



The role of neighborhood in urban black adolescent marijuana use



Beth A. Reboussin^{a,*}, Kerry M. Green^b, Adam J. Milam^{c,1}, Debra M. Furr-Holden^c,
Renee M. Johnson^c, Nicholas S. Ialongo^c

^a Department of Biostatistical Sciences, Wake Forest School of Medicine, Winston-Salem, NC 27157, United States

^b Department of Behavioral and Community Health, University of Maryland School of Public Health, College Park, MD 20742, United States

^c Department of Mental Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD 21205, United States

ARTICLE INFO

Article history:

Received 3 February 2015

Received in revised form 5 June 2015

Accepted 7 June 2015

Available online 2 July 2015

Keywords:

Adolescents

Blacks

Latent class

Latent transition

Marijuana

Neighborhood

Urban

ABSTRACT

Background: The present study examined the influence of neighborhood factors on transitions in marijuana involvement during adolescence in a sample of primarily low-income, urban Black youth.

Methods: 556 Black adolescents were interviewed annually beginning in first grade as part of a longitudinal study. Latent class analysis (LCA) was used to examine stages of marijuana involvement from 6th to 9th grades. The influence of neighborhood disorder, drug activity, violent crime, safety and disadvantage on transitions in marijuana involvement was tested using latent transition analysis (LTA).

Results: There was evidence for three stages of involvement: no involvement, offered, and use and problems. Involvement increased steadily during adolescence with a slightly greater risk to transition from offers to use between 6th and 7th grades. Neighborhood disorder (AOR = 1.04, CI = 1.00, 1.08), drug activity (AOR = 1.12, CI = 1.02, 1.22) and disadvantage (AOR = 1.44, CI = 1.10, 1.92) were associated with the transition from marijuana offers to use and problems. Neighborhood disorder (AOR = 1.07, CI = 1.02, 1.11), drug activity (AOR = 1.19, CI = 1.10, 1.29) and violent crime (AOR = 1.17, CI = 1.03, 1.32) were associated with transitioning rapidly from no involvement to use and problems.

Conclusions: Understanding how neighborhoods could be organized and provided with supports to discourage marijuana use and promote non-drug using behaviors should be an important goal of any prevention program in low-income, urban Black neighborhoods. Enhancing citizen participation and mobilization to address the social processes of neighborhood disorder has the potential to reduce marijuana involvement in these neighborhoods.

© 2015 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

National data show that marijuana use now exceeds the rate of cigarette smoking among adolescents. In 2014, rates of past 30 day marijuana use were 6.5%, 16.6% and 21.2% among 8th, 10th and 12th graders compared to 4.0%, 7.2% and 13.6%, respectively for cigarettes (Johnston et al., 2015). Perceptions of harm are also shifting; only 36% of high school seniors think regular marijuana use places the user at great risk compared to 52% in 2009 and a high of 78% in the early 1990s (Johnston et al., 2015).

Adolescent marijuana use is concerning not only because of the increased acute risk for motor vehicle crashes, engagement in risky sexual behaviors, and deficits in attention and memory but because of the long-term psychosocial effects associated with early use (Volkow et al., 2014). Although 9% of those that use marijuana will develop a cannabis use disorder, this risk increases to 1 in 6 for those who initiate in adolescence (Hall and Degenhardt, 2009). In addition, several researchers have demonstrated an association between adolescent marijuana use and poor school performance, unemployment, arrest and incarceration, and diminished lifetime satisfaction and achievement (Brook et al., 2013; Fergusson and Boden, 2008; Lynskey and Hall, 2000; Bray et al., 2000).

The negative impact of adolescent marijuana use is particularly concerning for low-income, urban Black youth; many of whom face other vulnerabilities that may hinder their ability to successfully transition to adulthood. Historically, rates of marijuana use have been higher in Whites than Blacks. However, this difference began to narrow in the 1990s and Black 8th, 10th and 12th graders now have higher rates of past 30 day marijuana use than Whites

* Corresponding author.

E-mail addresses: brebouss@wakehealth.edu

(B.A. Reboussin), greenkm@umd.edu (K.M. Green), amilam3@jhu.edu (A.J. Milam), cfurrho1@jhu.edu (D.M. Furr-Holden), rjohnson@jhu.edu (R.M. Johnson), nialong1@jhu.edu (N.S. Ialongo).

¹ Permanent address: Wayne State University School of Medicine, Detroit, MI 48207, United States.

(Johnston et al., 2014). Despite these trends, limited research exists on the epidemiology of marijuana use among low-income, urban Black adolescents and even less on neighborhood factors that may be particularly salient for this community (Copeland-Linder et al., 2011).

Black youth disproportionately reside in neighborhoods with high levels of neighborhood disorder; neighborhoods characterized by crime, drug use, and violence. Research shows that illicit drugs are more prevalent in Black neighborhoods (LaVeist and Wallace, 2000). Black youth are more likely to witness drug sales and drug activity in their neighborhoods, and Black youth are more likely to be offered drugs (Wallace and Muroff, 2002). Black youth also rate their communities as more threatening than youth of other racial groups (Aneshensel and Sucoff, 1996). Disordered neighborhoods in which Black youth reside are often characterized by weakened social cohesion and controls that invite a wide-array of illegal behavior, like drug selling and use, and incivilities (Sampson et al., 1997). Black youth also disproportionately reside in neighborhoods with high levels of poverty (USDHHS, 2001). Concentrated disadvantage can isolate residents from key resources supporting collective social control leading to perceived powerlessness to intervene on behalf of the community (Williams and Collins, 1995; Brooks-Gunn et al., 1993). Neighborhoods with high concentrations of poverty are also often characterized by high levels of neighborhood disorder (Gephart, 1997). Hence, neighborhood disorder and the concentrated disadvantage that often accompanies it may increase the risk for the initiation and continued use of marijuana, because it is widely available and because it may weaken beliefs about the potential harm of drug use and strengthen positive expectancies of use. Living in disordered neighborhoods with high rates of crime and violence can also bring with it a constant feeling of threat and danger (Ross and Jang, 2000). This chronic stress can result in feelings of hopelessness and helplessness that can lead to adverse psychological outcomes such as depressed mood. According to the stress reduction hypothesis, marijuana use may be a means of coping with or alleviating the depressed mood that accompanies the stress of living in a violent neighborhood (Conger, 2005).

Limited research has found that perceptions of neighborhood disorder are associated with 10th grade drug use (defined as alcohol, tobacco or marijuana use) among low-income, urban Blacks (Lambert et al., 2004). In one of the few studies specific to marijuana use, young adult Black men in Chicago reporting high levels of neighborhood disorder and violence were more likely to report a history of marijuana use (Seth et al., 2012). In a sample of primarily Black youth in Baltimore, neighborhood physical, but not social disorder, was associated with marijuana use after high school (Furr-Holden et al., 2011, 2014). Using data from the same study but restricted to Blacks, Reboussin et al. (2014) found that perceptions of neighborhood disorder, increased drug activity and exposure to violence in 8th grade were associated with initiation and progression to more frequent marijuana use between 9th and 12th grades.

A comprehensive understanding of how neighborhood impacts marijuana use among low-income, urban Blacks is critical to the development of effective prevention programs and policy initiatives. This study addresses multiple gaps in the literature by expanding the measures of neighborhood beyond those that are typically considered, and examining their association with early adolescent marijuana use, which has not been studied in any depth and has been shown to be particularly detrimental in the long-term. Specifically, this investigation will (1) identify stages of marijuana involvement during 6th through 9th grades in a longitudinal, community sample of primarily low-income Blacks living in Baltimore, Maryland, (2) estimate the probability of progressing between these stages, and (3) examine the influence of neighborhood

disorder, drug activity, violent crime, safety and disadvantage on these progressions.

2. Methods

2.1. Participants

Data are from a community-based longitudinal study conducted at the Johns Hopkins University Baltimore Prevention Research Center (BPRC; Ialongo et al., 1999). In 1993, 798 children and families representative of students entering 1st grade in nine Baltimore City schools were recruited to participate. Three 1st grade classrooms in each of 9 elementary schools were randomly assigned to one of two intervention conditions or to a control condition. Teachers and students were then randomly assigned to 1 of 3 classrooms within each school. Classroom and family-centered interventions were limited to 1st grade and targeted early learning and aggression. Prior work has examined the impact of these interventions on other risk behaviors (Ialongo et al., 1999; Storr et al., 2002; Bradshaw et al., 2009; Wang et al., 2012). One publication examined onset of marijuana use between 6th and 8th grades and found no intervention effects (Furr-Holden et al., 2004). This research was reviewed and approved by the Institutional Review Board of the Johns Hopkins Bloomberg School of Public Health. Written parental consent was obtained for youth to participate in middle and high school assessments. Youth verbal assent was also obtained in middle school and written assent in high school.

Of the 798 original adolescents, we restrict our analyses to the 678 adolescents who were Black. This resulted in a final sample size of 556 which represented Black adolescents with at least one assessment between 6th and 9th grades. At the 6th grade assessment, 55% were male, 70% received free or reduced price meals and the mean age was 11.8 years (range 10.4–13.1 years). Black adolescents in the analytic sample did not differ from the Black adolescents not included in terms of sex, free or reduced-price meal eligibility, intervention status, or emotional or behavioral problems in first grade (i.e., aggression, oppositional-defiant behaviors, concentration problems, anxiety or depression).

2.2. Measures

2.2.1. Marijuana involvement. We considered responses to five questions about marijuana involvement gathered in the spring of sixth, seventh, eighth and ninth grades. Opportunity to use marijuana involved asking whether a youth had “ever been offered” marijuana. Adolescent reports of marijuana use were based on asking “Have you ever used marijuana?” Frequency of marijuana use was measured based on questions from the Monitoring the Future survey (Johnston et al., 1995) and was defined as having used marijuana on three or more occasions. Health and social problems were assessed by asking if they ever experienced any health problems (e.g., felt panicky) or social problems (e.g., got into trouble with parents or teachers) from using marijuana. The specific problems comprising the health and social problems can be found in supplementary material.

2.2.2. Neighborhood disorder. Perceived neighborhood disorder was assessed using 10 items from the Neighborhood Environment Scale (NES; Elliott et al., 1985). These items were assessed at each of the annual assessments. Items are rated on a 4-point Likert scale (1 = not at all true; 4 = very true) with higher scores representing higher levels of perceived disorder. The Cronbach alpha coefficient for this scale was estimated for each annual assessment and ranged from 0.81 to 0.84. In addition to using the overall scale of neighborhood disorder, a factor analysis of this scale yielded three factors measuring neighborhood drug activity, violent crime, and safety. Items on these factors were summed to create subscale scores. Each scale consisted of three items with a total subscale score range of 3–12. Individual items comprising each scale are described.

2.2.3. Neighborhood drug activity. Three items from the NES were used to measure neighborhood drug activity. They included: (1) I have seen people using or selling drugs in my neighborhood, (2) in the morning or later in the day I often see drunk people on the street in my neighborhood, and (3) in my neighborhood, the people with the most money are the drug dealers. The Cronbach alpha coefficients for this subscale across the annual assessments ranged from 0.74 to 0.76.

2.2.4. Neighborhood violent crime. Three items from the NES were used to measure neighborhood violent crime. They included: (1) every few weeks, some kid gets beat up or mugged in my neighborhood, (2) every few weeks, some adult gets beat up or mugged in my neighborhood, and (3) the people who live in my neighborhood often damage or steal each other's property. The Cronbach alpha coefficient for this subscale across the annual assessments ranged from 0.63 to 0.78.

2.2.5. Neighborhood safety. Three items from the NES were used to measure neighborhood safety. They included: (1) There are plenty of safe places to walk or spend time outdoors in my neighborhood, (2) I feel safe when I walk around my neighborhood by myself during the day, and (3) I feel safe when I walk around in my neighborhood by myself at night. These items were reverse coded so that higher scores represented feeling less safe. The Cronbach alpha coefficient for this subscale across the annual assessments ranged from 0.69 to 0.73.

Download English Version:

<https://daneshyari.com/en/article/7504680>

Download Persian Version:

<https://daneshyari.com/article/7504680>

[Daneshyari.com](https://daneshyari.com)