ADHD Treatment in Minority Youth:

The Impact of Race on the Use of Stimulant Medication

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Introduction

Between three and five percent of school-age children in the United States are diagnosed with attention-deficit/hyperactivity disorder (ADHD), and many of those diagnosed are treated with stimulant medication, especially methylphenidate (Ritalin).\(^1\) Research has shown that prevalence of ADHD is similar across different sociodemographic categories like race and socioeconomic status; however the prescription of stimulant medications shows differences in these areas.\(^2\)

Problem Statement

This paper focuses on how minority youth (namely African-American and Latino/Hispanic) are diagnosed and treated for ADHD in comparison to their white counterparts. Given that minority groups are quite underrepresented, especially in the use of stimulant medication, this paper also tries to examine within the limited means available possible cultural reasons for this difference.

Research Evidence

Numerous studies highlight the influence of race on ADHD and the prescription of stimulant medications. Most concur that the prevalence of ADHD is fairly consistent between white and African-American students. According to Safer, “[s]tudies based on teacher ratings suggest that compared with white youths, black youths have the same or a greater likelihood of exhibiting the features of ADHD”\(^3\). Rowland expands upon

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1. ADHD Primer, 6, 93
2. Lipkin, 241.
3. Safer, 537.
prevalence rates by race, indicating that Hispanic children are significantly less likely to receive an ADHD diagnosis.\textsuperscript{4}

Stimulant medication is often considered a “first-line treatment”\textsuperscript{5} for children with ADHD. Estimates vary by study, but around 80 percent of children diagnosed with ADHD are treated with stimulant medication,\textsuperscript{6} although for between 20 and 30 percent of children with ADHD such treatment is not effective.\textsuperscript{7} Stimulant medications include methylphenidate (Ritalin), which most often is prescribed, as well as amphetamines (Adderall), dextroamphetamine sulfate (Dexedrine) and pemoline (Cylert).\textsuperscript{8}

The influence of race on treatment, especially in terms of the prescription of stimulant medication has been the topic of research in the past decade. Most studies indicate that white male students are most likely to be prescribed stimulant medications. In a study of elementary school students in Johnston County, North Carolina, researchers found that “[r]acial/ethnic differences in the proportion treated were more pronounced: 76% of the ADHD-diagnosed White children were taking medication, compared with 56% of the African American and 53% of the Hispanic children.”\textsuperscript{9} In the overall student elementary student population sample, 8% of the White children, 5% of the African American children and 2% of the Hispanic children received ADHD medication treatment.\textsuperscript{10}

In a study of Maryland public school students, all minority groups were found to “have a comparatively lower treatment prevalence for ADHD medication than white

\textsuperscript{4} Rowland, 232
\textsuperscript{5} Radigan, 45
\textsuperscript{6} Lipkin, 240
\textsuperscript{7} Weyandt, 90.
\textsuperscript{8} Cox, 237.
\textsuperscript{9} Rowland, 233
\textsuperscript{10} Rowland, 232
students based on their proportional enrollment.”\textsuperscript{11} In the same study, the districts with the lowest rate of methylphenidate treatment were also the districts with the largest minority populations.\textsuperscript{12} Other research shows higher rates of prescriptions for ADHD medications in non-African American students versus African American students.\textsuperscript{13}

Research has also investigated the links of various other sociodemographic factors to race and ADHD. In a study by Lipkin, low socioeconomic status was related to higher rates of treatment for white children, but not black children.\textsuperscript{14} No difference was shown based on insurance alone, but Medicaid non-African American subjects and privately insured African American children typically received higher doses of stimulant medication.\textsuperscript{15} A report by Radigan shows a correlation between a student’s geographic region (in the state of New York), in addition to the use of a mental health care provider and race. Children from Upstate New York were found to be ten times more likely to be prescribed stimulant treatment than children for New York City.\textsuperscript{16}

In addition to compiling statistics, these researchers have tried to look at cultural factors that might influence the lower prescription of stimulant ADHD medication to minority groups. According to Safer, “there is good evidence that cultural differences explain at least some of the comparatively low level of stimulant treatment by youths from black families.”\textsuperscript{17} Other research, especially by Bauermeister, explores the cultural implications of such treatment for Latino/Hispanic students.

\textsuperscript{11} Safer, 537
\textsuperscript{12} Safer, 535
\textsuperscript{13} Lipkin, 241
\textsuperscript{14} Lipkin, 241
\textsuperscript{15} Lipkin, 244
\textsuperscript{16} Radigan, 51
\textsuperscript{17} Safer, 537
One factor identified by several studies as a possibility for the discrepancy in treatment is an overall discrepancy in care and access to care afforded to minority groups. Bauermeister has indicated that while the largest growing minority group in the United States is the Latino/Hispanic population, “evidence suggests children identified as ADHD from this ethnic group are not receiving adequate pharmacological and psychosocial treatment.”¹⁸ Rowland cites lesser access to medical providers and health insurance coverage, as well as a diminished ability to pay for medication, as barriers in the way of access to such medical care.¹⁹

Lipkin suggests, however, that cultural factors perhaps carry more weight in the determination of treatment based on race.²⁰ Cultural factors may have a profound influence on the acceptance of medication by parents and children. In Bauermeister’s study of Puerto Rican children with ADHD, it was indicated that certain behaviors were viewed negatively by the Puerto Rican culture. “Some examples were ‘not being themselves’ when under medication, not being able to play the Puerto Rican cultural script of horsing around and joking (‘relajando’), not standing up for oneself and getting respect verbally or physically when bothered by others (‘darse a respetar’), or not being loyal and defending their friends at school.”²¹ Though Bauermeister cites the need for further research of this topic, he posits that negative cultural views of certain behaviors can have a profound impact on the choice of parents and children to pursue a medicinal treatment for ADHD.

¹⁸ Bauermeister, 5
¹⁹ Rowland, 233-34
²⁰ Lipkin, 245
²¹ Bauermeister, 6
Language and culture differences between the patient and health professional may be a significant barrier in the diagnosis and treatment of ADHD. For Latino/Hispanic patients, “difficulties in speaking English may mask inattention symptoms among Hispanic children.” Additionally, a language barrier may prevent parents and children from fully understanding the diagnosis. To combat this, materials on ADHD have recently been published in Spanish. Conversely, understanding cultural values such as the Latino/Hispanic value of familism might improve the success of a diagnosis. “Parents may consult extended family members about medication treatment and their opinions will have considerable weight in their decision-making,” thus sharing information about treatment and diagnosis with extended family members can aid in a successful diagnosis.

Conclusion
From this survey of the material on race and its implications on ADHD diagnosis and treatment, several conclusions can be drawn. While evidence suggests that prevalence rates for white and African American students do not differ, race does indeed seem to have an influence on treatment rates.

An interesting sub issue of this is ADHD in the Latino/Hispanic population. Unlike the African-American population, the Latino/Hispanic population does not seem to have the similar incidence rates of ADHD as found in the Caucasian population. Furthermore, stimulant medication treatment rates are significantly lower in this population. While it is probable that there is a racial explanation for this, a more likely conclusion is that cultural and language barriers exist that prevent the diagnosis and treatment of ADHD. Bauermeister’s evidence of youth choosing not to take the

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22 Rowland, 233, 34
23 Bauermeister, 7
24 Bauermeister, 7
medication because they are less able to play to the traditional Latino cultural script seems rather significant. Additionally, the difficulty most doctors have in overcoming the language and cultural barrier when making a diagnosis can be seen as detrimental to the cause.

This paper focuses on the differences in treatment of ADHD among races; however it is easy in researching the topic to be swayed to the impression that medication is the right treatment for all children with ADHD, or even children with this diagnosis need treatment. Cultural factors that seem to be highly influential in the determination of treatment; if medication prevents a child from joking and horsing around or from being loyal and defending one’s friends as is deemed desirable by a particular culture, then it is fair to assume that medication is not the correct treatment for that child in that culture.

Finally, from the research that went into this paper, it is safe to conclude that more studies need to and should be done into the impact of race on ADHD. Studies on treatment of ADHD in the African American population do exist, however it seems as though such research could be more complete, covering a broader sample and a wider variety of other factors, such as socioeconomic status and geographic location. Additionally, even less research exists about ADHD in the Latino/Hispanic population; Bauermeister, who seems to have completed the most comprehensive study on this minority group, limited his work to the Puerto Rican population. Is treatment different amongst different cultures within the Latino/Hispanic population? Finally, I found little to no conclusive research about the impact of ADHD on the Asian and Native American populations, among other minority groups. To fully understand the impact of ADHD on minority groups, all minorities ought to be examined in depth. Perhaps by understanding
the disorder comparatively, we may better understand the disease as it applies to Caucasians in American culture.

**Implications**

The implications of research into race and ADHD are wide-reaching. From the research conducted, it seems fair to conclude that culture may play a significant role in treatment of ADHD with medication. Thus in understanding how ADHD is treated, culture should be considered; all of those involved in the diagnosis and treatment regimen of a child with ADHD should take culture into account.

Similarly, in the classroom what may be seen in a particular student as symptoms of ADHD may in reality be part of the child’s cultural script being enacted. For teachers, often the ones to identify students for an ADHD diagnosis, an understanding of different cultures can help in the understanding of the behaviors of different students. A multi-cultural classroom approach may help to develop this understanding.

In teaching students with ADHD, understanding that differences exist in minority populations of the United States can aid teachers in reaching their students. While treatment of ADHD with stimulant medication is not an abnormality amongst white students, Latino/Hispanic and African American children may respond differently to the idea, as it is less common among their racial groups. Perceptions of the use of medication may therefore differ. Taking methylphenidate may not be viewed as a weakness by white students, considering its prevalence amongst this population. For African American and Latino students, however, it may not be seen as such. Similarly, the effects and side effects of the medication may not be accepted, especially if they prevent the student from participating in the culture.
The treatment of ADHD in minority youth has been shown to be different than that of their white peers. While the differences are accentuated by other sociodemographic facts, there does seem to be a relationship. This brings to light further questions about the reasons for the discrepancies. Culture is posited to be a large factor in determining this difference, however additionally the idea of differences in treatment by race brings up serious concerns about the equality of treatment. Either way, this is a significant topic that should be further researched to better treat both minority and white youth.
References

    The ADHD Report, 13, 5-9.


    Pediatrics, 106, 533-539.