The Mental Health of Black Men: A Problem of Perception*

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Abstract

Black men in our society face enormous challenges. Some of these challenges stem from social attitudes and perceptions about African American men, especially as these perceptions impact education, poverty, employment, and health-related problems. Society’s response to social stigma, the treatment of social and mental problems and racism are all evident in African Americans’ daily relationships with others. Each of these challenges individually can be devastating; collectively, they become overwhelming and catastrophic. It is this author’s supposition that the mechanisms that undergrid the challenges of Black men are embedded in race, ethnicity and culture, and that the pervasiveness and consistency of racism in our society impacts one’s quality of life and livelihood. The pervasiveness of racial and ethnic differences in health care delivery, stigma associated with mental illness, and cultural insensitivity among some health care professionals are addressed in this article. Overt prejudice, systemic biases and cultural insensitivity are viewed as contributors to the overall racial gaps in and poor delivery of health care for Black men in our society. These infractions become serious when middle-age Black men are dying at nearly twice the rate of White men of similar age (Men’s Health Network 2004); and when more than 1 in 4 adult Black men experience some form of mental health or substance abuse disorder during their lifetime (HHS 2003). This

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article closes with voices of Black men who live with the harsh realities of our health care system and the physical and emotional factors that create negative living environments.

**Introduction**

Beyond the structural barriers to health care are inadequate insurance coverage, pharmaceutical practices, and poor coordination of mental health and substance abuse services. Social determinants of racial/ethnic health disparities between African Americans and Whites create a divisive gap between all Americans, and especially Americans of color. For African American men and their families, the social divide in health, which is tied to social factors such as socioeconomic status, discrimination, and injurious work and home environments, leads to unevenness in mental and physical health service delivery. The consequences of neglected mental health needs are devastating for Black men, as outlined by the following statistics (Bryant, Ro and Rowe 2003):

- 7% of all African American men will develop depression during their lifetime.
- African American men have death rates that are at least twice as high as those for women for suicide, cirrhosis of the liver, and homicide.
- From 1980 to 1995, the suicide rate for African American male youth (ages 15-19) increased by 146%. Among African American males aged 15-19 years, firearms were used in 72% of suicides, while strangulation was used in 20% of suicides.
- For African American men, especially in urban areas, the abuse of alcohol and its consequences appear graver when compared to statistics for White men, White women or African American women.
- Finding care that is affordable, respectful, and accessible is a major challenge for African American men.
- Black men who have never been involved with the penal system are only half as likely to be hired as a White ex-convict (Economia 2005). The inability to care for one's family has serious psychological ramifications for Black men, especially when a White ex-convict has greater marketability than a law abiding Black Man.
- African Americans account for approximately 12% of the population, but they account for only 2% of psychiatrists, 2% of psychologists and 4% of social workers. These statistics address the ratio of African American professionals available to Black clients, especially Black men who struggle with help-seeking behaviors.
When mental disorders are not treated, African American men are more vulnerable to substance abuse, incarceration, homelessness, homicide and suicide, all of which lead to an absent father or absent male in the home. These occurrences impact negatively upon our children (HHS 1999.)

Current Study

This study explored how external factors such as patterns of treatment, availability of services, acceptability of services, location, hours of operation, transportation needs and cost, as well as internal factors such as stigma associated with mental illness and cultural appropriateness influence the mental health of Black men. The study is specific to Black men and their perceptions of the challenges that impact their health seeking behaviors, as well as those challenges that hinder their personal and professional advancement in today's society.

Method

Sample
Sixty qualifying participants were asked to participate in this study. Five participants were not included because of missing responses on the survey data. Participants self-identified as African American males between the ages of 18 and 62 who voluntarily reported their perceptions and experiences with treatment patterns in physical and mental health settings. This age group was selected to reflect those African American men who are most likely to have received some type of physical or mental health intervention during their lifespan.

Participants were recruited from local churches, fraternities and fraternal organizations through referrals and senior complexes.

Design
This study utilized an exploratory research method that solicited voluntary participation of Black men who have accessed the health care system for medical or psychosocial intervention purposes. This qualitative research design was chosen because of the researcher's desire to explore a subject that is often poorly understood: how social attitudes and access to quality care impact the mental health and status of Black men in our society.

Data Collection
The Patient Satisfaction Survey was used in this study, which is a 15-item survey that uses strongly disagree (1) to strongly agree (5), yielding a range of 0-15 to determine level of satisfaction of received services and perceived attitudes. Sample statements include: I am comfortable asking for help when I need it; I trust my
doctors to provide the best medical treatment for me; and I feel that I am treated equal to others when seeking help. The complete survey is in the appendix of this article.

Findings

Table 1 presents data on the top 3 systemic issues, or behaviors that were reported by the Black men in this study. These figures show that there were 55 participants in the sample. Of these participants, approximately 21% identified social stigma as their primary issue of concern when seeking treatment, 11% identified inequality in the health care system as a secondary concern; and 10% identified reluctant self-disclosure about receiving or seeking mental health services as problems in their overall help-seeking behaviors.

Table 1
Systemic Issues that Impact the Mental Health of Black Men
by Percentages

<table>
<thead>
<tr>
<th>Issue</th>
<th>%</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Stigma</td>
<td>20.6%</td>
<td>1</td>
</tr>
<tr>
<td>Inequality in Health care</td>
<td>10.7%</td>
<td>2</td>
</tr>
<tr>
<td>Disclosure about mental health</td>
<td>9.8%</td>
<td>3</td>
</tr>
</tbody>
</table>

n = 55

Table 1 suggests that African American men are more likely to identify social stigma as a major deterrent to their health-seeking services. This is determined by noting that the larger percentage (20.6%) identified this issue as describing their feelings about their association with the health care system. Inequality in the health care system (10.7%) and self-disclosure about mental health services (9.8%) were secondary concerns.

Fifty percent (n = 25) of the men in this study reported their ages as between 26 and 50. This is the age range when men become more mindful of their health behaviors. According to Fuller and Jackson (2003), men aged 18 – 29 are less likely

Table 2
Participants by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 – 25</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>26 – 34</td>
<td>12</td>
<td>24%</td>
</tr>
<tr>
<td>35 – 50</td>
<td>13</td>
<td>26%</td>
</tr>
<tr>
<td>51 – 62</td>
<td>15</td>
<td>20%</td>
</tr>
<tr>
<td>Number of Participants</td>
<td>55</td>
<td>100%</td>
</tr>
</tbody>
</table>
to regularly visit a doctor. Reasons for doctor office visits for this age group are athletic testing and evaluation, job screening, and current illnesses that require attention. Table II presents the age groups of the men in this study.

In Table III for interpretation purposes, a higher percentage means less agreement with the statement. The items were reverse scored so that a higher percentage always indicated greater racial and ethnic differences in perception of the health care system. The six most common experiences reported by African American men who sought health care in this study were comfortable seeking help; treated equal to others; disclosure about mental health; trust in health practitioners; doctor/worker understand culture; and experiences with health care practitioners. This means that the majority of Black men in this study reported problems related to the social environment, the way treatment is offered, and the lack of cultural competence or cultural sensitivity by health care practitioners. It appears that social stigma, or social factors, have significant influence upon the help-seeking behaviors of African American men. Social stigma for the men in this study led to secrecy, withdrawal behaviors, and rejection of services. The fear of rejection from friends, family and colleagues caused many of the men in this study to conceal selected aspects of their medical history. Their reported humiliation within the health care system further led to their disassociation and distrust with the health care system.

Table 3
Perceived Differences in the Quality of Health care Survey Item

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfortable Seeking Help</td>
<td>20.6%</td>
</tr>
<tr>
<td>Treated equal to others</td>
<td>10.7%</td>
</tr>
<tr>
<td>Health care system is fair and equal</td>
<td>5.4%</td>
</tr>
<tr>
<td>Good experiences with health care</td>
<td>7.8%</td>
</tr>
<tr>
<td>Have trust in health practitioners</td>
<td>8.9%</td>
</tr>
<tr>
<td>Color of skin impacts health care</td>
<td>4.0%</td>
</tr>
<tr>
<td>Treated with respect and dignity</td>
<td>6.4%</td>
</tr>
<tr>
<td>Comfortable in self disclosure</td>
<td>1.8%</td>
</tr>
<tr>
<td>Effective doctor/worker communication</td>
<td>1.8%</td>
</tr>
<tr>
<td>Health care services conveniently located</td>
<td>2.0%</td>
</tr>
<tr>
<td>Disclosure about mental health</td>
<td>9.8%</td>
</tr>
<tr>
<td>Family and friends treated with respect</td>
<td>1.8%</td>
</tr>
<tr>
<td>Doctor/worker understand culture</td>
<td>8.2%</td>
</tr>
<tr>
<td>Doctor/worker discusses culture values</td>
<td>5.4%</td>
</tr>
<tr>
<td>Doctor/worker call me by first name</td>
<td>5.4%</td>
</tr>
</tbody>
</table>
The need to address these issues is critical, especially as they impact the mental health of all Americans, and Black men in particular. Until these issues are corrected, African American men are likely to continue to experience disparities in health status and in service delivery. Black men will deny themselves needed treatment, only to compound their medical challenges and health problems. Their disassociative behaviors with the health care system will impact their quality of life and diminish their health outcomes.

The verbal reports by Black men in the current study were even more revealing. Many of them reported feeling discomfort and stigmatized when seeking health care services. Reports of being addressed by their first name, experiencing long waits before being seen, experiencing the physician called away by office staff and leaving them unattended in the examining room, physicians taking calls that were not perceived to be an emergency, being addressed in a subordinate manner, or leaving the examining room door cracked or half opened with their bodies "half robed." Several of the Black men in this study reported poor eye contact by their physicians and an unwillingness by their physicians to give detailed information or to provide choices for treatment options. One participant described his "rectal examination" as unduly harsh and degrading. Another participant reported that when he asked his physician questions about his treatment, he was told that "he wouldn't understand" and that "the treatment was complicated." These men seemed to feel an overwhelming amount of racialized disrespect when seen by White physicians. Some participants reported "feeling blamed" for their illnesses and feeling minimized and discredited by their physicians.

Another participant reported feeling ostracized and stereotyped when told by his physician that he "had better stop eating so much grease, collard greens, fried chicken and pork if he wanted to live to see his grandkids." The participant reported that while the physician may have been correct, "it was the manner and way the doctor said it that was derogatory." This participant stated that he comes from"a generation [sic] of obesity and that he has been trying to control his weight for years." The participant felt he would have been more open and responsive to the doctor if he were more sensitive. This particular participant reported that he never returned for a second visit.

Many of the participants in this study reported that they do have insurance and access to care. Their attitude is, "If you're sick, you'll get yourself to the hospital or to a doctor," but "It's the hassle and stigma" that deter them from seeking preventive care. Not a single Black male in this study reported overwhelming satisfaction with their health care professionals.

If the experiences and perceptions of the Black men in this study parallel the experiences or perceptions of other African Americans, then ethnicity and culture indeed are strong indicators of social determinants of health care. This study challenges the notion that race, culture and socio-economic status do not impact treatment. Social attitudes and behavior are at the heart of service delivery for the men.
in this study. Access to care for these men was not at issue. An interesting finding of this study was that older Black men expressed greater trust in their doctors than did the younger men in this study, although not to a significant degree. The older Black men stated more trustworthiness in their doctors while younger Black men expressed more skepticism and distrust. One participant, age 35, reported that he had searched WebMD before his appointment and that the doctor actually seemed offended and hostile when he [the patient] asked questions. This participant stated that he was in for a “second opinion” and not for a procedure. Regardless of age and reason for treatment, all of the Black men in this study reported perceived unevenness in treatment by White doctors. All participants in this study who reported seeking “second opinions” felt that their health practitioners were “too quick to push invasive surgery” without exploring options.

**Summary**

This study’s findings suggest that race and culture are important factors for disparities within the health care system, and that perceived inequities by Black men impact their help-seeking behaviors. The need for policymakers, educators, and health practitioners to identify and maximize health-enhancing resources that will reduce the negative effects of psychosocial factors on the mental health of African American men is warranted. The strong discomfort felt by the African American men in this study towards the health care system was a deterrent to their engagement with the health care system. This is a significant finding, especially as the African American male continues to be at greater risk for depression, suicide, chemical dependency, chronic diseases and mental disorders than their White counterparts. The community and health care providers must specifically reach out to African American men and we must do so through education, economics, health promotion and intervention initiatives that are aimed specifically at this population.

Support systems must be put into place for African American men to help them better care for themselves and their families. We must implement outreach programs specifically for men who are vulnerable to environmental and psychosocial stressors; and we must educate our communities, teaching institutions, and primary care facilities on the identification, diagnosis, and treatment of mental and physical health issues of African American men. Equally important is the need for formal and informal support groups for African American men to bond and to talk about issues that affect them, both physically and mentally. Historically Black Colleges and Universities, community leaders, legislators and families must take the lead and encourage African American men to seek traditional and non-traditional health care services and to talk about their fears and concerns. African American clinicians, educators, practitioners, policy makers and community leaders must take a stand for our African American men and denounce the stigmatism that is
often associated with psychosocial illnesses.

Of equal importance is participating in clinical trials, testifying at public hearings, demanding support from public officials, and rebuking the racism and discriminatory practices that exist in our health care system. Lastly, the need for culturally sensitive practitioners and open communication that is understood, honest and accurate must be present in all interactions between African American patient/client and practitioner. The ongoing need for treatment with dignity, respect and sensitivity is for the effective delivery of health care.

There is need to overhaul the health care system and to do away with the rhetoric of “equal treatment” and to (1) institute accountability and mandatory training for health care professionals in ethnic sensitive interventions and practices, (2) seek to increase minority enrollment in the sciences, (3) implement policy changes within the health care system, and (4) monitor/patrol service delivery until health care and service delivery become equitable.

References


Appendix 1

Patient Satisfaction Survey

Strongly Disagree-1 Disagree-2 Neither Agree Nor Disagree-3 Agree-4 Strongly Agree-5. Thinking back to your doctor/worker visits, please answer each question by circling the numbers that best describe your feelings about your experiences with the health care system.

Survey Questions
1. I am comfortable asking for help when I need it. 1 2 3 4 5
2. I feel that I am treated equal to others when I seek help. 1 2 3 4 5
3. The structure of the health care system is fair and equal. 1 2 3 4 5
4. I always have good experiences when I seek help. 1 2 3 4 5
5. I trust my doctors to provide the best medical treatment for me. 1 2 3 4 5
6. I feel that the color of my skin sometimes interferes with my ability to readily access the health care system. 1 2 3 4 5
7. I am treated with respect and dignity when I ask for help. 1 2 3 4 5
8. I am comfortable telling my friends that I seek professional help (i.e., physical, mental and/or social intervention). 1 2 3 4 5
9. My doctor(s) explain treatments in terms that I understand 1 2 3 4 5
10. Health care services are conveniently located near me. 1 2 3 4 5
11. I would have no problem telling someone that I have a mental disorder no matter how minor or severe it is. 1 2 3 4 5
12. My family is treated with respect and dignity. 1 2 3 4 5
13. My doctor/worker(s) understands my cultural values and beliefs. 1 2 3 4 5
14. My doctor/worker(s) seems comfortable talking with me about my cultural values and beliefs. 1 2 3 4 5
15. My doctor/worker(s) call me by my first name. 1 2 3 4 5

(Over)
Please use the following space to tell me about one of your most remembered experiences with the health care system.


Please use the following space to tell me about one of your most remembered experiences with your doctor.


What would you like for me to know about your experiences or perceptions of our health care system?


Thank you for your time in answering this survey. If you have any questions or would like a summary report, please e-mail me at ncalloway@cau.edu.
Abstract

This study set out to identify a means to increase the consumption of fruits and vegetables for incarcerated African American juvenile males through an educational program that focused on planting a garden. Surveys were administered to 125 incarcerated African American juveniles males aged 15 to 17. The program consisted of 39 sessions of 75 minutes each, twice a week for 15 weeks. Sessions focused on fruit and vegetable consumption, gardening, and nutritional knowledge. Prior to the workshops, none of the participants identified fruit and vegetable consumption, gardening and nutritional knowledge. After the workshops, all had increased their nutritional knowledge. Half stated that their fruit and vegetable consumption had increased because of gardening at the correctional facility. Participants also expressed an interest in learning more about gardening. The study concludes that health professionals can educate African American juvenile males about gardening and nutrition to help overcome barriers to fruit and vegetable consumption.

*This paper was originally presented in Atlanta, Georgia, at the Morehouse School of Medicine's 2005 National Conference on Men's Health. All correspondence should be sent to Edward V. Wallace, Ph.D., Assistant Professor, Ithaca College, 40 Hill Street, Ithaca, New York 14850 (ewallace@ithaca.edu).
Introduction

A sentence of imprisonment for African American Juvenile males should not come with a life-long sentence of obesity, cardiovascular disease, diabetes, and other health consequences. Messages abound that tell us to eat a minimum of five servings of fruits and vegetables each day, the average American, especially the African American juvenile male who are or have been incarcerated, eats only three and a half servings per day (Foerster, Kizer, Disogra, Bal, Krieg, & Bunch 1995; Subar, Heimendinger, Patterson, Krebs-Smith, Pivonka, & Kessler 1995). Though there are many reasons for this, most of the barriers are imposed by the juvenile correctional system and not self-imposed by the incarcerated youth (Harnack, Block, Subar, Lane, & Brand 1997). Trying to incorporate healthy eating in correctional settings is challenging because finding vendors to provide fresh fruits and vegetables is nearly impossible (Reill 2001). In most cases, budget constraints make it is very difficult to provide fresh fruits and vegetables for an increasing prison population. Across the United States, the average food cost per inmate is $3.71 per day (Stein 2000). Furthermore, correctional facilities may be unwilling to spend public money on healthy foods that they are unsure African American juvenile males will eat, based on their cultural preferences (Stein 2000).

African American males who are not a part of the juvenile correctional system enjoy some resources that address barriers to eating fruits and vegetables. For example, the National School Lunch Program provides food vouchers or free lunch, potentially alleviating this barrier to access fresh fruits and vegetables. However, for those who are incarcerated, such programs are not an option. In spite of the inadequate fruit and vegetable consumption among African American juvenile males, few primary prevention programs have been implemented to increase their fruit and vegetable consumption. The “African American Fruit and Vegetable Garden” project was a pilot program that utilized college students to help African American juvenile males learn about garden maintenance and harvesting.

Table 1

<table>
<thead>
<tr>
<th>Task</th>
<th>Monthly Time Line for Accomplishment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>June</td>
</tr>
<tr>
<td>Needs Assessment</td>
<td></td>
</tr>
<tr>
<td>Planning and Goal Setting</td>
<td></td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
</tr>
<tr>
<td>Gardening</td>
<td></td>
</tr>
<tr>
<td>Harvesting</td>
<td></td>
</tr>
<tr>
<td>Distribution of Produce to Inmates</td>
<td></td>
</tr>
<tr>
<td>Evaluating</td>
<td></td>
</tr>
</tbody>
</table>
Objectives for the participants were to increase the consumption of fresh fruits and vegetables among incarcerated African American males by having them establish a garden on the correctional site, distribution of free garden produce among juvenile inmates, and provide opportunities for learning to prepare fresh fruits and vegetables in Upstate New York. The time frame for planting the garden, harvesting, and evaluating the program ran from June to October 2005.

Methodology

The “African American Fruit and Vegetable Garden” project was located at a New York state juvenile detention facility. One hundred twenty-five incarcerated African American juvenile males participated in the study. In order to learn how to grow fruits and vegetables effectively, study participants attended specific workshops on gardening at the correctional facility. This consisted of thirty-nine sessions of 75 minutes each. College students facilitated the sessions twice a week. Student facilitators were enrolled in a 15-week upper level course at Ithaca College. They received training from experts in agriculture, community nutrition, health promotion techniques, and other relevant topics. The students who led the workshops also served as peer counselors to the study participants.

Prior to the 15-week program, inmates at the correctional facility prepared a raised square plot for the garden on property at the facility. During the instructional program, the study participants completed activities that increased their gardening knowledge and skills. A crucial component of the program was teaching inmates garden maintenance and harvesting. Upon completion of the workshops, inmates were awarded an “African American Fruit and Vegetable Garden” t-shirt and a certificate of completion.

To evaluate the effectiveness of the intervention, participants were administered a pre-test before beginning the program and a post-test at the end of the 15 weeks. The instrument consisted of questions about gardening, consumption of fruits and vegetables, and nutrition. These components were evaluated on a five-point scale. A score of 1.0 indicated little or no knowledge about gardening, fruit and vegetable consumption, and nutrition. A score of 5.0 indicated comprehensive knowledge in these areas.

Results

The 2005 growing season ended with 5,006 pounds of produce grown and distributed among the juvenile inmates. The post-test conducted at the end of the 15-weeks evaluated the short-term impact of the intervention on the participants' knowledge about gardening, consumption of fruits and vegetables, and nutrition. The results are presented in Table 2 below.
Table 2

<table>
<thead>
<tr>
<th>Knowledge Measures*</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Change (Pre-Post)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gardening</td>
<td>1.80</td>
<td>4.00</td>
<td>+2.20</td>
</tr>
<tr>
<td>Fruit and Vegetable Consumption</td>
<td>1.25</td>
<td>4.5</td>
<td>+3.25</td>
</tr>
<tr>
<td>Nutrition</td>
<td>1.60</td>
<td>4.00</td>
<td>+2.40</td>
</tr>
</tbody>
</table>

*Values ranged from 1.0 to 5.0

**Changes were significantly different from pre-test to post-test (p ≤ 0.05)

(N = 125)

The initial mean knowledge score indicates that the inmates participating in the program had very little knowledge about the importance of fruit and vegetable consumption before the “African American Fruit and Vegetable Garden” project. Post-test scores indicate that the participants had increased their nutritional knowledge significantly. In addition, more than half of the inmates in the study stated that their fruit and vegetable consumption had increased because of gardening at the correctional facility. Study participants also expressed a desire to learn more about gardening.

Conclusions

This study has some limitations. The sample was relatively small (N = 125) because the correctional facility only allowed non-violent inmates to participate. Additional information, such as whether the participant lived in a rural or urban setting, where gardening is not as prevalent, would have been useful. In addition, the participants’ self-reports of increased consumption would have been more informative with pre-test questions about eating habits and preferences. Despite these limitations, this study suggests the need for a comprehensive approach to educate juveniles about gardening and fruit and vegetable consumption.

African American juvenile males are at high risk for a number of health-related problems including illicit drug consumption (Ruddell and Mays 2004). African American males who are placed in the correctional system should be given the opportunity to learn about fruit and vegetable consumption while they are incarcerated. This approach may encourage them to maintain their fruit and vegetable consumptions upon release. As with many correctional facilities, securing sufficient funds for inmates to eat healthy continues to be one of the biggest challenges. This study shows that health promotion interventions such as the “African American Fruit and Vegetable Garden” can be successfully implemented within the correctional facility. The cost of such interventions might be lowered by charging a modest fee to distribute produce from the gardens to other correctional facilities.
A number of recent studies have demonstrated that low fruit and vegetable consumption, especially for Blacks, increases the risk of health problems such as colorectal cancer, high blood pressure, and coronary heart disease (Houston, Stevens, Cai, & Haines 2005; Sato, Tsubono, Nakaya, Ogawa, Kurashima, Kuriyama, Hozawa, Nishino, Shibuya, & Tsuji 2005; Alonso, de la Fuente, Martín-Arnaud, de Irala, Martínez, & Martínez-González 2004; Dauchet, Ferrières, Arviller, Yarnell, Gey, Ducimetière, Ruidavets, Haas, Evans, Bingham, Amouvel, & Dallongeville 2004). Some correctional facilities report that they are offering healthier menus for inmates by increasing fresh fruit and vegetable content (Riell 2001). An earlier issue of Prevention, a popular consumer nutrition magazine, ported a connection between improvements in delinquents' behavior and diets high in fruits and vegetables (Kinderlehrer 1983). This is another area in need of scientific investigation. While we cannot advocate that a prison system establish a fruit and vegetable garden in all of its correctional facilities, innovative health promotion interventions can educate African American juvenile males about nutrition while they overcome cultural barriers to eating fresh fruits and vegetables.

References


