyons, JS.; E., G.; M, F.; M.B., L. Child and Adolescent Needs and Strengths: an information integration tool for children and adolescents with mental health challenges (CANS-MH), manual. Buddin Praed Foundation; Chicago: 1999.
- Rawal P, Romansky J, Jenuwine M, Lyons JS. Racial differences in the mental health needs and service utilization of youth in the juvenile justice system. Journal of Behavioral Health Services & Research. 2004; 31(3):242–254. [PubMed: 15263864]
- Anderson RL, Lyons JS, Giles DM, Price JA, Estle G. Reliability of the Child and Adolescent Needs and Strengths-Mental Health (CANS-MH) Scale. Journal of Child and Family Studies. 2003; 12(3):279–289. 2003.
- Cabiya JJ, Canino G, Chavez L, et al. Gender disparities in mental health service use of Puerto Rican children and adolescents. J Child Psychol Psychiatry. 2006; 47(8):840–848. [PubMed: 16898998]
- Canino G, Shrout PE, Rubio-Stipec M, et al. The DSM-IV rates of child and adolescent disorders in Puerto Rico: prevalence, correlates, service use, and the effects of impairment. Arch Gen Psychiatry. 2004; 61(1):85–93. [PubMed: 14706947]
- Cicchetti DV, Feinstein AR. High agreement but low kappa: II. Resolving the paradoxes. J Clin Epidemiol. 1990; 43(6):551–558. [PubMed: 2189948]
- American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th editiontext revision (DSM-IV-TR). American Psychiatric Association; Washington, D.C.: 2000.
- Pliszka S. Practice parameter for the assessment and treatment of children and adolescents with attention-deficit/hyperactivity disorder. J Am Acad Child Adolesc Psychiatry. 2007; 46(7):894– 921. [PubMed: 17581453]
- American Academy of Pediatrics. Clinical practice guideline: treatment of the school-aged child with attention-deficit/hyperactivity disorder. Pediatrics. 2001; 108(4):1033–1044. [PubMed: 11581465]
- MTA Cooperative Group. A 14-month randomized clinical trial of treatment strategies for attentiondeficit/hyperactivity disorder. The MTA Cooperative Group. Multimodal Treatment Study of Children with ADHD. Arch Gen Psychiatry. 1999; 56(12):1073–1086. [PubMed: 10591283]
- Birmaher B, Brent D, Bernet W, et al. Practice parameter for the assessment and treatment of children and adolescents with depressive disorders. J Am Acad Child Adolesc Psychiatry. 2007; 46(11): 1503–1526. [PubMed: 18049300]
- Curry JF. Specific psychotherapies for childhood and adolescent depression. Biol Psychiatry. 2001; 49(12):1091–1100. [PubMed: 11430851]

- Olfson M, Gameroff MJ, Marcus SC, Waslick BD. Outpatient treatment of child and adolescent depression in the United States. Arch Gen Psychiatry. 2003; 60(12):1236–1242. [PubMed: 14662556]
- Weisz JR, Thurber CA, Sweeney L, Proffitt VD, LeGagnoux GL. Brief treatment of mild-to-moderate child depression using primary and secondary control enhancement training. J Consult Clin Psychol. 1997; 65(4):703–707. [PubMed: 9256573]
- Richardson LP, DiGiuseppe D, Christakis DA, McCauley E, Katon W. Quality of care for medicaidcovered youth treated with antidepressant therapy. Arch Gen Psychiatry. 2004; 61(5):475–480. [PubMed: 15123492]
- Staller J, Faraone SV. Attention-deficit hyperactivity disorder in girls: epidemiology and management. CNS Drugs. 2006; 20(2):107–123. [PubMed: 16478287]
- Leslie LK, Weckerly J, Landsverk J, Hough RL, Hurlburt MS, Wood PA. Racial/ethnic differences in the use of psychotropic medication in high-risk children and adolescents. J Am Acad Child Adolesc Psychiatry. 2003; 42(12):1433–1442. [PubMed: 14627878]
- Harker K. Immigrant generation, assimilation and adolescent psychological well-being. Social Forces. 2001; 79(3):969–1004.
- Cauce AM, Domenech-Rodriguez M, Paradise M, et al. Cultural and contextual influences in mental health help seeking: a focus on ethnic minority youth. J Consult Clin Psychol. 2002; 70(1):44–55. [PubMed: 11860055]
- Carson NJ, Cook B, Alegria M. Social Determinants of Mental Health Treatment among Haitian, African American and White Youth in Community Health Centers. Journal of Healthcare for the Poor and Underserved. 2009 (in press).
- Whaley AL. Cultural mistrust and mental health services for African Americans: A review and metaanalysis. Counseling Psychologist. 2001; 29(4):513–531.
- McMiller WP, Weisz JR. Help-seeking preceding mental health clinic intake among African-American, Latino, and Caucasian youths. J Am Acad Child Adolesc Psychiatry. 1996; 35(8): 1086–1094. [PubMed: 8755806]
- Schnittker J. Misgivings of medicine?: African Americans' skepticism of psychiatric medication. J Health Soc Behav. 2003; 44(4):506–524. [PubMed: 15038146]
- Bussing R, Gary FA, Mills TL, Garvan CW. Parental explanatory models of ADHD: gender and cultural variations. Soc Psychiatry Psychiatr Epidemiol. 2003; 38(10):563–575. [PubMed: 14564385]
- Bussing R, Gary FA. Practice guidelines and parental ADHD treatment evaluations: friends or foes? Harv Rev Psychiatry. 2001; 9(5):223–233. [PubMed: 11553526]
- Fuligni AJ. The adjustment of children from immigrant families. Current Directions in Psychological Science. 1998; 7:99–103.
- Georgiades K, Boyle MH, Duku E. Contextual influences on children's mental health and school performance: the moderating effects of family immigrant status. Child Dev. 2007; 78(5):1572–1591. [PubMed: 17883449]
- Glasgow GF, Gouse-Sheese J. Theme of rejection and abandonment in group work with Caribbean adolescents. Social Work with Groups. 1995; 17(4):3–27.
- Arnold, E. Issues of reunification of migrant West Indian children in the United Kingdom. In: Roopnarine, JL.; Brown, J., editors. Caribbean Families: Diversity among Ethnic Groups. Ablex Publishing; Greenwich, CT: 1997. p. 243-258.
- Leslie LK, Hurlburt MS, Landsverk J, Barth R, Slymen DJ. Outpatient mental health services for children in foster care: a national perspective. Child Abuse Negl. 2004; 28(6):699–714. [PubMed: 15193856]
- Nicolas G, Desilva AM, Subrebost KL, et al. Expression and treatment of depression among Haitian immigrant women in the United States: clinical observations. Am J Psychother. 2007; 61(1):83– 98. [PubMed: 17503679]

Key Messages

White youth stay in treatment considerably longer than Black youth and receive higher quality mental health treatment for ADHD and depression. When stratified by need, these differences remain salient, suggesting that clinical need is more likely to result in increased treatment for White youth, but less likely to have that result for Black youth. Haitian youth who did not meet our definition of clinical need attended fewer sessions, and had more single-session treatments, than comparable White youth. This may indicate that Haitian families access mental health services only in the presence of clear need, and end treatment sooner when that need eases. Research that captures patient perspectives on service use may clarify the reasons for reduced service use and lead to interventions that improve the quality of care for these groups of youth.

Table 1

Sociodemographic characteristics of youth by ethnic group

	Haitian (n=81)	African American (n=82)	White (n=89)
Age at first treatment (SD)	13.5 (4.3)	12.4 (4.7)	12.5 (3.8)
Sex (%)			
Male	42 (51.9)	44 (53.7)	55 (61.8)
Female	39 (48.1)	38 (46.3)	34 (38.2)
Insurance (%)		**	***
Uninsured/Free Care	22 (27.2)	7 (8.6)	4 (4.5)
Medicaid	35 (43.2)	54 (66.7)	30 (33.7)
Private	24 (29.6)	20 (24.7)	55 (61.8)
Documentation of separation from caregiver (%)	32 (56.1)	19 (27.5)**	13 (22.0)***
Mean age at separation in years (SD)	7.8 (5.0)	6.1 (4.3)	9.1 (3.4)
Mean duration of separation in months (SD)	44.4 (45.1)	22.5 (15.0)	19.7 (18.0)
Documentation of Injured Child report (%)	15 (23.8)	25 (38.5)*	14 (25.9)

p<.05,

** ______p<.01,

*** p<.001

Table 2

Clinical characteristics (all comparisons are with Haitian patients)

	Haitian (n=81)	African American (n=82)	White (n=89)
Number of patients meeting definition of need (%)			
Need	59 (72.8)	60 (73.2)	56 (62.9)
Below Need Threshold	22 (27.2)	22 (27.2)	33 (37.1)
Mean number of visits by need a			
Need (SE)	5.7 (0.8)	4.8 (0.6)	8.0 (0.9)
Below Need Threshold (SE)	2.1 (0.6)	3.3 (0.7)	5.0 (0.8)**
Number of visits during first six months of treatment (%)			**
1	22 (29.3)	21 (27.6)	7 (8.1)
2-7	38 (50.7)	37 (48.7)	50 (58.1)
≥8	15 (20.0)	18 (23.7)	29 (33.7)
Most common diagnoses (%)			
Adjustment Disorder	22 (27.2)	20 (24.4)	13 (14.6)
Depressive Disorders	20 (24.7)	28 (34.2)	26 (29.2)
ADHD	15 (18.5)	29 (35.4)*	36 (40.5)**
Most common providers (%)			
Psychiatrist	33 (40.7)	42 (51.2)	59 (66.3)**
Psychologist	35 (43.2)	13 (15.9)***	10 (11.2)***
Social Worker	10 (12.4)	23 (28.1)*	11 (12.4)
Guideline-adherent treatment (%)			
ADHD	6 (37.5)	20 (64.5)	36 (87.8) ^{***} , b
Depressive Disorders	16 (48.5)	24 (54.5)	45 (76.3) [*] , <i>b</i>

_____p<.05,

** p<.01,

*** p<.001

 a Treatments of defined duration (e.g. psychological testing) were excluded

 b Cases were identified by reviewers as needing treatment by CANS-MH item score for ADHD or depression

Table 3

Correlates of guideline-adherent treatment for ADHD and depressive disorders

	Odds Ratio (95% CI)		
	ADHD Treatment	Depression Treatment	
CANS-MH Item Score 2 or 3 (ref. CANS score 0 or 1)		4.10 (2.23-7.52)***	
African American ethnicity (ref. Haitian)	1.80 (0.88-3.66)	1.78 (0.84-3.77)	
White ethnicity (ref. Haitian)	4.00 (1.96-8.17)***	4.83 (2.27-10.28)***	
Age 10-15 years (ref. age 3-9 years)	1.22 (0.60-2.48)	1.54 (0.73-3.27)	
Age 16-20 (ref. age 3-9 years)	1.32 (0.59-2.97)	3.69 (1.60-8.49)**	
Female (ref. male)	1.38 (0.76-2.51)	1.34 (0.73-2.46)	
Females with CANS-MH score 0 or 1 (ref. Males with CANS-MH score 0 or 1)	2.07 (1.01,4.26)*		
Females with CANS-MH score 2 or 3 (ref. Males with CANS-MH score 2 or 3)	0.57 (0.20, 1.59)		

p<.05,

** p<.01,

*** p<.001

NIH-PA Author Manuscript