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Editorial Team

Editor's Message: The primary focus of the Jackson State University *Online Journal of Rural and Urban Research*, founded by the Mississippi Urban Research Center, is to improve the quality of life through basic and applied urban research. The current issue includes research and commentaries targeting public health. We are especially appreciative to Dr. Brandi Newkirk-Turner for serving as Visiting Editor. Dr. Newkirk-Turner holds the rank of associate professor, and she chairs the Department of Communicative Disorders in the School of Public Health, Jackson State University.

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EDITORIAL

The First School of Public Health in Mississippi: Challenges and Opportunities

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Introducing the Jackson State University School of Public Health

Building on its historic mission of empowering diverse students to become leaders in various fields, Jackson State University began a public health program within the School of Allied Health Sciences in 1999. The program, with five concentrations, operated under the Department of Public Health for several years. In anticipation of becoming a School of Public Health, the Department of Public Health was reorganized into three departments, added the Department of Communicative Disorders, and became the School of Health Sciences in 2006.

The Public Health Program, offering MPH and DrPH degrees, was approved as an accredited program by Council on Education for Public Health (CEPH) in 2007. The Public Health program received reaffirmation of accreditation in 2014 for seven years. In the same year, the speech-language pathology graduate program in Communicative Disorders applied for re-accreditation and was re-affirmed for eight years. During the same period of time, the student enrollment in the Healthcare Administration program blossomed making the program one of the largest undergraduate programs at the university.

The momentum of hard work and good fortune for Public Health, Communicative Disorders, and Healthcare Administration continued into 2015. With financial and logistic supports from the State of Mississippi, the Board of Trustees of State Institutions of Higher Learning (IHL) and Jackson State University, the Jackson State University School of Public Health Initiative was established in the Fall of 2015. The establishment of the School of Public Health Initiative was significant in that it represented collaborative efforts between the State of Mississippi, IHL and Jackson State University to achieve the first accredited School of Public Health in Mississippi. In December 2016, Jackson State

University submitted the application to transition from a public health program to a School of Public Health to CEPH. In February 2017, CEPH approved the application allowing Jackson State University to begin the accreditation process of its School of Public Health. Upon receipt of accreditation (slated for 2018-2019), Jackson State University's School of Public Health will join the other 59 Schools of Public Health that hold this designation, which will make Jackson State University's School the first accredited School of Public Health in Mississippi and the first accredited School of Public Health at a Historically Black College and University. Accreditation by CEPH affirms the quality of educational programs in a School of Public Health so such a designation is a distinction.

Framing the Work of the School of Public Health

In the early 1900s, public health focused on improving sanitation, controlling infectious diseases, and assuring water and food safety. The workforce primarily consisted of nurses, physicians and biological scientists. The purview of public health has tremendously expanded to address the evolving health concerns of the world. Healthy People 2020 (Office of Disease Prevention and Health Promotion, 2017) has a broad agenda for public health that includes increasing quality of life, eliminating health disparities, promoting health for all through a healthy environment, maximizing health, preventing chronic diseases, addressing social determinants of health, addressing aging populations and quality of life, increasing the proportion of children who are ready for school, and improving public health through global disease detection, prevention and control strategies. To address the depth and breadth of these issues, Schools of Public Health must continue to prepare professionals who are inquisitive, knowledgeable and skillful and who seek innovative and collaborative ways to promote health, prevent disease, and protect people. Hernandez, Rosenstock and Gebbie underscores the importance of this in their book, *Who Will Keep the Public Healthy? Educating Public Health Professionals for the 21st Century*:

> Public health professionals of the future will need to understand and be able to use the new information systems that provide the data upon which public health research and practice is based. They will need to be able to communicate with diverse populations, to understand the issues, concerns, and needs of these groups in order to work collaboratively to improve population health. Public health professionals must have the skills and competencies necessary to engage in public health practice at many levels: leadership, management, and supervisory (Hernandez, Rosenstock & Gebbie, 2003).

Guided by Jackson State University's mission of empowering diverse students to become leaders and producing technologically-advanced, diverse, ethical, global leaders who think critically, address societal problems, and compete effectively, the School of Public Health prepares public health professionals, through degree programs in Health Care Administration (BS), Communicative Disorders (BS and MS), MPH degrees in five concentrations (Behavioral Health Promotion/Education, Biostatistics, Epidemiology, Environmental and Occupational Health, Health Policy and Management) and DrPH degrees in three concentrations (Behavioral Health Promotion/Education, Epidemiology, Health Policy and Management), to address the health challenges of the state, nation and world. With Mississippi being among the most unhealthiest and impoverished states in

the nation, our work starts here, focusing on disease prevention and health promotion in our state, but the relevance and importance of our work ensures that it will impact the nation and world.

The Current Issue of the *Online Journal of Rural and Urban Research*

This issue of the *Online Journal of Rural and Urban Research* celebrates the accomplishments of Jackson State University's School of Public Health by focusing on health promotion and prevention in public health. This issue contains both research articles and commentaries that address prevention of diseases, disorders, and disabilities; promotion of health and wellness; and prevention-based policies. The research articles reflect qualitative and quantitative research designs.

In the first section of articles, through their own words, we learn about the stigmas, barriers, and discrimination faced by individuals who live with HIV/AIDS and we hear the hearts of former wards of the court to learn about the challenges they faced in the foster care system. Through model-based studies, we learn important predictors of disease diagnoses and use of the health care system. One study examines the effect of political affiliation and racial identity on diabetes and hypertension diagnoses and another study documents predictors of the use of dental care services by Hispanic/Latino adults in three southern states, including Mississippi. The final research article describes a community-based health promotion and intervention program that was designed to reduce hypertension in women who live in urban Mississippi. The results of the pilot study suggest that health promotion and intervention programs can effectively educate and change the beliefs and behaviors of adults.

The second section of articles contains commentaries that describe projects and great ideas about public health. These studies are significant in that they provide road maps for future health promotion and prevention programs and research. The section begins with an article that describes the Community Health Model (CHM), developed by the Centers for Disease Control and Prevention, and provides examples of community-based programs implemented in various states to address local health challenges. Public health professionals can apply the CHM to communities in Mississippi to design, implement and evaluate similar projects to create community change, improve behavior, eliminate health disparities and achieve health equity. The second commentary discusses how posing a simple question during medical appointments can reduce unplanned pregnancies, improve birth outcomes, and support women's reproductive needs. For a state like Mississippi, which has one of the highest rates of teenage pregnancies in the country, adopting the One Key Question® can prove to be beneficial. In the next article, the author argues that treating depression in prevention and intervention programs may prevent and reduce the impact of chronic illnesses.

Together, the next three commentaries describe programs that can be used with parents and within the classroom, and considerations that can be taken at the school district level to prevent language and literacy disabilities in young children. These articles align with Healthy People 2020's objective of increasing the proportion of children who are ready for school. The projects and ideas in these three articles can be combined into a larger initiative in the future to have a population-level effect on the early language and literacy experiences of children in Mississippi – similar to the University of Chicago's Thirty Million Words® Initiative project.

The final paper reminds us that we must always be thinking about recruiting and retaining students, including those from minority backgrounds, into public health fields. It has been argued that reducing and eliminating health disparities also involves addressing the disproportionate representation of males and minorities in the public health workforce in the U.S. through active and innovative recruitment and retention activities. Although this paper uses the fields of communication sciences and disorders as the case example, the suggestions and ideas that are presented can be applied to any public health program.

Scholars and students from Jackson State University, within and outside of the School of Public Health, and from other southern universities contributed to this issue of the *Online Journal of Rural and Urban Research*. These scholars and students are from various areas of public health including social work, sociology, epidemiology, biostatistics, health policy, speech-language pathology, and education. This issue of the *Online Journal of Rural and Urban Research* makes it clear that public health is everywhere and that work from all public health disciplines is needed to promote health and prevent diseases, disorders, and disabilities. To be most impactful in creating a healthier state, nation and world, our work has to cut across programs, schools, universities and work settings. Multidisciplinary, integrated approaches are required to meet the challenges and opportunities of public health.

As we celebrate Jackson State University's School of Public Health, it is our hope that this issue will spark new and innovative ideas of collaborative research and programs. We hope that the ideas presented here will lead to research that is translational and meaningful. We hope that the research that is inspired by this issue will guide policies and legislation that improve the quality of life for all people in Mississippi and beyond. Enjoy!

Acknowledgement

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Research

Living with HIV/AIDS in Rural and Urban Areas of the Midwest

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Abstract

This paper utilizes interview data to understand the lived experiences of 18 persons living with HIV and AIDS (PLWHA) in low prevalence areas of the Midwest, in both urban and rural contexts. Our findings demonstrate qualitatively different lived experiences of those in rural versus urban contexts. In exploring these themes, the paper reveals that respondents in rural areas are likely to be geographically dispersed, struggle with accessing healthcare services, believe their communities are intolerant of HIV-positive people, and that respondent's fear of stigma and discrimination make them less likely to disclose their positive status or seek out social support. On the other hand, respondents who lived in urban areas were much more likely to disclose their positive status, have access to AIDS service organizations and social support, and to participate in the "HIV community." Urban respondents were more likely to challenge HIV-related stigma by becoming activists and challenging misconceptions about HIV/AIDS and negative stereotypes about PLWHAs. We conclude by drawing attention to the continuing stigmas and barriers experienced by PLWHAs in rural settings and offering suggestions to mitigate stigma and discrimination in social and healthcare settings.

"Place is not merely a setting or backdrop, but an agentic player in the game, a force with detectable, and independent effects on social life" (Gieryn, 2000, p. 466).

Background

In the third decade into the HIV epidemic, people living with HIV and AIDS (PLWHAs) continue to report experiencing HIV-related stigma within their day to day lives. Despite the advancements in the treatment of care to combat HIV and AIDS worldwide (i.e. combination anti-retroviral treatments) and the proliferation of HIV-related education across the globe, work still remains to combat stigma, prejudices, and discrimination associated with being HIV-positive. A growing body of research suggests that stigma and discrimination related to an HIV-positive status among PLWHAs act as barriers to getting tested, taking medication, and retention in care among PLWHAs (Turan et al., 2011; Vanable, Carey, Blair, & Littlewood, 2006; Holzemer et al., 2009; Vyavaharkar et al., 2010; Stringer et al., 2016) as well as having negative effects on the psychological and social wellbeing of PLWHAs (Herek & Saha, 2013). In general, the level of prejudice, stereotyping, and discrimination toward PLWHAs has decreased since the 1990s (Herek, Capitanio, & Widaman, 2002), however it still remains prevalent among some communities within the United States (Stringer et al., 2016; Zukoski, Thornburn & Stroud, 2011; Canstaneda, 2000).

The nature of HIV stigma, prevalence, and expression varies across social and cultural contexts. The experiences of stigma can vary depending on the geographic regions within a country, particularly within the

United States where this varies across urban and rural contexts. Comparing research across sociocultural context in the United States demonstrates qualitatively different lived experiences of those living with HIV/AIDS in urban and rural areas.

Structural resources are more available to PLWHAs in urban settings. There are more people living with HIV and more support services through local AIDS service organizations (ASOs). ASOs typically provide individuals with case management, financial assistance for medication, housing, counseling, educational or vocational training, and numerous other related services. The characteristics of urban settings—existence of ASOs, increased numbers of PLWHAs, and increased availability of related healthcare and social support— insulates PLWHAs from negative experiences and discrimination. HIV-positive people are often able to construct an "HIV community" or support network, what Kelley (2002) refers to as an aggregation of HIV-positive friends, family members, and medical providers. This "HIV community" often serves as a great source of support for these individuals' social and health related needs. PLWHAs in urban and rural areas both experience stigma, albeit intensity and prevalence in rural contexts is greater than in urban environments (Heckman et al., 1998; Zukoski & Thorburn, 2009).

Most notably, studies find that PLWHAs living in rural contexts experience heightened stigma, discrimination, and rejection by community and family members. They also have limited access to ASOs and other related health and social support services due to distance or lack of transportation, and can experience issues with confidentiality and involuntary disclosure among their community (Castaneda, 2000; Zukoski & Thornburn, 2009). There are fewer persons living with HIV in rural areas so it is less likely to know someone with HIV, which might increase negative views toward PLWHAs. In terms of the culture, research finds that rural areas are more likely to hold on to stereotypical beliefs about PLWHAs and present unique environments PLWHAs must navigate (Castaneda, 2000). In this paper, we explore the lived experiences of 18 PLWHAs in urban and rural areas of the Midwest including Kansas, Nebraska, and Missouri and how these individuals manage, respond, and combat HIV-related stigma in their communities.

Methodology

Respondents were recruited via snowball sampling through AIDS service organizations. Our sample consists of ten men and eight women who are HIV-positive living in the Midwestern part of the United States. We used a semi-structured interview schedule and asked respondents about their experiences of living with HIV/AIDS. The majority of the sample identified as white, with one respondent identifying as Native American, one as Hispanic, and another as Black. The sample's age ranged from 31-61, with an average age of 48. Length of living with

HIV or AIDS varied, from two years to 26 years. All had at minimum a high school diploma, with two having taken some college courses, and only one respondent had a bachelor's degree. At the time of the interviews, most were unemployed, living on disability and/or social security checks. Of the employed respondents, one worked for a gas station and the other worked at a sex toy shop. Respondents defined for themselves if the area they lived in constituted "rural" or "urban." In our study, seven lived in what they considered rural areas, while nine lived in urban areas.

Qualitative research techniques were appropriate for this study because they allow researchers to grasp underlying and hidden meanings embedded in social processes (Berg, 2006; Esterberg, 2002; Weiss, 1994). Once interviews were complete, interviews were transcribed for data analysis. Consistent with the grounded theory approach, the transcripts were open coded for relevant themes and commonalities across respondent's interviews pertinent to the research question: Are there contextual differences of PLWHAs living in rural and urban areas (Berg, 2006; Esterberg, 2002; Strauss & Corbin, 1998; Weiss, 1994)? The analysis rendered four main coding categories that highlight the experience of living with HIV/AIDS in urban and rural areas in the Midwest: the geographic dispersion of respondents, how disclosure patterns are shaped by anticipated stigma from respondents' communities, experiences of enacted stigma associated with fear of casual contact, and how respondents combatted stigma through activism.

Findings

Geographic Dispersion

As is consistent with other studies on PLWHAs in low and rural prevalence areas (Zukoski & Thornburn, 2009; Castaneda, 2000) our research demonstrates that respondents often encounter structural barriers that impede their ability to seek adequate social and health related services. For instance, several respondents reported issues with inadequate or complete lack of transportation as a barrier. A Black female respondent, who has been living with AIDS for 18 years and does not have a car, receives assistance from an ASO in a neighboring town 20 miles away. If she needs a ride, she calls her case manager to set up rides through the ASO to go to appointments, group meetings, or other related social services. The ASO that provided this service shut down a few years later due to lack of Ryan White funding by the state's government. The Ryan White program allocates federal funding to local community-based organizations so that they may provide care including medical care and support services for people living with HIV who are uninsured or underinsured.

Geographical distance, especially for those living in rural communities becomes an impediment to accessing necessary health and social services. For some of the respondents in this study, health providers in rural areas did not have HIV medication and other related services readily available and therefore traveled upwards of 100 or more miles to get access. For example, one male respondent indicated issues in getting access to his medication which resulted in a four hour delay in taking his HIV medication. The most common form of medication that PLWHAs take are anti-retroviral, which prevent the replication of the HIV virus. They typically consist of a "cocktail" of several medications that have been adjusted to their individual needs. The absence of these anti-retroviral medications, either by not consistently taking, being late, or skipping medication even within a short window of 24 hours, may result in the virus replicating and evolving. If this happens, it is likely that the "cocktails" usefulness decreases and the possibility of developing resistance to their current cocktail regiment increases. Once this happens, PLWHAs must begin an entirely new medication regiment, which can take from several months, up to a year to adjust. Thus, taking medication on time and having ready access is a necessity for PLWHAs.

Similarly, in rural communities healthcare facilities sometimes do not provide all of the care PLWHAs need and they must travel to multiple locations and health facilities. One respondent shared an experience about the different locations he visits to get access to different types of medical services. He gets his blood work done at one location, his primary doctor is located at another, but he currently resides in another town. All three locations are approximately 90 miles apart. Thus, for those PLWHAs, it is likely that those who live in rural

areas must drive greater distances or visit multiple healthcare facilities in order to get their needs met.

Anticipated Stigma, Disclosure Processes, and Community "Climate"

In general, most respondents had disclosed to doctors, close friends, and family members and only two respondents reported being "out" to their entire community. One prominent pattern that became apparent is how the location of either living in a rural community versus living in a city determined the degree to which respondents had disclosed their HIV-positive status to others. Those respondents who occupied urban areas tended to be "freer" in who was knowledgeable about their status. One female respondent makes two important distinctions regarding support available and acceptance of HIV-positive individuals in rural versus urban settings. Having lived as an HIV-positive person in both of these settings, she gives insight into the qualitatively different experiences, where people experience heightened stigma, discrimination, and prejudice in rural contexts (Heckman et al., 1998; Zukoski & Thorburn, 2009). In a rural community, she describes a context where she feels there is more prejudice toward HIV-positive people and less anonymity protecting her HIV-positive status. However, in an urban community, she describes a welcoming community (i.e., "we're a family") as well as access to other kinds of assistance and support.

As a response to the real or perceived stigma or prejudice PLWHAs may experience, many respondents modified their disclosing patterns to minimize these negative experiences. This modification typically involved not telling anyone outside their doctor and immediate friends and family. Most practiced this process of "selective disclosure" because of the fear of community backlash. Two female respondents indicated that they did not disclose for fear of being ostracized by the community. Both respondents are not sure how their community would react, but assume it would be negative. One of the ways in which respondents avert experiences of hostility, discrimination or prejudice is through keeping their HIV-positive status completely secret.

Respondents indicated the "feel" of their rural community and a social environment where HIV-positive people were not accepted, were fearful of harassment and discrimination as well as afraid for their personal safety. One Native American female respondent indicated being fearful because of the general hostility she witnesses towards other marginalized groups of people in her community, particularly persons who are Black and are non-English speakers. She wondered what the community would think of a person with HIV. Her experience illustrates the creation and maintenance of boundaries between who belongs and who does not belong.

Similarly, another respondent describes his community as a "redneck" town. It is noteworthy that the respondent uses the term "redneck" to describe the place in which he resides. In American culture the word "redneck" is associated with specific characteristics, and his use of the word gives sense to the qualities of his community: traditional, intolerant, conservative, and farm-based economy. Invoking the term "redneck town" implies that those who do not "fit in" to this stereotype would probably be considered outsiders and therefore not welcome in the community, as well. Both respondents describe the "climate" and what this means for those living with HIV or AIDS in these communities.

The "Myth" of Casual Contact and Enacted Stigma

We also explore what happened to the respondents in this study after disclosing their HIV-positive status. Post disclosure, respondents often experienced mixed reactions from family members, friends, and medical providers. They ranged from complete support, to being exiled and rejected by family, friends, and community (Herek, 1999). Upon disclosure one respondent was rejected by family, which prompted her to move away from her family. She explained that being disowned by her family hurt for a while, but where she is living now (urban area) is much better for her. She is able to receive the medical services she needs.

Despite widespread knowledge about how HIV is transmitted, one common "myth" that still plagues PLWHAs is that HIV/AIDS can be transmitted through casual contact (e.g. sharing a drink, touching someone) with someone who is infected. The fear of casual contact remained one of the more common reasons why respondents were treated poorly in their day to day lives (Herek, Widaman, & Capitanio, 2002). The majority of the respondents indicated having past and current experiences where they experienced fear of casual contact by their family members, healthcare providers, and strangers. This is one of the reasons why some of the respondents chose not disclose their positive status to deter negative experiences of discrimination and harassment. However, non-disclosure is not always an option, such as in healthcare settings. The "myth" of infection through casual contact persists even in healthcare settings. One male respondent reported experiencing stigmatization when seeking care in a hospital setting. The respondent described being left in the emergency room for six or seven hours and hearing nurses saying "I'm not touching him." Finally, a doctor noticed that he had been laying there for a long time and inquired what was wrong, after explaining the issue, the doctor remedied the situation. The persistence of these myths and resulting negative treatment of HIV-positive persons points to a breakdown or lack of adequate education in rural contexts involving HIV transmission and infection. Even when disclosing their status in mandatory settings, respondents still experienced stigmatizing interactions.

Activism and Combatting Stigma

The experience of HIV-related stigma motivated some to figure out ways to combat stigma. One way of doing this was through becoming a target, challenging stereotypical beliefs, and becoming involved in activism surrounding HIV and AIDS issues. In this study, women were more likely to be involved in activism, in part, because they had greater access to opportunities at ASOs located in urban areas. The types of activism respondents participated in varied from participating in AIDS marches, giving speeches to medical professionals and students about prevention, fundraising, attending benefits, participating in support groups, and involvement on councils regarding Ryan White funding allocations for medical care and support services for PLWHAs. For the respondents who were politically active, the main motivation behind activism was to better the lives of HIV-positive individuals living within their communities, spread awareness about HIV, and to combat ignorance and stigma surrounding the disease.

A female respondent who has played a prominent role within the HIV/AIDS community in the city she currently resides has been involved in securing social services that PLWHAs might need, such as housing. Most notable, however, is this respondent's discussion of where her activism is going: "changing something to do with us [PLWHAs] being viable people again" to combat HIV-related stigma. This undermines HIV-related stigma in a few ways. Early in the epidemic, due to the high death rates, being diagnosed with AIDS was

synonymous with a death sentence. This is no longer the case given developments of treatment regimes, yet this belief still lingers. Dispelling the notion that an HIV diagnosis is a death sentence will challenge negative stereotypes and myths and will likely lead to more positive beliefs surrounding PLWHAs and their ability to continue to be a valuable member of society, who can work, carry on relationships, and have families.

Discussion and Implications

Our findings indicate that people living with HIV across diverse contexts in the Midwest experience stigma and discrimination similarly, though the severity largely depended on context. The respondents in this study indicated they were more likely to be socially isolated and rejected by community members, in healthcare settings, and among family and friends when living in rural contexts.   In the majority of their stigmatizing experiences, it was others' fear of casual contact with the PLWHAs that lead to family or friends avoiding the person or to the respondent modifying their behavior to prevent further negative experiences caused by others. This finding raises several concerns. It points to the general persistence of myths about HIV infection and misconceptions about HIV, despite the countless local, national, and global educational campaigns designed to correct misinformation regarding HIV/AIDS infection. Second, it is these misperceptions that are the catalyst to stigmatizing beliefs towards and actions against PLWHAs. The greatest concern here is how stigmatizing beliefs can maintain a consistent state of forced social isolation that is further exacerbated by anticipated stigmatization, geographic isolation, and lack of social support. These findings demonstrate the relational nature of stigma, its manifestations in sociocultural contexts and the damaging effect stigma has on the wellbeing of PLWHAs (Earnshaw & Kalichman, 2013; Link & Phelan, 2001).

Our findings suggest that interventions are needed to mitigate stigma and discrimination in both social and healthcare setting, more so in rural contexts. Myths regarding infection still persist and have adverse effects on PLWHAs. Thus, continuing education programs or events (such as World AIDS Day) about HIV and AIDS are important for medical providers and the general community, particularly, on how people are infected with HIV. One way to provide accurate information about HIV/AIDS in rural areas is to recruit practitioners or case managers who have expertise in this area to provide educational programs at community centers or local schools to provide continued education and information surrounding HIV and AIDS.

Our findings indicate that PLWHAs advocating or participating in spaces where they have access to other PLWHAs and ASOs was a positive experience and helped to combat internal and external HIV-related stigma. Our findings also show that PLWHAs and ASOs are not easily accessible in rural contexts. Online support groups for PLWHAs may be an alternative to find support in a geographically isolated location. Online groups and counselors have the potential to provide support as well as allow for more confidentiality. Currently, such websites as *The Tribe* have HIV/AIDS specific support groups. Similar groups can also be found on Facebook and MySpace. There are also many dating websites available for HIV/AIDS positive persons, such as *Positive Singles* and *Poz Personals.*

The findings also indicate there is lack of availability and access to HIV-related health and social services in rural and low prevalence areas. This becomes direr given cuts to government spending on healthcare programs such as Ryan White, Medicaid, and some states' refusal to expand Medicaid to the 33% poverty line under the Affordable Healthcare Act. Given the rigid medication schedule PLWHAs must maintain to keep healthy, availability of medications in cases of emergency needs to be adequately addressed. There needs to be

more funding or designated funding for those in rural areas. There is also the possibility of collaborating with existing social agencies in these communities to provide commonly needed resources in rural areas, for example transportation services and health care facilities.

Conclusion

Three decades into the HIV epidemic, PLWHAs continue to experience stigma associated with being HIV-positive. Although research documents that stigma has decreased, it still remains prevalent for PLWHAs in rural contexts (Herek, Capitanio, & Widaman, 2002; Stringer et al., 2016; Zukoski, Thornburn & Stroud, 2011; Canstaneda, 2000). Despite the numerous educational materials and campaigns to inform the general population about the transmission of HIV, myths about the HIV transmission persist. Thus, there is still work which needs to be done to combat stigma, prejudices, and discrimination associated with being HIV-positive. Our research offers a glimpse into some mechanisms that may work to address the disparaging effects of HIV stigma and discrimination in rural contexts among the United States.

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Research

From Their Hearts to Our Ears: Former Wards in Rural Communities Discuss Permanency

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Abstract

Using qualitative methods, this study explored the understanding of "permanency," "best interest of the child" and beliefs of the former wards of the Southern Illinois child welfare system. Analyses revealed consensus among the participants' understanding of permanency and best interest of child. The study's findings suggested a need for better collaboration between all parties (judges, attorneys, caseworkers, etc.) in permanency planning for children involved in the child welfare system.

Introduction

The child welfare system provides temporary living arrangements for abused and neglected minor children. This provision is most commonly known as foster care. Children of parents who are unable or unwilling to provide basic necessities in a safe environment are removed from their homes and designated as wards of the state. They are placed in foster homes until such time that the parents can demonstrate minimal parenting skills, adequate housing, sufficient income, sobriety, mental stability, etc. The system exists to protect society's most vulnerable population, its children.

The foster care system acts as a safety net for this population of vulnerable children (Barth, 2000; Triseliotis, 2002). The goal of the system is to restore families and improve permanency outcomes for children. However, statistics do not support the efforts of the system. Less than fifty percent of children in foster care are reunited with their biological families nationally (U.S. Department of Health and Human Services, 2002). Further, Lawrence, Carlson, and Egeland's (2006) study suggests that children who have been abused or neglected and subsequently placed in foster homes away from their biological families are surprisingly at a higher risk for behavioral and emotional problems. This goes against the commonly held assumption that children would fare better if they are protected from abuse and neglect and placed in environments where they can thrive emotionally, physically and mentally.

Although permanency rates for children in foster care in Illinois have increased over the past few years (ICDFS, 2006), there has been a statewide initiative to do more to address permanency and reunification for children in foster care. The initiative aims to address the discrepancies in permanency rates statewide. Although the number of out-of-home child cases decreased by 15.5 % statewide from fiscal year 2003 to fiscal year 2006, there was an increase of 9.01% in downstate Illinois for the same period (IDCFS, 2006).

It is important to involve those most impacted by systemic decisions as we continue to examine permanency in the Southern Region of Illinois. The Southern Region of Illinois comprises the southern third of the state. The area has a population of approximately 1.2 million and includes the cities of Alton, Belleville, Carbondale, Centralia, Collinsville, Edwardsville, O'Fallon, Mount Vernon, and Marion. The Southern Region of the Illinois Department of Children and Family Services (IDCFS) provides foster care services for over 20,000 children each year (IDCFS, 2016; Mississippi Department of Human Services Division of Family and Children's Services [MDHS], 2013).

Those individuals who, as children, were a part of the system due to neglect or abuse have a wealth of knowledge that could be helpful in assisting the state in addressing issues related to barriers to permanency. The Southern Region of the Illinois Department of Children and Family Services (IDCFS) in conjunction with the Illinois African-American Family Commission (IAAFC), Illinois State University (ISU), Southern Illinois University at Edwardsville and the IDCFS Divisions of the African-American Advisory Council (African-American Affairs and Training) gathered information from several focus groups to identify and assess barriers to permanency in the Southern Region of Illinois. Results of the research were reported in a "Southern Region Permanency Enhancement Symposium" held August 23, 2007 at Southern Illinois University-Edwardsville, in Edwardsville, Illinois. The results from one focus group are presented in this paper.

Methodology

This cross-sectional research study primarily utilized qualitative methods to collect and analyze data. Data were collected from a focus group consisting of adults who were wards of the State of Illinois. The Illinois Department of Children and Family Services and Illinois African American Family Commission identified potential study participants in the Southern Region of Illinois. Names and addresses of potential subjects were made available to the investigators after permission to release this information was secured by the IDCFS. The potential subjects received invitational letters asking that they participate in a focus group. Participants were asked to complete a demographic survey, designed specifically for this study. Participants were also asked to participate in a discussion facilitated by investigators of Southern Illinois University – Edwardsville. Participants responded to the following questions:

1. What does the term "permanency" mean to you?
2. What does the term "best interest of the child" mean to you?
3. What are the three most important things that judges, attorneys, caseworkers, and others in the child welfare system should think about before making a final decision about a child's future?

The Statistical Package for the Social Sciences (version 17.0) was used to numerically describe the participants. Interval and nominal level data was collected to obtain descriptive data and measures. Frequency distribution, mean, and range were used at the univariate level to examine the distribution of the variables in the study that describe the subjects. Audio taped responses were orthographically transcribed and then qualitatively analyzed. Patterns and themes were identified as they emerged in the data.

Participant Descriptions – Demographics of Former Wards

Seven people participated in the Former Wards Focus Group. The racial distribution of the group is White/Caucasian (100%). Their ages range from 18 to 45 with a mean age of 34 years. All of the participants indicated that they were from rural areas. Eighty-six percent described their city/town as small and 14% described their town as mid-size. The participants reported a range of two to four siblings in the foster care system with a mean of three siblings. The number of years the participants were in the DCFS system range from six to 20 years with a mean of 9.42 years. Six of the seven participants were never returned home to their birth parent. One participant indicated that he/she was returned home. Another was returned home twice, but eventually ended up back in the foster care system. Three of the participants were adopted. Five of the participants indicated that two or more of their siblings were adopted. At the time of the focus group, four of the participants indicated that they were parents and had never been involved with DCFS for neglect or abuse.

Qualitative Findings – Focus Group Discussion

Definition of Permanency

Participants were asked what the term "permanency" meant to them. The group defined permanency as a stable, loving environment for the child to grow, feel safe and obtain their basic needs. While there seemed to be general consensus on the definition of permanency, some differences can be seen within personal experiences. Although some participants indicated that they had periods of extended placements (one as long as six
years), all point to the uneasiness of not knowing if he/she would be removed. The following are excerpts of individual responses:
1.   "To me it means being able to stay in that same home and knowing where you're going to lay your head every night."
2.   "Where you're going to wake up in the morning."
3.   "Where you're going to be, I was fortunate enough to stay in the same foster home for six years, yet I saw foster children come and go that have been in five or six foster homes in
       a year. And they never had that permanency that I felt I had. That I knew I was going to be there."
4.   "So the permanency to me would be to know what to expect and where you're going to be day to day."
5.   "Your own bed, a couple meals a day, someone who's always going to be there if you need it…You gotta know that you're safe."
6.   "Now I think that's what permanency is to a child because you want to belong somewhere. You want a family. And that should be a permanency. Having a Mom and Dad. Having your own room and your own stuff."
7.   "You don't want to have to be sixteen years old and having to explain to your friends why you don't have a permanent home – why you're moving school to school. That was my problem as a child. I was always by myself.. Always, on the outside looking in – looking at the other kids with their families and thinking - Is that what a family supposed to look like? You never knew…So I didn't know permanency until the day I was adopted and it took four years."

Definition of Best Interest

According to the Illinois Department of Children and Family Services Rule 315, "Best interest of the child" has been defined by law to include the following factors:

- *the physical safety and welfare of the child, including food, shelter, health, and clothing;*
- *the development of the child's identity;*
- *the child's background and ties, including familial and religious;*
- *the child's sense of attachments, including: where the child actually feels love, attachment, and a sense of being valued (as opposed to where adults believe the child should feel such love, attachment, and a sense of being valued);*
- *the child's sense of security;*
- *the child's sense of familiarity;*
- *continuity of affection for the child;*
- *the least disruptive placement alternative for the child;*
- *the child's wishes and long-term goals;*
- *the child's community ties, including church, school, and friends;*
- *the child's need for permanence which includes the child's need for stability and continuity of relationships with parent figures and with siblings and other relatives;*
- *the uniqueness of every family and child;*
- *the risks attendant to entering and being in substitute care; and the preferences of the persons available to care for the child.* [705 ILCS 405/1-3]

Participants were asked what the term "best interest of the child" meant to them. Overall, "best interest of the child" was described by the participants as a stable environment for children. Understandably, the group did not distinguish between the terms "best interest "and "permanency" rather the terms were used interchangeably. These terms are often used in this manner by persons outside of the court system i.e. birth parents, wards, and foster parents, while court personnel and law enforcement often distinguish between the two by policy, laws, and statutes. Response excerpts were:

1. "Listen to the child regardless of age- ask them their option";
2. "Get the full story";
3. "Recognize siblings need to be together";
4. "System failed us by taking away the caretaker 'me'";
5. "Let the child talk about their situation and what really matters, they tell you not to worry about each other they are in good foster homes"; and
6. "Re-evaluate the situation before making a decision."
7. "I would say um…best interest would be whatever makes that child learn and grow and keep them out of danger."

Priorities Related to Permanency Planning

Focus group participants were asked what they thought were the three most important things that judges, attorneys, and others should think about before making a final decision about a child's future. The participants were very adamant about their feelings. They were all in agreement that the child's needs, wants, and

experiences need to be taken into consideration. They were also concerned with the separation of siblings and the safety and quality of foster homes. Representative responses are as follows:

Child Needs/Wants/Experiences

1. "What your real need is. What the child's need is. To me, I felt like even at twelve years old I knew what I needed, and what, what I needed from the system, what I needed from the case worker, from the judge, from, you know, the attorney that was there supposed to be in my best interest. But I didn't always feel like they were looking at what was best for me as the child, so I think even asking the child what need, instead of an adult taking it upon themselves to look at what they think the child needs. Because honestly, what…as an adult, what we think a child needs may be completely different than what their real need is. We may look at a child that's been neglected and abused and think that their need is to deal with the issue of their abuse when that might not be what their issue is that they truly need to deal with at that time. I think there were too many people when I was a child looking at what they thought I needed to get from them instead of what I really needed. And I thought at twelve years old I could express to them what my needs were but I didn't feel like they were listening or that they were asking, and that when I did tell them, I was hushed so that they as adults could figure out what I needed. And being the oldest, and, being twelve, I felt like I was already making decisions for younger siblings and taking care of things and I didn't do well with someone telling me what I needed to do and what my needs were. I wanted to be able to tell them what I needed from them."
2. "They would ask you a question but they really weren't listening. You could see their eyes glaze over, because they already knew what they wanted to hear from you. They just wanted you to feel like you were being heard but you really weren't.…they didn't expect that you were intelligent or had enough experience to actually evaluate the situation when I think that we evaluated it probably better than they did."
3. "Everyone thinks they're going to fix this, you know, okay, we're going to fix you. We're going to make this all better."
4. "If you're someone who grew up again in a quote normal family, you can read all you want, you can study all you want, you can watch all the movies you want…but you can never understand…until you live through it. You know, it was normal for us. It was no big deal for our mom and step dad to disappear for four or five days. It wasn't a big deal …we changed the baby, we fed the baby… all the sudden now all these other people are making the decisions for you."
5. "I think there were some things that were just you didn't talk about, you kept hush, and I think just letting the child talk about and find out what their true issues were. To me, my true issue was us staying together. And doing anything possible to stay together, and everyone else's true issue, for me was that I go to school."
6. "So never mind the wishes of us five children. But the parents have rights. Where are the children's rights?" "It comes back to you listening to what the child's needs and wants are and investigating whether these family members would have been fit like you said to take care of me instead of going back to these parent rights. I mean, that's what still just got me so much after…the parent had the right to this and that and to me, at twelve years old, I was their parent and what rights did I have?"
7. "I knew what was best for me and I wanted them to see that, but they didn't listen to me and it took a year and a half before anything was said about it."

Separation of Siblings

1. "Don't separate them. Don't make them feel like they have a mental illness or they're wrong because they were dependent upon each other and because they have been placed in that role. Don't then tell them that they are no longer in charge."
2. "And no one took into account that what was important to me was protecting my sisters. I could a cared less about being a kid. I could a cared less about living in a nice home. I mean, to me the little trailer court and trailer we were in was fine because we were all sisters and we were together."
3. "The priorities should be that they keep the kids together because the kids have depended on each other through all the trauma."

Safety and Quality of Foster Homes

1. "And for God's sakes, some of the foster parents we have… how did they ever get licensed? And how did they keep a license… I talked to kids all the time, and they would stay in foster homes that were crappy because they were scared to death where they might go was even worse…They had left sexual abuse, well, now they're only getting physical abuse, and that was better than the sexual abuse, so they would stay with the physical abuse rather than report it. Because they'd be afraid if they reported it, they'd go back to sexual abuse again. So sometimes it's the lesser of many many evils …You'll take a little neglect. You'll take a pop upside the head. You know, when the dude is drinking Friday night as opposed to the guy crawling in your bed."
2. "I would rather be in a foster home because I felt protected even though the physical and emotional abuse was there…. It was better…Than getting raped…The devil you know is better than the devil you don't know. And, and…I saw a lot."

Inadequate Investigations

1. "I think that DCFS needs a better …investigation."
2. "That's all I was going to say. It's just a better investigation. They need to do better. DCFS didn't step in. They didn't take the case for… They were supposed to get the case Monday…over the weekend it happened…they were supposed to get the case Monday… but didn't start doing nothing until about a month later."

Recruitment and Oversight

1. "I was literally ignored by my caseworker and she maybe contacted me every six month and that was because she felt I was in a good home….a safe home….a foster home….where I was going to hell. She did not advocate for me. She just separated me from my siblings."

The Importance of Relationship Building with DCFS

1. "I actually was listened to every time I spoke to someone. Be it the judge, the caseworker, whoever, they actually listened to me …they made sure I understand all of the different ramifications of whatever choices I was making. They allowed me to make the choices. Whenever I turned fifteen, my parent's

rights were going to be terminated. Plain and simple. I was actually given the choice of going home or staying in the system.

2. If I stayed in the system, I could have chose to be adopted or I could have chose to go through as a ward of the state. And they explained everything, I made my choices,
and that's where I went. I credit that to a lot of people. I mean that was… the foster family, the judge. It wasn't any one person. It was everybody. It was a team effort basically."

Summary

The information gathered is useful in helping social workers and social service providers understand the emotional and psychological experiences of children in the child welfare system – most of whom, at the time of their removal, are too young or do not know how to verbalize how they feel. This study found that all of the former wards expressed despair around the rebuilding process of reconnecting with their siblings, feeling as though their emotional and psychological needs had not been met, and suffering from a negative impact on their psychosocial development as a result of being separated from their siblings on into adulthood.   Apparent in the narratives were the emotional pains and sufferings that the former wards of the foster care system endured and continued to struggle with as a result of being separated from their siblings.

As evidenced in the knowledge base on consequences for children with foster care system involvement, outcomes should include the voice of children/adults who have been involved in the foster care system. The process of removing children from their homes and loved ones should be examined in order that sensitivity and care are apparent to the children being removed. Assessing the prevalence and nature of psychosocial issues among youth and young adults exiting the foster care system will provide evidence that can inform public and programmatic policies. Assessing how system policies, procedures and organizational culture impact the lives of the children it serves both short- and long-term, plays a vital role in
determining best practices for child welfare policy and practice and social work education, practice and research regardless to geographical location.

Limitations

This study was conducted in Southern Illinois and all of the participants were from rural areas. Therefore, the findings of the study cannot be generalized to other populations experiencing out of home placement in other geographical areas. The study also included only seven participants of who all were white. Experiences by children of other races may not be the same. However, the results can assist other child welfare workers in developing and implementing interventions, policies and procedures, and trainings addressing the findings highlighted in this study. For example, The Modified Mississippi Settlement Agreement and Reform Plan (2007) resulting from the Olivia Y, et al vs. Phil Bryant, as governor of the State of Mississippi lawsuit requires the Mississippi Department of Human Services to "develop a broader and more geographically diverse array of mental health services available to foster children, develop and maintain sibling visitation, and place siblings entering placement at or near the same time together, with exceptions" (pp. 25-26, 40-41).

The findings of this study may assist in identification of issues that occur early on in a young person's life and may be beneficial in improving mental health delivery for children involved in the foster care system. Preventive initiatives can reduce psychosocial developmental issues in this population by implementing improved foster care programming and developing empirically informed interventions targeting children and youth in foster care at early stages of their development (Fowler, Toro, & Miles, 2009).

Future Research/Recommendations

This study provides a foundation for inquiry into the experiences of children served by the child welfare system. Research on outcomes for children involved in the child welfare system should include the voice of children who have been involved in the system. The process of removing children from their homes should be examined in order that sensitivity and care are apparent to the children being removed. The impact of being separated from siblings should also be examined. Strict qualifications with stringent oversight of foster homes and adequate and consistent investigations and casework must be maintained. Collaborative efforts between judges, attorneys, caseworkers and others in the child welfare system must be emphasized when contemplating permanency planning for children. It is in the aforethought of what positive things could happen for children in the child welfare system that will allow for collaboration between all parties and create a platform to increase permanency rates while working in best interest of the child.

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Research

The Effect of African American Socio-Political Ideology on Diabetes and Hypertension Diagnoses

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Abstract

This study evaluates the effect of socio-political ideology on two health outcomes: diabetes and hypertension, using the National Survey of Black Americans (NSBA) Wave 1 (1979-1980). It also provides a statistical test of Semmes (1996) theorized link between political consciousness and health consciousness. To test this relationship, an adjusted logistic regression was conducted to predict hypertension and diabetes diagnosis. Socio-political ideology was conceptualized using several predictor variables: political partisanship and racial identity attitudes. The health outcome variables were two measures of morbidity: self-reported diagnoses of hypertension and diabetes. Results indicated that African Americans who identify as Independent voters had lower percentages of hypertension and diabetes diagnoses than African American Democrats, Republicans, and those African Americans with no political affiliation. Respondents with higher levels of racial identity attitudes were more likely to have a diabetes diagnosis than those with lower levels; this could be attributed to a stronger ability to identify racial bias which possibly leads to increased acculturative stress. Further studies, however, are needed to clarify the causal mechanisms by which ideology affects African American health, particularly for intervention and preventive health strategies.

Introduction

Minorities are less likely to engage in preventive health care use than non-Hispanic whites (NHW) (Musa, Schulz, Harris, Silverman, & Thomas, 2009). Medical mistrust is one contributing factor for the lack of health services utilization among these groups, specifically among AA (Ball, Lawson, & Alim, 2013; Benkert, Peters, Clark, & Keves-Foster, 2006; Hammond, 2010; Musa et al., 2009; Simonds, Goins, Krantz, & Garroutte, 2013). Correlates of medical mistrust include poor patient-physician interaction, knowledge of historical medical experimentation and abuses, and experiences of racism (Musa et al., 2009). Cultural identity has also been shown to be associated with lower levels of mistrust in the medical system (Simonds et al., 2013). On the other hand, strong ethnic identity has been found to provide a protective buffer for poor mental health, such as depression, among minorities (Mossakowski, 2003; Pierre & Mahalik, 2005) and has also been specifically linked to wellness outcomes such as health promoting behaviors and dietary habits (Balsam et al., 2015; Flynn & Fitzgibbon, 1998; Sheehy, Kolahdooz, Roache, & Sharma, 2015).

Most studies, however, focus on one aspect of cultural identity and use crude measurements to capture "acculturation."   Aside from the debate on how to properly assess acculturation, most scales and surveys measure behavioral outcomes rather than acculturation orientations and ideologies (Celenk & Van de Vijer, 2011; Kang, 2006). These orientations deserve attention, yet scant research exists on how

other dimensions of culture, such as political orientations, can explain health status. The only study to date to examine the direct relationship between political ideology and U.S. health from a disaggregated level is Subramanian and Perkins (2010). These researchers used General Social Survey data (1976-2006) to determine the effect of political ideology on the health of Democrats and Republicans. Findings indicated that Republican partisans have better self-reported health than Democrats, but how generalizable are these conclusions when we account for ethnic and racial diversity?

African Americans (AA), for example, have a unique social and political history that has been intertwined with racial oppression and disadvantage. Their contemporary and past experiences in the United States have a profound influence on their political orientations. There has been a plethora of ideological articulations to address the social problems that have plagued the African American community; it is critical to account for these ideological commitments because relying solely on partisanship loyalty is insufficient given the subordinate status of AAs in U.S. society. Moreover, the explicit focus on partisanship as an indicator of political ideology can have significant limitations, especially when studying ethnic groups because their political ideologies are often rooted in ideas of pan-ethnicity (Espiritu, 1992; Nagel, 2003). Thus, if political party is the key observation in predicting ethnic health then researchers may neglect to identify other key orientations that may be of greater significance for these groups. This study examines the association between morbidity diagnoses and multiple dimensions of political orientation using the National Survey of Black Americans (Jackson & Gurin, 1980; Jackson & Neighbors, 1992). Based on the previously discussed notions, it is hypothesized that socio-political orientations and morbidity are associated.

Methods

The National Survey of Black Americans (NSBA) Wave 1 (1979-80) is a national multistage probability survey conducted by the U.S. Department of Health and Human Services and the National Institutes of Health. The NSBA survey is designed to offer a suitable methodological approach in the study of the AA population. NSBA sample data provides information on the attitudes and opinions on a number of issues and activities that are of self-described importance to AA, such as health, political interest and beliefs, community involvement, and religion (Jackson & Gurin, 1980; Jackson & Neighbors, 1992). Details of the NSBA study design have been reported elsewhere (Jackson & Gurin, 1987).

The NSBA dataset is well suited for several reasons. One, are the comprehensive measurements. Typically, there are many data constraints when examining the full spectrum of Black socio-political ideology. However, the NSBA sample, although dated, provides a variety of indicators to assess the continuum of Black political belief systems. Second, the NSBA is one of the few nationwide surveys of AAs to include variables regarding health morbidities and health status. And finally, the date of the dataset. Although many may find this to be a disadvantage, the time period is actually advantageous because the time period in which the first wave was collected allowed for a context that was politically charged.

Criterion Variables

Hypertension and diabetes were examined because these are both considered "lifestyle diseases" that are influenced by daily health behaviors such as sedentary lifestyles, poor eating habits, lack of sleep, and alcohol

and drug consumption (Steve, Tung, Schlichtman, & Peek, 2016). Both hypertension and diabetes were coded as binary variables. Respondents who answered "yes" to the question of whether a doctor had diagnosed them with a disease were coded as 1 and those respondents who answered "no" were coded as a 0. Responses with a "don't know" (original value of 8) or "not applicable" (original value of 9) were re-assigned a value 0 because it was assumed if a respondent did not know if a doctor had diagnosed them with a disease then, for the purpose of this study, they do not have the condition.

Predictor Variables

The primary explanatory variable in this study was political ideology. Partisanship, was used as a traditional measurement of political ideology. This variable was dummied into 4 categories: Republican, Democrat, Independent, and No political identity. Because the AA population is overwhelmingly Democratic, Democrat was a baseline and served as the reference category.

Traditional measurements like party affiliation can reveal pertinent information about one's political ideology, but it is important to account for other socio-political orientations when studying marginalized populations. These ideologies and beliefs are often related in race consciousness and group identity. These socio-political ideas were measured via a series of questions. Black Nationalism, for example, is important to examine when studying Black political and social orientations because it offers an "ideological determinant of black public opinion" (Brown & Shaw, 2002; Dawson, 2000; Lipford, 2007). In the contemporary, Black Nationalism is typically divided into three distinct strains, political, cultural, and economic.

Political nationalism centers on Black control over institutions that serve a predominant Black population, (Abraham, 1991; Franklin & Resnik, 1973) while economic nationalism promotes the strengthening of a Black economic base (Lipford, 2007). Cultural nationalism advocates for the development of distinct cultural institutions that foster a sociocultural collective psyche that contributes to the overall development of the Black community (Lipford, 2007; Oliver, 1989). Three items to assess respondent's perceptions concerning Black political, economic, and cultural ideas that are typically associated with Black Nationalist ideology are used. These items were: Blacks Should Always Vote for Black Candidates When They Run, Black People Should Shop in Black Owned Stores Whenever Possible, Black Children Should Study an African Language. Responses items included, "strongly agree" (5), "agree" (4), "disagree" (2) and "strongly disagree" (1). These variables were reverse recoded so that high values indicate higher agreement with the statement. An additional value (3) was added to indicate neutrality and individuals who responded "dk/don't care/not applicable" (values 8 and 9) were assigned a value of 3.

To reduce the number of items, principal component analysis with varimax rotation was conducted to compute composite scores for the agreement with the Black racial identity oriented variables (voteblack, shopblack, afrikanlang). The factor loadings were high on one component suggesting correlation. Based on the factor analysis results, an index was created using all three of the variables since they are all theoretically and statistically related according to the Cronbach's Alpha (.686) indicating satisfactory reliability. The range of this index is 3-15 and higher scores suggest a stronger tendency towards a Black racial identity, whereas lower scores indicate a weak propensity towards Black racial identity attitudes. The descriptive statistics for this index can be found in Table 1.

Table 1

Descriptive Statistics for Black Nationalism Index

Index	# of items	$\bar{x}$	s	γ_1	γ_2	n
Black Nationalism	3	9.57	2.53	-.061	-.55	2107

Covariates

Health is influenced by a constellation of variables and it is necessary to account for contributing factors outside the realm of identity and racial politics Five predisposing factors are accounted for which include, 1) sex, dichotomized as female and male; 2) age, measured as a continuous variable; 3) education, was rank ordered with four categories: some education, high school graduate, some college education, college graduate; 4) region, dummied into northeast, north central, west, and south (reference category), 5) marital status was dummied and measured using the following response categories, married, divorced, separated, widowed, and never married/single (reference category). Two enabling factors were also controlled for which included, 1) income, the scale ranged from one to 6 where one indicated an income of less than $4,000 per year and a 6 indicated and income of $30,000+ per year; and 2) health insurance, dichotomized as yes or no.

Statistical Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) 23.0 (SPSS, 2015). Demographic and covariates are described using mean and percentages (mode and median are used when appropriate). Several statistical analyses were conducted to determine correlation and linearity between the predictor and outcome variables. These tests include, (1) maximum likelihood factor analyses with varimax rotation and reliability analysis on the Black Nationalism items to aid as a confirmatory factor model for the measures, (2) correlation analyses, including the Chi-square significance tests, to test the linearity and patterns of association between partisanship and morbidity (hypertension and diabetes) using Pearson's correlation, and (3) a logistic regression on diabetes and hypertension diagnosis.

Ethics Statement

This study was reviewed by Southern Illinois University Carbondale Institutional Review Board and was granted an exemption due to the public use and de-identifiable nature of the data set.

Results

Sample Characteristics

A total of 797 male and 1,310 female participants were in the final analysis sample. Table 2 displays the characteristics of the participants by respondent sex. The sample ranged in age from 19-102 (M = 43.8, SD = 17.7). Over half of the male sample was married, and just over a third of females were married. Males had an average salary between $7,000 - $9,999 while females had an average salary between $4,000 - $6,999.   A small minority had attained a college degree but more than a quarter of the

sample had a high school diploma. Over half of the sample lived in the southern region of the United States.

Outcome Variables

In general, the respondents were fairly healthy and a little over a quarter of the sample had at least one health condition. The top health condition was hypertension; over a quarter of the sample had been diagnosed with hypertension (32%) and 7 percent of the sample were diabetic. Comorbidity was present and 25 percent of respondents had at least 2 or more health conditions. Despite these statistics, the majority of respondents (84.2%) reported that they were satisfied with their health.

Predictor Variables

As expected, the majority of the respondents were aligned with the Democratic Party (68%). Six percent identified with the Republican Party. There were many respondents who were Independent (20%); nine percent of the respondents did not identify with any type of political partisanship. The sample also had a high level of ethnic consciousness, though this isn't surprising. Wave 1 of the NSBA was sampled in the late 1970's when there was a wave of racial pride. Also, consistent with the times, nationalist sentiments were very high. Over half the sample agreed that, Black children should study an African language (55.2%), and Blacks should support Blacks businesses (62.4%); almost half the sample (40.0%) believed that African Americans should form their own political party and always vote for Black political candidates (37.8%). The mean for the Black Nationalist scale was 9.56.

A cross-tabulation analysis with a chi-square test was conducted to determine the degree of association between political partisanship and the health factors. These results are shown in Table 3. Chi-square tests did show significant association between Democrats and health satisfaction, diabetes, and hypertension. There was also a significant association between those respondents who identified as Independent and diagnoses of diabetes and hypertension. Chi square tests also showed a significant association between health satisfaction and having no political identity.

Logistic regression analyses were conducted to further investigate these associations. Net of other factors, analysis of data indicated significant association between Black Nationalist political ideology and diabetes diagnoses. For every one-unit increase on the Black Nationalist index, the odds of having a diabetes diagnoses were expected to increase by 1.14. Age, living in the Midwest, and having health insurance were also significant predictors. None of the political factors reached significance in the model predicting hypertension. However, gender, age, education, and health insurance were significant predictors of high blood pressure. These results are presented in Table 4.

Table 2

NSBA Socio-demographic Characteristics of Respondents Sex, (N=2107)

	Male N=797 (37.8%)	Female N=1310 (62.2%)
Mean Age	43.30 (SD=17.81)	44.10 (SD=17.72)
Mean Income, $	5.41 (SD=2.78)	4.35 (SD=2.82)
Educational Attainment		
< High School Diploma	346 (43.8)	573 (44.2)
High School Diploma/GED	225 (28.5)	425 (32.8)
Some College	147 (18.6)	187 (14.4)
College Degree	72 (9.1)	112 (8.6)
Marital Status		
Married	419 (53.0)	448 (34.5)
Divorced	75 (9.5)	170 (13.1)
Separated	54 (6.8)	153 (11.8)
Widowed	49 (6.1)	256 (19.7)
Single	194 (24.5)	273 (21.0)
Region		
South	424 (53.2)	701 (53.5)
East Coast	138 (17.3)	253 (19.3)
Midwest	178 (22.3)	289 (22.1)
West	57 (7.2)	67 (5.1)
Health Insurance		
Yes	443 (55.6)	432 (33.0)
No	354 (44.4)	878 (67.0)

+Source: National Survey of Black Americans Wave 1 (1979-80)
+Table reports frequencies and percent for each covariate

Table 3
Health Satisfaction and Diabetes and Hypertension Diagnoses by Partisanship, (N=2107)

	Democrat N=1409 (67.6%)	Republican N=129 (6.2%)	Independ. N=356 (17.0%)	No Political N=189 (9.1%)
Health Satisfaction				
Very Satisfied	718 (50.8)	68 (52.3)	194 (54.5)	96 (50.5)
Satisfied	465 (32.9)	45 (34.6)	110 (30.9)	57 (30.0)
Very Dissatisfied	177 (12.5)	14 (10.8)	39 (11.0)	22 (11.6)
Dissatisfied	49 (3.5)	2 (1.5)	13 (3.7)	14 (7.4)
p-value1	.0483*	0.527	0.691	0.049*
Diabetes Diagnosis				
Yes	114 (8.1)	10 (7.7)	13 (3.7)	12 (6.3)
No	1298 (91.9)	120 (92.3)	343 (96.3)	178 (93.7)
p-value1	0.011*	0.776	0.006*	0.645
Hypertension Diagnosis				
Yes	480 (34.0)	48 (36.9)	274 (77.0)	4 (21.1)
No	932 (66.0)	82 (63.1)	82 (23.0)	15 (78.9)
p-value1	0.000*	0.171	0.000*	0.100

+Source: National Survey of Black Americans Wave 1 (1979-80)
+Table reports frequencies and percent for health satisfaction and 2 morbidities
1 Chi-square test for association

Discussion and Conclusion

Political Partisanship

Political partisanship does not influence diabetes and hypertension diagnoses. Bivariate correlations did indicate that there were some significant associations between partisanship and the health variables but further regression analyses showed that partisanship nor political ideology play no role in predicting health except for diabetes diagnoses. Results showed that those AA who have strong racial identity attitudes have higher odds of having diabetes. This is not to suggest direct causality between political ideology and diabetes but it has been well established that the disease is rooted in stress and anxiety (Smith et al., 2012). Hormones such as cortisol and epinephrine flood the body when under stress which results in an increase in blood sugar (Williams & Williams-Morris, 2000). Perhaps, AA who have strong racial attitudes are more racially conscious and experience more acculturative and race-related stress due to their ability to pick up on certain racial nuances.

Table 4: Logistic Regression Predicting Diabetes and Hypertension Diagnoses

Variable	Diabetes Diagnosis Coefficient(SE)	Hypertension Diagnosis Coefficient(SE)
Sex	.314 (.211)	.607 (.119)*
Mean Age	.040 (.007)*	.041 (.004)*
Mean Income, $	.026 (.040)	.012 (.022)
Educational Attainment	-.047 (.119)	-.195 (.064)*
Marital Status		
Married	.115 (.354)	.103 (.173)
Divorced	.216 (.421)	.549 (.204)*
Separated	.095 (.432)	.060 (.217)
Widowed	.263 (.398)	-.099 (.225)
Single (reference group)	----------	----------
Region		
East Coast	.313 (.481)	.074 (.141)
Midwest	.533 (.741)*	-.010 (.136)
West	.056 (.456)	.208 (.228)
South (reference group)	----------	
Health Insurance	-.833 (.264)*	-.557 (.127)*
Political Partisanship		
Republican	-.398 (.365)	-.171 (.216)
Independent	-.431 (.315)	-.084 (.154)
No Political ID	-.194 (.359)	-.261 (.199)
Democrat (reference group)	----------	----------
Black Nationalism	.136 (.039)*	.000 (.022)

N = 2047
Nagelkerke R2   .176
X2, d.f.   150.86, 16

Statistical Significance: p < .01* (two tailed)

+Source: National Survey of Black Americans Wave 1 (1979-80)
+Table reports adjusted logistic regression analyses for diabetes and hypertension

Literature has recognized the negative influence of racism on both physical and mental health.   For example, one study found that institutional racism was a predictor of mental health among older AA (Utsey, Payne, Jackson, & Jones, 2002). Another study showed that recurrent experiences with racism were associated

with elevated blood pressure levels in AA (Krieger & Sidney, 1996). Other studies show similar relationships (Krieger & Sidney, 1996; LaVeist, Nickerson, & Bowie, 2000; Williams & Williams-Morris, 2000). Racism related stress and anxiety may explain why strong racial identity is a significant predictor of diabetes among this sample of AA. However, we are unable to determine how. More work needs to be conducted to identify and test for mediators to determine how cultural and political beliefs influence diabetes onset.

Other Significant Factors

This study also reveals some other findings. Aside from the typical predictors of health like education, age, income, and health insurance, marital status and region are significant predictors of AA health. Findings showed that divorcees have higher odds of having hypertension than those who are single. The dissolution of a marriage can cause strain and stress this is evidenced with the result that divorced individuals have a higher odds of high blood pressure than any other marital category. Those living in the Midwestern portion of the United States were also found to have a higher odds of diabetes diagnoses compared to respondents living in the South.

Limitations

This research has several limitations. First, the NSBA date is outdated so findings may not be applicable to contemporary AAs. The political landscape is much different than the one 50 years ago. Since the election of President Obama, African American attitudes have shifted. Moreover, his Administration (via Michelle Obama) has focused on a national health promotion campaign. More research is needed to see if current findings in this study remain consistent among the AA population today. It is possible that the effect of Democratic partisanship on health has changed directions.

Second, the American Black population is substantially diverse. This study only examines AAs which is a major limitation because results are not generalizable to the total American Black population (e.g., African immigrants, Afro-Caribbeans, Afro-Latinos). It is important to account for nationality and immigration status because intra-racial differences may be seen across groups. It would be especially interesting to see how immigration patterns affect political ideology among Africans and African Caribbean's and then how political ideology influences their health. A third limitation is the health measurements. Unfortunately, the NSBA does not ask respondents about their health behaviors. Assessing factors like health activities and diet practices could reveal a lot more about the relationship between political ideology and health. Finally, mediations and moderation could have been analyzed on a number of variables to examine interactive effects.

Research Significance and Study Implications

In lieu of these limitations, this research is noteworthy in that almost all studies that use race, culture, and/or ethnic conceptualizations as predictors do so by examining mental health and psychological well-being as the outcome variables in the model (Bhui et al., 2004; K. Johnson, Carroll, Fulda, Cardarelli, & Cardarelli, 2010; Mossakowski, 2003; Pierre & Mahalik, 2005). The researcher knows of only a few published studies that directly investigates some component of Black culture (political ideology) as the independent and some dimension of physical health as the dependent variable (Airhihenbuwa, Kumanyika, TenHave, & Morssink, 2000; Bhui et al., 2004; R. L. Johnson, 2002; Newton & Perri, 2004; Thompson & Chambers, 2000). These

studies are significant in that they provide strong theoretical frameworks, but a major limitation of these studies is that (1) samples are not completely demographically representative (2) the samples are fairly small which limits generalizability.

This study is the only research to date that (1) uses a representative national data sample of the AAs and (2) analyzes data with comparatively large sample sizes which allowed the researcher to make inclusive inferences about the population under study. This research is also attractive because it was taken from a randomized sample and predicts health outcomes as opposed to solely relying on self-reported health satisfaction. In addition to addressing the limitations of past research, the implications of this study are tremendously significant because it offers a more holistic picture on issues affecting AA health. This research also offers a quantitative assessment of the role of political ideology on health that is often written about in historical texts and also heard in Black political rhetoric (Semmes, 1996). Thus, it functions as an empirical test of the theorized relationship between political ideology and health status. Lastly, this study builds on previous studies that assess the influence of culture on physical health and additionally adds to the scant literature on this specific relationship. Future studies should explore what factors mediate the relationship between Black ideology and diabetes prevalence.

Preventive Medicine Implications

It is important to know what sub-groups of AAs may cling to ideologies that may place them at a higher risk of hypertension and diabetes diagnoses in order to target preventive strategies and educational interventions, particularly those that help people develop coping skills and stress reduction activities in the face of discrimination and race-related stress. However, in order to develop educational interventions, studies like this are needed to disseminate knowledge and gain better understanding of the causal processes and health effects of cultural and political ideologies.

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Research

Predictors of Dental Care Service Utilization among Hispanics/Latinos in Mississippi, Louisiana and Alabama

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Abstract

The purpose of this research was to examine the potential factors of socio-economic status (SES), healthcare coverage and acculturation as barriers to dental healthcare service utilization in Hispanics/Latinos. A Hispanic/Latino Community Health Needs Assessment was administered to 411 participants by the bilingual interpreter. The descriptive, bivariate and multivariate logistic regression statitsics were performed to predict dental care service utilization. Of all participants, non-Mexicans were more likely to utilize dental services compared to Mexicans (52% vs. 29%, *p*-value <0.001). With respect to gender, females were more likely to acquire dental services than males (53% vs. 31%, *p*-value < 0.001). The level of education, income, acculturation and health insurance status were also significantly related to dental service utilization. However, in a multivariate logistic regression model that included Mexicans vs. non-Mexicans, gender, education, income, acculturation, health insurance coverage; female gender and health insurance coverage were significant independent predictors of dental service utilization. The odds of dental service utilization is 2.1 times higher in women than that of males (95% CI: 1.3-3.4); and 3.2 times higher in those who have health insurance than those who do not have health insurance (95% CI: 1.7-5.8). The results of this study underscore the need for health care coverage irrespective of their SES and acculturation characteristics.

Public Health Implication: Interventions and policies should be targeted to improve their access to dental care service.

Introduction

Oral health such as dental caries and periodontal disease are common health problems in the United States (U.S.) population (CDC, 2016). Approximately, 47.2% U.S. adults ages 30 years or older have periodontal disease and 70.1% of people age 65 and older have periodontal disease. With respect to health disparities, men are more likely to have periodontal disease than women and Mexican American adults are more likely to have periodontal disease than white adults (CDC, 2016). Healthy People 2020, a science-based, ten-year national framework has emphasized the prevalence of oral health disparities

within the U.S. population and set up goals to eliminate oral health disparities for all Americans including Hispanics/Latinos.

Hispanics/Latinos are the new "majority- minority" and make up 16% of the U.S. population. Although Hispanics/Latinos are the largest and fastest growing population in the U.S., only 2.7-4.2% of Latinos live in Mississippi, Louisiana and Alabama (U.S. Bureau of Census, 2010). In 2014, approximately 39% of all uninsured persons in the U.S. were of foreign-born Hispanics/Latinos (Krogstad & Lopez, 2014). The Healthy People 2020 target for health insurance is 100%, and dental service utilization is 49% (Office of Disease Prevention and Health Promotion, 2017). In 2011, 47.5% of non-Hispanic Whites reported a dental visit in the past 12 months, whereas only 29.7% of Hispanics reported a dental visit (Office of Disease Prevention and Health Promotion, 2017). Hispanics/Latinos were two times as likely as non-Hispanic Whites to be living below the federal poverty level (20.2%, Hispanics vs. 9.9% Whites) (U.S. Bureau of the Census, 2014). Although efforts have been made to eliminate inequality in health and health care, disparities in access to oral health care continue to exist in the United States (Scott & Simile, 2005).

The health outcomes including oral health of U.S. Hispanics/Latinos present a pattern of substantial heterogeneity in several dimensions. Wide ranges of factors have been explored to explain this heterogeneity. These factors include more traditionally studied attributes such as socioeconomic status, educational level, and age, as well as other, less studied contextual factors such as language fluency and immigration status, including time and number of generations living in the United States. These factors are often described as part of the phenomenon of acculturation to U.S. mainstream culture (Wells, Golding & Hough,1989). Utilization of dental healthcare services by Latino/Hispanic is usually linked with insurance status. While significant, the impact of additional factors/barriers on access to dental healthcare by Hispanics/Latinos within the tristate areas of Alabama, Louisiana, and Mississippi remains unclear. This study examines the potential factors of social economic status (SES), healthcare coverage and acculturation as barriers to dental healthcare service utilization in the Hispanics/Latinos.

Methods

Initially in 2010, the Behavioral and Environmental Health Equity Project conducted a Latino/Hispanic Community Health Needs Assessment Pilot Study with 110 participants in
Mississippi. After receiving feedback from community stakeholders in the Pilot Study, the survey questionnaire was modified and extended to Mississippi, Alabama and Louisiana from 2011 to 2012. The assessments were administered by bilingual interviewer using participants' preferred language (English/Spanish). All surveys were conducted after receiving approval from the Jackson State University Institutional Review Board. Four hundred and eleven (411) Latino/Hispanic community members and leaders ≥ 18 years of age participated in the Latino Hispanic Community Health Needs Assessment survey. Because of the small percentage of Latinos residing in these states, convenience sampling was used to capture the views of Hispanics/Latinos through faith-based, community service, and health care organizations.

Outcome Variable
The phrase "Dental Service Utilization" is the outcome variable in this study. Participants, who replied "yes" to the question, *"During the past 12 months, have you seen a dentist ?"* were considered to have utilized

dental service during the previous 12 months, and those who replied "no" were considered not to have used dental service during the past 12 months.

Explanatory Variables

The primary independent variable is "acculturation." Language preference, duration of stay in the U.S., and U.S.-born are used as proxy measures of acculturation in this study. An individual was said to be "acculturated" if, he/she was either born in the U.S., or preferred speaking English, or had been living in the U.S. for more than ten years. If an individual did not meet any of these criteria he/she was "not acculturated." Other covariates include age, gender, socioeconomic status, health care coverage, and country of origin. SES was measured by the level of education and yearly income. Age was separated into three groups: 18-24; 25-64; ≥ 65. Education level was divided into four groups: no education/elementary, high school /GED, vocational school/college, university degree. Income level was categorized into three groups: <$20,000, $20,000-$39,999, and $\geq$ $40,000. Insurance status was assessed by asking whether they had health insurance for previous 12 months or never had health insurance. Participants were divided into two ethnic groups. An individual who reported Mexico as their country of origin was considered Mexican. All others were considered non-Mexican that included most of them from Puerto Rican, Cuban, Honduras, Guatemala, Nicaragua, Peru, El-Salvador and Colombia.

Data Analysis

The Statistical Package for the Social Sciences (SPSS), Version 22, was used for analysis. Descriptive statistics for univariate analysis and chi-square test for bivariate and multivariate logistic regression analysis for predicting dental care coverage were performed. Three models were constructed separately for predicting dental care service utilization. Model 1 included demographics and SES. Model 2 included demographic, SES, acculturation and its components. Model 3 included demographic, SES, acculturation and its components plus health insurance.

Results

Table 1 displays the dental service utilization by demographic and SES status. Non-Mexicans were more likely to utilize dental services compared to Mexicans (52% vs. 29%, *p*-value <0.001). With respect to gender, females were more likely to acquire dental services than males (53% vs. 31%, *p*-value < 0.001). The level of education and income were significantly related to dental service utilization (*p*-value <0.001 and 0.008 respectively). Table 2 indicates that insurance status and acculturation (its components: U.S. citizenship, length of stay, language preference) were significantly related to dental service utilization.

Table 3 displays the predictors of dental service utilization. The odds of dental service utilization in females were 2.1 times higher than in males (95% CI: 1.3-3.4). The odds of dental service utilization by people who have health insurance was 3.2 times higher than those who did not have health insurance (95% CI: 1.7-5.8).

Table 1

Dental Service Utilization by Demographic and SES

Variables	Dental Service Utilization		
	No (%)	Yes (%)	P- value
Ethnic group	------	---	
Mexicans Hispanic	101 (70)	42 (29)	<0.001
Non-Mexicans Hispanic[a]	121 (48)	133 (52)	
Gender	-----	-----	-----
Male	118 (69)	52 (31)	<0.001
Female	109 (47)	125 (53)	
Age Category	----	---	---
18-24	36 (58)	26 (41)	.304
25-64	178 (57)	133 (43)	
≥ 65	10 (39)	16 (62)	
Education Completed	-----	---	-----
No education/elementary	85 (72)	33 (28)	<0.001
High School/GED	82 954)	70 (46)	
Vocational School/College	40 (51)	38 (49)	
University degree	15 (30)	35 (70)	
Household income	----	----	-----
Less than 20,000	120 (63)	70 (37)	0.008
20,000-39,999	64 (54)	54 (46)	
40,000-above	27 (42)	38 (59)	

[a]Puerto Rican, Cuban, Honduras, Guatemala, Nicaragua, Peru, Columbia, El Salvador

Table 2

Dental Service Utilization by Health Insurance and Acculturation

Variables	Dental Service Utilization		
	No (%)	Yes (%)	P-value
Health insurance	-------	------	------
Health insurance for past 12 months	25 (25)	74 (75)	<0.001
Had health insurance	26 (58)	19 (42)	
Never had health insurance	172 (68)	82 (32)	
U.S. born	19 (42)	26 (58)	0.04
Length of stay (10 yrs. or more)	105 (48)	113 (52)	<0.001
Language Preference	------	----	----
Spanish	180 (59)	124 (41)	0.05
English	24 (42)	33 (58)	
Both	13 (50)	13 (50)	
Acculturation	-----	-----	----
Not acculturated	115 (65)	63 (35)	0.002
Acculturated	111 (49)	115 (51)	

Non-Mexicans (Puerto Rican, Cuba, Honduras, Nicaragua, Peru, Columbia, El Salvador)

Table 3

Multivariate Logistic Regression Model for Predicting Dental Care Service

_____

Variables	Model 1		Model 2		Model 3	
	OR	95% CI	OR	95% CI	OR	95% CI
Ethnic (Mexican)	Ref	Ref	Ref	Ref	Ref	Ref
Non-Mexican*	2.1	1-3-3.4	2.1	1.3-3.4	1.6	1.0-2.8
Gender (females)	2.1	1.3-3.4	2.1	1.3-3.4	2.1	1.3-3.4
Education (Elementary) vs	Ref	Ref	Ref	Ref	Ref	Ref
High School/GED	2.2	1.2-3.8	2.0	1.1-3.6	1.9	1.0-3.4
Vocational or College	1.6	0.8-3.2	1.5	0.7-3.0	1.3	0.7-2.8
University Degree	3.4	1.5-7.6	2.9	1.3-6.7	2.2	0.9-5.3
Income (<20,000) vs	Ref	Ref	Ref	Ref	Ref	Ref
20,000-40,000	1.2	0.7-2.1	1.1	0.7-1.9	1.0	0.6-2.3
>40,000	1.6	0.8-3.0	1.4	0.7-2.7	1.2	0.6-2.3
Acculturation	---	---	1.5	0.9-2.5	1.3	0.8-2.1
Health Insurance	---	---	---	---	3.2	1.7-5.8

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Legend:

Non- Mexicans (Puerto Rican, Cuba, Honduras, Nicaragua, Peru, Columbia, El Salvador); OR=Odds ratio; CI=Confidence interval; NS=Non significant; Model 1 included: demographic and SE; Model 2 included: demographic, SES and acculturation; Model 3 included: model 2 plus health insurance

Discussion

This study is unique as it estimates dental service utilization of Hispanics/Latinos within the tri-state region of Alabama, Mississippi and Louisiana. This study takes into account the major predictors of dental service utilization by the Latino/Hispanic population with the variables being demographics, SES, health insurance, acculturation and its components. Results portray the significant predictors of dental service utilization as being the ethnic origin, gender and health insurance. The dental service utilization for non-Mexican Hispanics is more than Hispanic groups after controlling for demographic, SES and acculturation. However, when adding health insurance coverage in the model, non-Mexican Hispanics ethnicity becomes nonsignificant for predicting dental service utilization. Women use more dental services than men. This finding is consistent with national data. Less use in men could either mean less prevalence of dental caries, reluctance to seek dental care or lack of awareness in comparison to women.

In our study, health insurance coverage appears as an important independent determinant of dental care service utilization. Participants having some form of insurance for the previous 12 months report a higher predilection of dental service utilization. Dental service use for adults are not a mandated benefit under Medicaid as it is for children. Studies show that Mississippi, Alabama and Texas have significantly large access gap with no dental benefit for Medicaid-insured adults. As of 2016, Alabama has no dental coverage; Mississippi has emergency-only benefits and Louisiana has limited benefits for Medicaid beneficiaries (Hinton & Paradise, 2016).

This study has several limitations. First, it does not take into account the other contributing barriers of dental service utilization such as the high cost of oral care, fear of the dentist, long waiting hours, transportation difficulties, language barriers, and the availability of facilities. A previous study indicated that the high cost of oral care was the primary reason for not seeking needed dental care among Hispanics or Latinos (Gould, 2012). Second, this study is based on self-reported data which could result in measurement bias and recall bias on behalf of the participants. Third, our study rests on the Hispanic/Latino population living in the tri-state area as a whole and has not been divided into sub-groups of Hispanic or Latino populations in the United States such as Mexican, Puerto-Rican, Cuban, Central or South American, and other Hispanic or Latino subgroups. The U.S. Hispanic or Latino population consists of individuals whose ancestors were originally from various countries in North America, Central or South America, the Caribbean, and Europe. Although the Hispanic or Latino population in the United States may share a common language, there is considerable variation among subgroups concerning dialects, cultural background, socioeconomic status, and care-seeking behaviors. A division by sub-group would provide deeper insight into their behaviors and dental service utilization.

Summary

Gender and health insurance are major predictors of dental care service utilization among the Hispanics/Latinos within the tri-state area. An emphasis on catering to their needs in these categories will prove helpful in providing dental services in this majority-minority population. The results of this study underscore the need for health care coverage that includes preventative dental services and a wide range of dental

treatment. Policies should be established to improve access to dental prevention and intervention services with a particular focus on Hispanics/Latinos.

Acknowledgments

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Research

Step N2 Life- A Pilot Investigation on the Benefits of Community-Developed Intervention to Reduce Hypertension in Mississippi

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Abstract

Step N2 Life is a health promotion/intervention program developed by a group of four local community members trained as Community Research Fellows to become partners with academic institutions to address research barriers and to empower minority communities to become a part of the research process. The goal of Step N2 Life is to assist women in the Virden Addition and Bailey Avenue communities surrounding the Jackson Medical Mall in reducing the prevalence of hypertension and to promote healthy lifestyle changes and to build protective safeguards to deter hypertension in the target population. African American women were recruited for this pilot study that utilized a pre-assessment and post-assessment. The paired t-test statistic was used. Participants were exposed to the "Step N2 Life" Intervention that included instruction, mentoring, community education about the importance of risk factor prevention, focusing on the major three modifiable lifestyle risk factors: tobacco use, unhealthy diet, and sedentary lifestyle. Knowledge of the participants increased significantly from the pre-assessment to the post-assessment in their understanding of the healthiest type of fat; symptoms of high cholesterol; organs affected when blood pressure is not controlled; risk factors for hypertension. Results indicate that interventions, like Step N2 Life, developed and managed by community groups have benefits. They facilitate the development of health policy and the health research agenda can be successful if formulated with strong, active community input. Findings provided here can drive future research using larger samples and multiple communities with comparison groups that may highlight the importance of

community-based groups in leading efforts to reduce the impact of cardiovascular disease in African American communities.

Introduction

In 1997, Cooper and Rotimi reported that the excess prevalence of hypertension among African Americans had been recognized as a major health disparity for decades and contributed to much of the negative health outcomes occurring in African American communities. In 2013, Go et al. (2013) reported no change in those statistics. According to their study, in the U.S., 41% of African Americans have high blood pressure, compared to 27% of whites. Compared with Caucasians, African Americans develop high blood pressure (BP) earlier in life, with much higher average BP and a 1.3-times greater rate of nonfatal stroke, a 1.8-times greater rate of fatal stroke, a 1.5-times greater rate of CVD mortality, and a 4.2-times greater rate of end-stage renal disease (ESRD). The World Health Organization (WHO) reported that cardiovascular disease was responsible for one-third of global deaths and is a major contributor to the global burden of disease (WHO, 2009; Lloyd-Jones et al., 2010). Hypertension is one of the major factors contributing to cardiovascular disease and is a major health concern worldwide.

The occurrence of high BP in African Americans could be due to genetic factors, environmental factors, and behavioral factors. Genetic influences result from the fact that people of African descent experience high rates of high BP. Other researchers believe that there is a relationship between genes, environment, job-related stress, racism, and other psychosocial factors and racial/ethnic disparities in the prevalence of hypertension (Redmond, Baer, & Hicks, 2011). Scientists believe that high blood pressure in African-Americans can be attributed to risk factors to which they are exposed in the environment.

African Americans in the United States respond differently to high BP drugs compared to other groups of people, and they are also believed to be more sensitive to salt, which increases the risk of developing high BP. In addition, some experts have concluded that social and economic factors, including discrimination and economic inequality are responsible for this difference.

It is generally accepted that high BP is preventable and can be attributed directly to lifestyle habits like inadequate dietary practices, sedentary lifestyle, and tobacco use (Sahli et al., 2016). African Americans in Mississippi have a hypertension and CVD prevalence
that is among the highest in the world and is steadily increasing (Harmon et al., 2013). In the current study, the authors sought to determine whether receipt of and adherence to health behavior advice for hypertension control could result in an increase in knowledge and awareness and subsequent behavior change that would reduce the chances of developing hypertension, or controlling its effects.

The authors intended to assist women living in the Jackson Medical Mall area to adopt healthy lifestyle changes and build protective factors to deter hypertension and related risk factors. The Jackson Medical Mall Thad Cochran Center is a vibrant facility located on 53 acres at 350 West Woodrow Wilson Drive in Jackson,

Mississippi, flanked on the east and west side by interstates 55 and 220, and on the north and south by Northside Drive and Woodrow Wilson Drive. In 1995, Dr. Aaron Shirley developed a plan to convert Mississippi's first retail mall into an up-to-date ambulatory health care facility, providing quality health care for the urban poor of Jackson, Mississippi. The Jackson Medical Mall (JMM) was redesigned into a modern medical complex, providing medical care and human services to those who are economically disadvantaged. Dr. Shirley teamed up with the University of Mississippi Medical Center, Tougaloo College and Jackson State University to develop and expand educational opportunities at the facility, including quality medical treatment and health and wellness education. Major tenants of the JMM are the University of Mississippi Medical Center primary and specialty clinics, Jackson State University's School of Public Health, Jackson Heart Study, and Mississippi State Department of Health clinics. The JMM is also home to other non-profit, human and health service, and retail providers. In addition to these services, the JMM offers three spaces for public and private events. The Community Meeting Room, Common Area, and Center Stage are available to accommodate neighborhood, business, and civic organizations in their outreach efforts in communities around the Metro-Jackson area. The Community Meeting Room at the JMM was selected as the location for the Step N2 Life intervention activities serving the Virden Addition and Bailey Avenue communities surrounding the Jackson Medical Mall.

Implementing interventions have proven to be effective strategies for health promotion and reducing the prevalence of cardiovascular disease. Little is known about interventions developed by community members and the impact they have on reducing health disparities. It was hypothesized that exposure to Step N2 Life, a structured intervention/prevention program, would result in improvements in knowledge and behaviors that could facilitate reduction in health risks.

Methods

In 2015, the Mississippi State Department of Health launched the first cohort of the Mississippi Community Research Fellows Training (CRFT) Program. This was a sixteen week training program that trained community members to become partners with academic institutions and public health professionals to address research barriers in minority communities and to empower minority communities to become involved in the research process. After graduating from the CRFT, community members, affiliated with the Jackson Heart Study Community (JHS) Outreach Center (CORC), implemented Step N2 Life as a health promotion research project.

Step N2 Life was initiated as a quasi-experimental study that sought to test the impact of a behavioral intervention for community members interested in BP control. The goal of Step N2 Life was to assist women in the study area in reducing the prevalence of hypertension and related risk factors. The overall objective was to promote healthy lifestyle changes and to build protective safeguards to deter hypertension in the target population. This study utilized a pre-assessment and post-assessment that were administered to participants who resided in the neighborhood surrounding the location of the Jackson Heart Study in Jackson, Mississippi.

Participants

A total of 25 African American women who resided in the communities surrounding the Jackson Medical Mall, a residential neighborhood that surrounded the official site of the Jackson Heart Study, participated in this study. The final study sample used for analysis purposes included 12 women because all twenty who had completed the pre-assessment were not present on the day the post-assessment was held due to other scheduling conflicts. The community residents agreed to participate in the study to test the practical interventions for improving hypertension control that we believed can be broadly implemented and can reduce high blood pressure and CVD risk.

Almost all of the participants were African Americans; all of them had a high school education and above; 25.0% of them had graduate school experience. Half of the participants were 60 years old and one-third of them was retired (see Table 1).

Table 1

Characteristics of Study Group

Characteristics	Frequency	Percent
Race		
African American	11	91.7
White	1	8.3
Education		
High School	2	16.7
College	6	50.0
Graduate School	3	25.0
Age		
Under 50	1	8.3
50-59	4	33.3
60 and above	6	50.0
Occupation		
Assembly		
Teacher	1	8.3
Retired	1	8.3
Clerical	4	33.3
House Supervisor	1	8.3
Disabled	1	8.3

The participants also provided information about their medical history (Table 2). Only one had taken an X-Ray or MRI in the last two years to facilitate a medical diagnosis. Over 83.0% of them indicated that they did not have any medical diagnoses done in the last two years. Most of the participants reported that high BP was prevalent in their family, and all of the participants reported that they had high BP. More than half of them

revealed that high cholesterol was a problem with family members, and about 41.7% of them were tested as having elevated cholesterol. While 83.3% of them reported that diabetes was prevalent in their family, 58.3% of them tested positive for diabetes. In addition, 75.0% of the participants revealed that obesity was a problem in their family.

Table 2

Medical History of Study Participants

	Frequency	Percent
Medical or Diagnostic Taken in Past 2 Years		
X-Ray and MRI	1	8.3
Colonoscopy-Mammogram	1	8.3
None	10	83.4
Hypertension-Blood Pressure	12	100.0
High Blood Pressure in Family	10	90.9
Elevated Cholesterol	5	41.7
Elevated Cholesterol in Family	6	54.5
Diabetes-Abnormal Blood Sugar Tests	7	58.3
Diabetes in Family	10	83.3
Obesity in Family	9	75.0

Intervention Program

The intervention program was facilitated by the project team which was composed of four Jackson area community health workers with affiliation with the Jackson Heart Study (JHS) Community Outreach Center (CORC) and the community-based JHS Community Health Advisory Network (CHAN). The JHS CORC is one of the five centers that comprise the JHS and is one of the two JHS centers housed in the School of Public Health at Jackson State University. The focus of the JHS CORC is to perform community health education activities to disseminate health promotion and prevention messages in the Jackson community.

Twenty-five female residents from the Jackson Medical Mall area were selected to participate in this program. They were interviewed, they completed the application which included the consent form, and they provided medical and health information. The participants were divided into four groups with an assigned team member and were given logs for documentation of activities and practices.

Pre-Assessment

Prior to beginning program activities and the intervention, the participants were exposed to health screenings, after which they were administered the Pre-assessment. The Mississippi Diabetes Foundation provided baseline health screenings, measuring kidney function, BMI, BP, glucose, and cholesterol. The participants recorded in their logs the measures provided by the Mississippi Diabetes Foundation for kidney function; BMI, BP, glucose, and cholesterol. Pre-tests were administered to assess the participants' current knowledge of hypertension and risk factors. The participants were asked to provide information on 20 items that related to risk behaviors for development of hypertension. These questions inquired about their consumption of fruits and vegetables, their knowledge of fat consumption and cholesterol, weight loss practices, measures of blood pressure, the impact of BP on the body, and warning signs of high BP. They were also asked a few questions about mental health.

Intervention

Participants were then exposed to five months of "Step N2 Life" Intervention that included sessions of instruction, mentoring, and heart healthy activities. The intervention lasted from August 2015 to December 2015 and consisted of community education about the importance of chronic disease prevention and risk factor prevention, focusing on the major three modifiable lifestyle risk factors: tobacco use, unhealthy diet, and sedentary lifestyle.

This team received expert support from JHS CORC staff, and collaborated with a variety of health care professionals including physicians, paramedics, nurses, technicians, and nutritionists. All facilitators were trained to deliver standardized educational preventive messages. To promote physical activity, participants received messages designed to help them incorporate more physical activity into everyday life. They also received information and training that promoted healthy eating. The program also provided risk factor screenings (obesity, hypertension, diabetes, cholesterol) and education for persons at risk.

Participants attended education sessions that included workshops, interactive discussions, physical activity sessions, and smoking cessation consultations. Education sessions on healthy diet, physical activity, and tobacco cessation were led by occupational physicians, nurses, and technicians who were trained to provide standardized educational messages. Topics related to healthy lifestyle strategies and also included discussions on balanced diet and sodium reduction.

Technicians took measures of blood pressure, weight, glucose, and cholesterol and a pre-test that examined their attitudes, behaviors, and practices regarding dietary practices, knowledge and awareness and general health status, and mental health.

During the instructional sessions, participants were exposed to expert lecturers who provided guidance on the importance of drinking water, the benefits of an exercise regimen, the value of eating healthy, the need for sustainability, the importance of the group staying together and working together, working with family members to improve health status, and changing patterns of behavior to improve health. The participants also learned about strategies to control blood pressure and how to minimize negative reactions to stressful situations.

The participants were also guided through the exercise segments by a registered nurse who was also an aerobic instructor. Physical activities included yoga and mindfulness, line dancing, and aerobics and were conducted for 1.5 hours each. Participants walked at their will and under the team leader's direction in the Jackson Medical Mall three (3) miles, three (3) times a week. They were also challenged to complete a round trip "virtual walk" from Jackson, Mississippi to New Orleans, Louisiana.

There were four (4) monthly wellness sessions conducted by a nutritionist that provided information on nutrition portion size, label reading, and healthy cooking. A group of experts, including a medical doctor, presented information on managing hypertension. They attended a lecture on "Know Your Numbers." All participants were responsible for tracking their physical activity and dietary habits on a daily basis.

In addition, a motivational speaker addressed women's mental health and empowerment. For the final session of the five month intervention program, healthy snacks were provided and a healthy lunch was served. All participants received T-shirts, pedometers and an insulated shopping bag with several items to compliment preparation of healthy foods.

Post-Assessment

At the end of the five month intervention, the post-test measures were taken. The participants were asked to provide information on same 20 items that they addressed in the pre-assessment phase that related to risk behaviors for development of hypertension. These questions inquired about their consumption of fruits and vegetables, their knowledge of fat consumption and cholesterol, weight loss practices, measures of BP, the impact of BP on the body, and warning signs of high BP. They were also asked a few questions about mental health. The Mississippi Diabetes Foundation provided follow-up (post) health screenings, measuring kidney function, BMI, BP, glucose, and cholesterol. Pre-tests and post-tests were administered to assess participants' current knowledge and knowledge gained of hypertension and risk factors, as well as changes in the outcome measures (kidney function, BMI, BP, glucose, and cholesterol). The Step N2 Life Health Promotion evaluation examined the participants' perceptions about health promotion and awareness relating to hypertension and CVD.

Data Analyses

Statistical analysis was performed using SPSS 23.0 software (IBM, Armonk, NY, USA). Data are presented with frequencies, percentages, means, and standard deviations. The paired t-test statistic was used to compare means for the pre-assessment and the post-assessment. A 2-tailed p-value of < 0.05 was considered the threshold for statistical significance. The effect of intervention was measured by a comparison of pre-intervention and post-intervention measures.

Ethical Considerations

This study was undertaken with approval from the Institutional Review Board (IRB) at Jackson State University, Jackson, Mississippi, ensuring respect for the rights and integrity of the participants. Participants were informed that their involvement in the study was confidential, and they all signed an informed consent form.

Results

The effectiveness of the intervention was determined by examining the results of the paired t-test that was conducted to examine differences between the pre-assessment and the post assessment. Table 3 provides the details of the analyses computed. Knowledge of the participants increased significantly from the pre-assessment to the post-assessment in their answers to the following questions:

1. It would be better to eat a whole piece of fruit, than to drink a glass of 100% juice? ($p = .038$)
2. Which cholesterol is good for you? ($p = .015$)

No significant change was observed in the participants' responses to the other questions posed regarding their knowledge about hypertension and other risk factors for development of hypertension and CVD. The study shows evidence that participants' knowledge is malleable, to some degree, after a 5-month intervention program.

Table 3

Paired Samples t-test sample of pre-intervention and post-intervention knowledge of the study participants

Participants' Knowledge	Pre-Intervention	Post-Intervention	*p*-value
How many servings of fruit are suggested to eat each day?	1.9167 ± .51493	2.0000 ± .42640	.674
How many servings of vegetables are suggested to eat each day?	2.0000 ± .42640	2.0833 ± 28868	.586
Which of the following is the healthiest type of fat?	2.0000 ± .81650	1.8000 ± .63246	.168
It would be better to eat a whole piece of fruit, than to drink a glass of 100% juice?	1.3636 ± .50452	1.0000 ± .00000	.038
Which cholesterol is good for you?	1.5000 ± .52705	1.0000 ± .00000	.015
What are the symptoms of high cholesterol?	3.1000 ± .99443	3.4000 ± 1.07497	.081
What ethnic group is more at risk for high-cholesterol?	2.0909 ± .30151	2.0000± .00000	.341
What are the risk factors for high cholesterol?	2.3333 ± 1.30268	1.9167 ± 1.08362	.318
What is considered a high blood pressure reading?	1.1818 ± .60302	1.0909 ± .30151	.676

Participants' Knowledge	Pre-Intervention	Post-Intervention	p-value
What are the measures for reading high blood pressure?	$1.0833 \pm .28868$	$1.0000 \pm .00000$	.339
What organs can be affected when blood pressure is not controlled?	4.8333 ± 1.80067	4.8333 ± 1.64225	1.000
Which gender is mostly affected by high blood pressure?	$1.2500 \pm .45227$	$1.2500 \pm .62158$	.166
What are the risk factor for high blood pressure?	$4.6667 \pm .88763$	4.2500 ± 1.21543	.096
What are the warning signs of high blood pressure?	3.7500 ± 1.71226	3.8333 ± 1.52753	.884

Values are mean $\pm$ SD

Conclusion

This study tested the effects of a behavioral intervention program for participants seeking to initiate BP control. Because community-based research is rare, this intervention program, Step N2 Life, was developed and implemented by a group of community health workers in collaboration with the Jackson Heart Study (JHS) Community Outreach Center (CORC). These community researchers assumed the responsibility for conducting a community-generated intervention to make a difference in the lives of community neighbors. In addition to observed changes between the pre- and the post- measures, participants gave testimonies about the value, impact, and the benefits that participating in this research had on their lives. Participants praised the Step N 2 Life coordinators for their foresight to take the steps to engage them in this life-saving endeavor. Programs and activities like Step N2 Life have great value in helping communities to adopt specific strategies to control blood pressure, stress, weight, and overall health. The results illustrate that intervention programs, like Step N2 Life can be effective in assisting women living in the Jackson Medical Mall area to develop awareness that will enable them adopt healthy lifestyle changes and build protective factors to deter hypertension and related risk factors (Ferdinand, 2013).

Community-based strategies to prevent high blood pressure must emphasize lifestyle modification. This represents a strong and effective strategy to mitigate the rising health care costs and the burden of chronic diseases like hypertension (Laslet et al., 2012). The results of this study reveal that this type of intervention can have specific effect when conducted in neighborhoods and generated and managed by community-based groups. This is an effective way of improving people's lifestyles (King et al., 2015), emphasizing the importance of individual responsibility and individual self-care to ensure effective health management and reducing the impact of chronic diseases like hypertension (Booth, Prevost, & Guilliford, 2016; Kent et al., 2015). The most successful interventions are those that are created and managed by community-based groups that are willing to commit and make an investment in the well-being of their communities and that have a vested interest in the health and welfare of their families and their neighbors who will be impacted by their efforts.

The implementation of intervention programs like Step N2 Life involving community-based groups can lead to the development of health policy and a successful health research agenda if these intervention programs are formulated with strong, active community input. Success can be realized if this is viewed as a local public health issue and involves all stakeholders in order to fully address the health challenges that plague the African American community in Mississippi. These findings provide unique evidence of the benefits of interventions developed and managed by community groups. Most intervention programs are generally dominated by academic institutions. Findings provided here can drive future research using larger samples and multiple communities with comparison groups that may highlight the importance of community-based groups in leading efforts to reduce the impact of hypertension and cardiovascular disease in African American communities.

This was an exploratory study that was accompanied by some limitations. The authors did not use a comparison group to evaluate the benefits of the Step N2 Life intervention program against a control group. As a result, the improvements observed from the analyses could be attributed to factors other than the exposure to the intervention. This study involved a small group of community members. So, it is possible that the statistical analyses may be affected by the small sample size. To address this situation, future studies could test other communities with larger groups of participants using a control/intervention design. It is important that future research be conducted using larger numbers of participants and involving larger number of communities before we can generalize these findings to the larger African American communities. Future research may want to explore what knowledge areas are most malleable and which intervention activities lead to the most change in participants' knowledge.

Acknowledgements

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Commentary

The Community Health Model (CHM): A Conceptual Framework for Understanding

Racial/Ethnic Community Change

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Introduction

Over the last several decades, numerous processes and programs aimed at improving the health of communities have been proposed (Wallerstein, Yen, & Syme, 2011; Merzel & D'Afflitti, 2003; Kesler & O'Connor, 2001). Complex, multi-sectoral interventions that promote community ownership are now the norm, rather than the exception, with an increased emphasis on changing policies and the environment to facilitate the adoption of healthier behaviors. Building on the successes of anti-tobacco legislation has led to further empowerment of communities to create opportunities for healthy living.

The Centers for Disease Control and Prevention (CDC), other governmental agencies, and foundations have funded large community-based programs that have put these concepts into practice and experienced some success at eliminating health disparities and reducing risk behaviors related to chronic disease. A unifying model of community health was needed that was not only grounded in the scientific literature, but that also considered the experiences and programmatic successes observed in the field. It is useful, if not essential, to look back at the key lessons learned from this knowledge, theory, and practice, to extract the factors and processes needed to promote the health of a community.
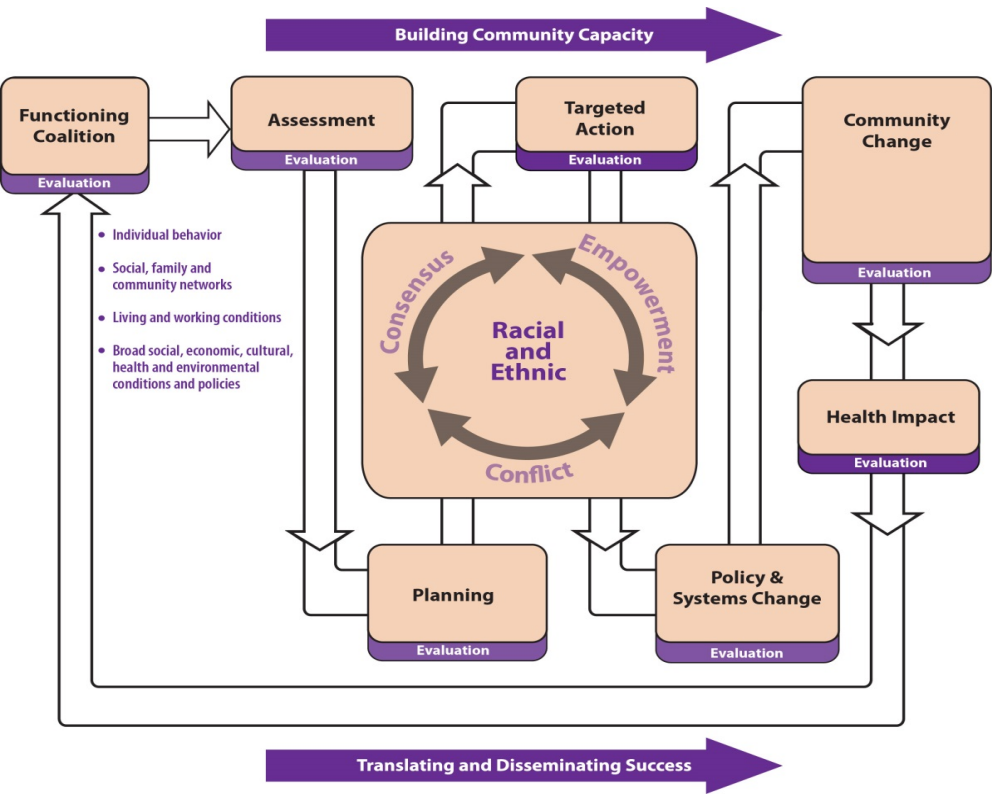
In 2010, the CDC, with input from its internal and external partners, proposed a model for community health that reflected the experiences of its programs, focused on eliminating health disparities, improving health behaviors, and achieving policy and environmental level change. The Community Health Model (CHM) borrowed frameworks from other community-based conceptual models, including, Minkler and Wallerstein's Community organization and community building typology (Minkler & Wallerstein, 2005), the Action Model to Achieve Healthy People 2020 Overarching Goals, and the Racial and Ethnic Approaches to Community Health (REACH) logic model. REACH is a national program administered by the (CDC) to reduce racial and ethnic health disparities. Awardee and partners implement culturally and linguistically appropriate strategies that address a myriad of health issues affecting African Americans, American Indians, Hispanics/Latinos, Asian Americans, Alaska Natives, and Pacific Islanders. To learn more about REACH, see the website: https://www.cdc.gov/nccdphp/dch/programs/reach/.

In the CHM (see Figure 1), there is a functioning coalition composed of community members and leaders, stakeholders, decision-makers, and partners well-versed in the community context. This is essential to the process. The model represents how coalitions engage in the community change process, impacting the social determinants of health throughout, and identify effective characteristics of each of these stages, with continued

feedback and evaluation. As the coalition proceeds through the community change process, the model highlights that there is a continuous process of negotiations. This mix of consensus, conflict, and empowerment is essential to create community change, reducing barriers, and achieving improvements in behaviors and risk factors, the elimination of health disparities, and achieving health equity.

The CHM illustrates the continuous process of evaluation and sustainability of coalition efforts, which informs the operation of the coalition in a cyclical loop of learning and improvement. This iterative process increases community capacity.

Figure 1. The Community Health Model

Community capacity is defined as "characteristics of communities that affect their ability to identify, mobilize, and address social and public health problems" (Goodman et al., 1998).

Organically, or through design, communities that experience success over time translate and disseminate that success to other communities. It is important to note that although this progression through the action stages can occur in a linear fashion, a nonlinear progression is common. Often, communities regress to earlier stages based on member attrition, evaluation findings, etc. In addition, stages are not isolated, e.g., identifying new partners works in tandem with planning. As the figure denotes, evaluation is systematic, constant, and **cyclical** to assure successful **program implementation.** Furthermore, in the ideal situation, issues pertaining to sustainability will be addressed and fostered throughout the process.

The next sections describe different components of the CHM and provide examples of REACH program successes that align with respective stages of the CHM model.

Building Community Capacity

All communities have assets. Community capacity may appear to be largely latent in communities, until they are provoked into action because of imminent threats or evolving needs. The community functioning and social capital literature suggests that the four fundamental characteristics of community capacity consist of: (1) a sense of community; (2) a level of commitment among community members; (3) mechanisms of problem solving; and (4) access to resources (Chaskin, 1999). Note: In the context of a community setting, the term social capital refers to the "specific processes among people and organizations, working collaboratively in an atmosphere of trust, that lead to accomplishing a goal of mutual social benefit" (Fulbright-Anderson & Auspos, 2006, p. 20).

These are characteristics that all REACH communities shared. REACH communities responded by leveraging social capital to collectively solve problems and improve the health of their communities. Their successes demonstrate that building community capacity is tied to long-term outcomes and the elimination of health disparities. Local capacity building is essential in changing the social and economic determinants of health; improving the physical or community environment; impacting health behaviors, literacy, and knowledge; and improving clinical care. Capacity building trainings were commonly provided to high-risk community members, or businesses and community organizations that served a racial/ethnic population.

Building Community Capacity Examples from REACH Programs:

- The Institute for Urban Family Health in New York, established a youth nutrition education program in churches.
- Southeast Chicago Development Commission, Inc. conducted capacity building workshops to build communication skills of members of the Southeast Diabetes Community Action coalition.

- The University of Arizona conducted a cervical cancer prevention training workshop for "promotoras" (community health workers).

Functioning Coalition

A functioning coalition is characterized by a collaborative history, a sense of community ownership and understanding, and representation of the community of interest. It is made up of members representing constituencies or organizations that adequately and diversely embody the community of interest, which helps to establish credibility of the partnership by the wider community (Granner & Sharpe, 2004). Striving for open communication and welcoming participatory and collaborative processes, members experience a high level of agreement regarding collective vision and goals (Butterfoss, 2007; Potapchuck, 2007). Members are committed to strengthening and sustaining the coalition and leveraging the financial, human, and social capital of their organizations (Graber, Huang, Drum, Chin, Walters, Heuer et al., 2008; Kegler, Twiss, & Look, 2000).

REACH coalition partners have included a rich mix of community-based organizations, state and local health departments, universities and other research institutions, faith-based organizations, tribal organizations, groups focused on older adults, local chapters of national voluntary health organizations, and national and regional minority organizations. REACH recognizes that achieving widespread community change to improve health requires engaging organizations beyond those focused on health.

Functioning Coalition Examples from REACH Programs:
- After examining the lack of physical activities for adult African Americans, Community Health Councils of Los Angeles engaged a multi-sector consortium to research and evaluate strategies to: (1) promote land-use management and urban design policy, (2) increase physical activity opportunities and improve existing food venues through regulatory practices and policy development, and (3) develop policies and promote investments that support new nutrition sources. This collaboration has led to environmental improvements.
- The Community Redevelopment Agency of Los Angeles developed an incentive package to attract grocery stores and sit-down restaurants to under-resourced communities. The Los Angeles City Council unanimously approved a proposal that prohibited new fast-food restaurants in South L.A. Council Districts 8 and 9 for at least 1 year.

Assessment

The collection of local data is important to provide baseline data for evaluation, to inform intervention strategies, and to encourage local ownership of the community change process. To determine the actual assets and needs of a community, both quantitative and qualitative data should be collected. A community assessment can be most effective when it involves multiple methods of data collection, respects both empirical data and stories, and places an emphasis on empowerment through community participation. This is especially true in underserved communities where ethnographic methods, such as focus groups and key informant interviews, have proven effective in providing locally relevant and culturally appropriate information relevant for change (Braithwaite et al., 1994; Merzel & D'Afflitti, 2003).

Assessment Example from a REACH Program:

The Medical University of South Carolina and the REACH Charleston and Georgetown Diabetes Coalition conducted a community needs assessment to improve diabetes self-management. The

Coalition discovered that people with diabetes had high interest in using the Internet to find important information about managing their diabetes. However, 50% of older community members and 40% of people with less than 12 years of formal education needed help using the Internet. The coalition built a library partnership to support and sustain diabetes education across the community. The library partnership promotes use of online health information in the context of support systems already in place for the African American community.

Planning

Community planning is a deliberate action approach for involving those directly and indirectly affected by critical problems to effectively and collectively address social, political, economic, and environmental forces that adversely influence health and health outcomes. This is a synergistic and an open system that fosters active and sustainable community coalitions that are based on mutual respect. All REACH awardees developed community action plans that were directly related to the organizations' goals, objectives, and day-to-day activities.

Planning Example from a REACH Program:

- The goal of the Chicago REACH 2010–Lawndale Health Promotion Project was to eliminate disparities related to heart disease and diabetes experienced by African Americans and Latinos in two contiguous Chicago neighborhoods using a community-based prevention approach. The awardee used multiple data sources that informed its community action plan. The triangulation of data sources from the planning phase enriched interpretation and led to more creative and feasible suggestions for programmatic interventions across the four levels of the ecological framework. Multisource data yielded useful information for program planning and a better understanding of the cultural differences and similarities between African Americans and Latinos (Levy, 2004).

Targeted Action

Targeted action stems from the planning process of a community coalition. It must be in alignment with the goals and priorities of the community action plan, and leverage community assets. Targeted action is responsive and flexible to community needs, and promotes interventions that are sustainable, practice- and evidence-based. Targeted action, as borrowed from the REACH 2010 logic model, is defined as "planned, identifiable, and discrete activities to produce change in the population of focus" (Tucker, Liao, Giles, & Liburd, 2006). Feedback from REACH grantees suggested that the actions conducted by the coalition must be flexible enough to be responsive to the needs of the community and must take advantage of unanticipated opportunities to garner successful outcomes. This term is expanded in this model to include not only change to the population of focus, but also change in the surrounding environment.

Targeted Action Example from a REACH Program:

- As a CEED, New York University School of Medicine (NYU School of Medicine) conducted the B Free CEED program to eliminate Hepatitis B Virus (HBV) disparities in Asian and Pacific Islander (API)

communities. The NYU School of Medicine educated API community members and social and health service providers about the risks and prevention of HBV in New York City. Additionally, B Free Centers of Excellence in the Elimination of Disparities engaged in concerted efforts to disseminate HBV information and intervention tools. To date, NYU School of Medicine B Free CEED has developed and maintains student mentor programs, and an online library of HBV resources aimed at researchers, health and social service providers, and API community leaders. This REACH grantee contributed to long-term improvements in HBV data collection.

Policy, Systems & Environmental (PSE) Change

PSE change strategies have been a cornerstone of CDC's efforts to prevent chronic diseases and promote health. REACH community-based programs have shown that there are different ways to achieve this type of change. Some coalitions have employed a grassroots strategy that unveiled the needs and injustices of a community that have shown the need for policy change. In this instance, community-driven political action occurs in order to change the community infrastructure. Other coalitions have instituted a "grasstops" strategy where community-based coalitions educated local decision-makers on community needs; thus serving as a catalyst for policies that support healthier living.

PSE Changes Examples from REACH Programs:

- Hidalgo Medical Services created policy change locally by partnering with various community agencies to reduce the number of vending machines in area schools.
- The University of Illinois at Chicago has worked to prevent and reduce diabetes and cardiovascular disease among the Latino and African American populations of the Chicago metropolitan area. Key PSE changes included developing a policy that provides data on food items sold in Chicago stores, and creating a collaborative of agencies to employ and train community health workers.
- The Inter-Tribal Council of Michigan worked to reduce the burden of chronic disease specific to cardiovascular disease and diabetes among three federally recognized communities in Michigan. The REACH awardee grantee awareness of chronic disease in communities and conducted cultural trainings at the state level, implemented a variety of worksite wellness policies, and revitalized the community environment to include more accessible recreational areas.

Community Change

Community change is about altering the status quo of neighborhoods. Strategies are implemented that target the physical, economic, institutional, and social factors that cause neighborhoods to become unstable or to decline. While the evidence base is neither strong nor robust enough to provide definitive answers to some of the most vexing questions about community change, the public health literature shows that positive community outcomes occur when community building strategies emphasize safety, education, employment, economic development, housing, youth development, and social services issues (Fulbright-Anderson & Auspos, 2006). However, a growing body of literature has documented promising lessons about interventions and factors that contribute to positive changes in communities (Blanchard, Narle, Gibbs, Ruddock, Grady, Brookes, et al, 2013; Jenkins, Myers, Heidari, Kelechi, & Buckner-Brown, 2011; Fouad, Partridge, Dignan, Holt, et al, 2010; Giles, Holmes-Chavez, & Collins, 2009; Findley, Irigoyen, Sanchez, Guzman, et al., 2004). For example, the use of

community collaborations to prevent violence, rather than relying solely on a law enforcement approach, is a strategy that has gained national acceptance (CDC, 2007).

Community Change Examples from REACH programs:

- In Boston, Massachusetts, nearly 1,000 African American and Latino children with asthma had 80% fewer hospitalizations, 56% fewer emergency department visits, and 41% fewer missed school days after participating in a 5-year comprehensive case management program led by low-income Boston Children's Hospital Community Asthma Initiative (CAI). The majority of these children live communities. CAI is replicating the programs in Alabama, Tennessee, and Ohio.
- In Brownsville, a low-income African-American and Latino neighborhood in Brooklyn, New York, the REACH U.S. Brooklyn Perinatal Network in New York supported two community health centers in putting into action an enhanced perinatal risk assessment (PRA) system and a community-based navigation system to link women with social services. As of December 2012, the health centers had screened an estimated 840 women using the PRA system and referred about half of these women to social service providers.
- In North Carolina, approximately 1,200 students in the Eastern Band of Cherokee Indians school system received 150–225 minutes of physical education each week, which meets the National Standards for Physical Education for grades K–12. At least half of this time is spent on moderate to vigorous physical activity.

Health Impact

Public health logic typically asserts that PSE change and community changes will lead to demonstrable positive community health outcomes.

Health Impact Example from a REACH Program:

- The Institute for Family Health/Bronx Health REACH/Center of Excellence for the Elimination of Disparities was awarded REACH funding under two initiatives, REACH 2010 and REACH U.S. Bronx Health REACH and partners were instrumental in eliminating whole milk and reduced the availability of sweetened milk in New York City, the largest school district in the country with 1,579 schools. In 2009, the City's Department of Health and Mental Hygiene conducted an analysis of the impact of the implementation by comparing annual milk purchases from 2004 through 2009. The data analysis suggest that per student per year, almost 5,960 calories and 619 g of fat were eliminated, or more than a pound of weight per child per year.

Evaluation

Program evaluation is essential to public health. Evaluation can be used to assess the value and impact of programs. Data improve program functions, can help redirect program activities when needed, and support appropriate education and messaging for the future. REACH communities often used qualitative and/or qualitative approaches to evaluate their programs.

Local Evaluation Examples from REACH Programs:

- The Charlotte REACH community-based interventions were created to eliminate rates of heath disparities in cardiovascular disease and diabetes. Interventions targeted all five levels of influences: intrapersonal, interpersonal, organization, community, and policy. Charlotte REACH conducted a qualitative assessment using 10 focus groups. The results of this assessment provided feedback for improving community health promotion activities and developing program sustainability (Debate, Plescia, Joyner & Spann, 2004).
- The REACH Detroit partnership used a community-based participatory approach at multiple levels to reduce risk factors for type 2 diabetes in African-Americans and Latinos residing in low-resource neighborhoods in east and southwest Detroit. They assessed whether the REACH Detroit community-based diabetes lifestyle intervention delivered by trained community residents to Africans and Latinos with type 2 diabetes resulted in significant diabetes-related knowledge and behavioral changes and glycemic control. Using a mixed-methods approach, REACH Detroit concluded that their program initiative resulted in significant improvement in dietary and diabetes self-car related knowledge and behaviors as well as important metabolic improvements (Two Feathers, Kieffer, Palmisano, Anderson, Sinco, et al., 2005).

Translating and Disseminating Success

Developing a translation and dissemination plan is an integral part of the collaborative planning process. Collecting data on intervention programs, practices, and services, and sharing this knowledge is beneficial because it increases the availability of program information within formal (e.g., stakeholders) and informal (e.g., the community at large) networks.

REACH communities adapted the ecological perspective in their messaging (i.e., influencing multiple social, economic, and political environments). Audience is an important criteria to consider when designing and implementing dissemination strategies. REACH examples included tailored messages at the individual level, targeted messages at the group level, social marketing at the community level, media advocacy at the policy level, and media campaigns at the population level. For example, REACH Detroit Michigan developed separate culturally and linguistically appropriate intervention curricula for African American and Latino adults with type 2 diabetes. Moreover REACH Detroit trained community residents to deliver the curriculum designed to improve dietary, physical activity and diabetes self-care behaviors (Two Feathers et al., 2016).

In addition, public health communication strategies were often intertwined with ongoing intervention efforts such as coalition building, networking, and community organizing. REACH awardees continue to engage in multiple dissemination activities—e.g., articles in peer reviewed journals, success stories, white papers, and technical reports. Dissemination activities varied by funding level.

Translating and Disseminating Success Examples from REACH Programs:

- REACH US CEEDS significantly produced more peer-reviewed journal articles than Action communities. Between 2008 and 2011, REACH US grantees disseminated 1,414 culturally tailored products.
- Grantees also used digital media to interact with consumers and stakeholders. Internet communications methods, including email, websites, blogs, Facebook, twitter, YouTube and webinars, were the most frequently reported method of distribution.

Conclusion

The value of community coalitions in working to improve population health has widely received affirmation. They operate through collaborative partnerships and community stakeholders [using social capital] to build community capacity. As in predominantly white communities, to address the social determinants of health and associated risk factors, a community health model requires a comprehensive approach to sustained racial/ethnic community engagement. However, the tension experienced by racial/ethnic communities may be heightened in the conflict, empowerment, and finally consensus building as depicted in Community Health Model (CHM). This tension is intrinsic and cyclical, and never fully abated. This characteristic is unique and peculiar to racial/ethnic communities; it is the one salient distinguishable attribute that differs from other community action models.

Acknowledgements

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Commentary

Enhancing Maternal and Child Health in Mississippi: Is the One Key Question® (OKQ)

Initiative a Potential Solution?

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Background

The birth of an infant is one of the most celebrated moments of life; however, for many, pregnancy comes as a surprise. According to recent estimates, approximately half of all pregnancies in the U.S. (6.1 million) are unintended (Finer & Zolna, 2011). Unintended pregnancies are defined as either unwanted (the pregnancy occurred when no children, or no more children, were desired) or mistimed (the pregnancy occurred earlier than desired) (Division of Reproductive Health, 2015)—and are often the result of not using contraception, inconsistent, or incorrect use of contraceptive methods. Unintended pregnancy rates provide an understanding of the population's fertility and unmet needs (Division of Reproductive Health, 2015).

According to the Guttmacher Institute, approximately 36% of pregnancies in every U.S. state were unintended, with 28 states including the District of Columbia, reporting more than 50% unintended pregnancies in 2010 (Guttmacher Institute, 2016). The highest rates of unintended pregnancy occurred in Southern and Southwestern states, as well as heavily populated areas. Women who are more likely to experience unintended births include: cohabiting women, minority women, and women with less education or income (Division of Reproductive Health, 2015).

In the same year (2010), Guttmacher's Mississippi fact sheet reported 35,000 (62%) unintended pregnancies. Sixty-six percent (62%) resulted in births, 19% ended in abortions; the remainder resulted in miscarriages. Mississippi's teen pregnancy rate was 70 per 1,000 among women aged 15–19 in 2011, an increase from 57 per 1,000 in 2010 and greater than the national rate of 52 per 1,000.

Unintended pregnancy is associated with an increased risk of problems for both mom and baby. If a pregnancy is not planned before conception, a woman may not be in optimal health for childbearing. For example, women with an unintended pregnancy could unknowingly engage in behaviors that are harmful to an infant's development. These behaviors include smoking, drinking, drug use, not managing chronic illnesses or stress.

"By helping women control the timing, number, and spacing of births, family planning has many benefits for a woman and children she may have in the future. Planned pregnancies—which for most women require contraception—benefit women by allowing them to take steps to optimize their own health before pregnancy and childbirth. An unintended pregnancy may have significant implications for a woman's health, sometimes worsening a preexisting health condition such as diabetes, hypertension, or coronary artery disease. Planned pregnancies improve the health of children as well, as adequate birth spacing lowers the risk of low birth weight, preterm birth, and small-for-gestational age (Lawrence, III, 2011)".

Economic Impact

Unintended pregnancies are not only associated with increased health problems for mother and child but also carry a large economic burden. In 2010, over $267 million was spent on unintended pregnancies in Mississippi. Approximately $226 million came from federal funding and the other $40 million paid by the state. The total public cost for unintended pregnancies statewide was $442 per woman aged 15-44, more than $200 greater than the national cost ($201 per woman) {State Facts About Unintended Pregnancy, 2016}.

In 2014, 64% of Mississippi births were financed by the state Medicaid program (The Henry J. Kaiser Family Foundation, 2016). Public programs paid for at least 75% of unplanned births in eight states and the District of Columbia. All but two of the nine jurisdictions are located in the South (as categorized by the U.S. Census Bureau) and in a region with high levels of poverty (Sonfield & Kost, 2015b). "Of the eight states which received public funding for unplanned births, Mississippi had the highest proportion (82%) of pregnancies." (Sonfield & Kost, 2015; *Strategies to Increase Access to Long-Acting Reversible Contraception (LARC) in Medicaid*, 2016). Since Medicaid spends over $10 billion dollars on complications accompanying unplanned births, unplanned births in MS account for a large part of Medicaid's expenditure.

Indirectly, complications from unplanned pregnancies (i.e., preterm birth) add to the economic impact. In 2007, the Institute of Medicine reported that the cost associated with premature birth in the United States was $26.2 billion each year (Behrman & Stith Butler, 2007).

According to the March of Dimes, preterm births-- a complication of unplanned pregnancies-- cost the Nation (March of Dimes, 2015):
- $16.9 billion in medical and health care costs for the baby
- $1.9 billion in labor and delivery costs for mom
- $611 million for early intervention services. These are programs for children from birth to age 3 with disabilities and developmental delays. They help children learn physical, thinking, communicating, social and self-help skills that normally develop before age 3.
- $1.1 billion for special education services. These services are specially designed for children with disabilities ages 3 through 21. They help children with development and learning. Children can get these services at school, at home, in hospitals and in other places, as needed.
- $5.7 billion in lost work and pay for people born prematurely

Preconception Health Care

Per the Centers for Disease Control (CDC), preconception health and healthcare is defined as active steps taken to ensure the health of a baby in the future. It is usually the first step in addressing unwanted pregnancies. One of the goals of Healthy People 2020 is to improve pregnancy planning and spacing, and prevent unintended pregnancy. Family planning efforts that can help reduce unintended pregnancy "include preconception care, increasing access to contraception, particularly to the more effective and longer acting reversible forms of contraception, and increasing correct and consistent use of contraceptive methods overall among those who are sexually active but wish to delay or avoid pregnancy" (Division of Reproductive Health, 2016). Unfortunately, many healthcare providers assume that women share the same desires regarding pregnancy and children and therefore do not offer these services to all patients.

In *Addressing potential pitfalls of reproductive life planning with patient-centered counseling,* Callegari et al. (2016) outline many of these assumptions and provide alternatives to fostering the conversation of pregnancy with patients in a way that is patient centered. According to Callegari et al., (2016) women may experience certain pitfalls when discussing reprodutive life planning options with their health provider. Some of these pitfalls include: (1) providers assuming that all women share the same intentions in getting pregnant or avoiding pregnancy; (2) providers assuming that all women (married, single, teens) believe that having an unintended pregnancy is a negative consequence; (3) providers assuming that women are interested in pregnancy planning and find it meaningful and relevant to their lives; and (4) providers possibly allowing their personal/implicit biases about women's reproductive goals and desires to impact their counseling. To avoid some of these pitfalls, Callegari et al. (2016) recommend that providers engage in patient-centered alternatives such as: (1) having an open dialogue with women that allows them to express their feelings (mixed, ambivelent, joy) about pregnancy; (2) recognize that some women irrespective of stage in life may not be interested in pursuing pregnancy, however, they see no problems with an unintended pregnancy; (3) acknowledging that some women are not interested in planning a pregnancy or may believe that planning a pregnacy is unachievable for them due to various social and environmental circumstances; and (4) providers respecting women's reproductive autonomy by refraining from interjecting their opinion about "appropriate" reproductive health decisions for women.

A preconception care visit can optimize women's chances of a healthy pregnancy by screening for conditions that adversely affect pregnancy and reducing toxic exposures to the infant. Despite decades of high-quality evidence and several national initiatives, only 33% of women take folic acid daily – a preconception care recommendation (Behrman & Stith Butler, 2007) before conception to prevent major birth defects of the brain and spinal cord. This may be due to the fact that these women are not actively planning on becoming pregnant or that their health providers are not discussing folic intake with them.

Opportunities for Action

Many states and public health organizations have employed various methods to decrease unplanned pregnancy rates, using campaigns and adolescent-focused messaging. Screening women on their pregnancy intentions may prove worthwhile in reducing unwanted pregnancies and improving birth outcomes especially within communities most affected by unintended pregnancies (minority and low-income women).

One program that has shown to be effective at starting the conversation about pregnancy intentions is The One Key Question® (OKQ) Initiative. The OKQ Initiative is preconception care, encouraging primary care health teams to routinely ask women ages 18-50 "*Would you like to become pregnant in the next year*?" Based on the patients' response, she and her physician would create a plan of reproductive health services suited to her needs. These may include: folic acid supplementation, preconception care, and or contraceptive services.

The trademark question "*Would You Like to Become Pregnant in the Next Year*?" was developed by the Oregon Foundation for Reproductive Health (OFRH) as a part of the One Key Question® Initiative (OKQ). The "question" is a simple solution to making women and families healthier and ensure that more pregnancies are wanted, planned, and as healthy as possible. OKQ encourages primary care providers to routinely ask women about their reproductive health needs; asking women about their pregnancy intentions within the next year reduces stigma and increases comfortability with family planning conversations. In addition, the woman is able to focus her attention on her own life and health (Bellanca & Hunter, 2013).

By asking women "*Would you like to become pregnant in the next year*?" primary care clinicians can more fully support women's preventive reproductive health needs, such as preventing an unintended pregnancy or preparing for a healthy pregnancy. One Key Question® was part of a unique survey of nearly 2,000 women of childbearing age who receive health care at the nation's community health centers. It found that 90% of participants reported not actively seeking to become pregnant in the next 12 months. Yet more than 3 out of 10 were not using any preventive measures to avoid pregnancy (Wood et al., 2015).

In a state with birth outcomes such as Mississippi, could asking women of reproductive ages "*Would you like to become pregnant in the next year?*" impact our high rates of unintended pregnancy? We hypothesize that this simple question, if implemented, could yield tremendous results for Mississippi women and their children. This model would start dialogue among women and families and the opportunity to think about and plan for their reproductive future.

Call to Action!

Here are some actions you can take to influence the future directions of family planning in Mississippi: (1) Try asking women the One Key Question® *"Would you like to become pregnant in the next year?"* in your clinic and note its effect on preconception care and contraception services and share your experience with the OFRH. (2) Encourage other professionals and colleagues to pilot the OKQ model. Go to www.onekeyquestion.org to learn more. For more information on OKQ and its implementation in Mississippi, contact the authors.

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Commentary

Treating Depression: A Strategy for Preventing and Reducing Chronic Illnesses

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Depression and its Effect on African American Women

Depression is characterized by the presence of five (or more) of the symptoms listed below that have been present during the same 2-week period and represent a change from previous functioning. The symptoms must last all day or nearly all day. The symptoms are depressed mood, markedly diminished interest or pleasure in all or almost all activities, significant weight loss when not dieting or weight gain, insomnia or hypersomnia, psychomotor agitation or retardation, fatigue or loss of energy, feelings of worthlessness or excessive or inappropriate guilt, diminished ability to think or concentrate and recurrent thoughts of death. At least one of the symptoms must be either depressed mood or loss of interest or pleasure (American Psychiatric Association, 2013).

Depression has been called a major health problem in the lives of women (Glied & Kofman, 1995). Depression affects more than 17 million American adults annually. Depression is often associated with higher medical costs, greater disability, poor self-care and adherence to medical regimens, and increased morbidity and mortality from medical illness (Katon & Sullivan, 1990). Women are approximately two times more likely than men to suffer from depression (Sagui & Levens, 2016*).*

Depression is more likely to occur among those who are of lower socioeconomic status and among those who are less educated and unemployed (McGrath, Keita, Strickland & Russo, 1990). African American women are more likely to have lower socioeconomic and educational status, be unemployed, have poorer physical health and be a single parent (McGrath et al., 1990).

Depression is more likely to be present in individuals with physical illnesses than in individuals without physical illnesses

Approximately 25% of individuals with medical conditions (e.g., diabetes, cardiovascular heart disease (CHD), cerebrovascular accident (CVA), or cancer) will develop depression (Ettinger, Reed, Goldberg & Hirschfield, 2005; Lamberg, 2005; Tan, Shafiee, Wu, Rizal & Rey, 2005). Because depression is more likely to be exacerbated in individuals with physical health problems than in individuals without physical health problems, African Americans are especially vulnerable to depression due to their high rate of physical health problems, including hypertension, diabetes, and CVAs. African American women tend to have higher rates of

hypertension, exceeding those of African American men, other ethnic groups, and Caucasian women (Ettinger et al., 2005; Lamberg, 2005; Tan et al., 2005).

Compared to other minority groups, African Americans have higher rates of diabetes, putting them at greater risk for associated complications including blindness secondary to retinopathy, diabetic nephropathy, end-stage renal disease, and nontraumatic lower extremity amputations (Briggs, Gary, Bone, Hill, Levine & Brancati, 2005). These associated complications heighten the probability of depression among African Americans resulting in an increase in diabetic complications (Levin, Routh, Kang, Sanders, & Dunn-Meynell, 2005).

CVAs, or strokes, are the fifth leading cause of death in the United States, and CVAs are a leading cause of long-term severe disability (American Heart Association and American Stroke Association, 2016). Approximately 800,000 people in the United States experience a CVA each year (American Heart Association and American Stroke Association, 2016). More African Americans than Caucasian Americans, particularly African American women, suffer from CVAs each year (National Center for Chronic Disease Prevention and Health Promotion, 2016). Approximately 10-27 % of people diagnosed with a CVA will also experience symptoms of major depression (National Center for Chronic Disease Prevention and Health Promotion 2016).

Higher incidences of CVA and cancer have been linked to smoking in African Americans (Repetto, Caldwell, & Zimmerman, 2005). Depression has been shown to be more commonly experienced by cigarette smokers than nonsmokers and for African American women who are smokers, there is a significant association between smoking dependence and depression (Ludman, Curry, Grothaus, Graham, Stout & Lozano, 2002). These statistics suggest that African American women, compared to other demographic groups, are at an increased risk for health-related depression.

The evidence indicates that there is a relationship between depression and chronic health conditions. This relationship has important treatment outcomes and healthcare expenditure implications. For example, health-related emotional distress, or depression, has been linked to poorer treatment adherence for chronic diseases such as diabetes (Gonzales, Shreck, Psaros & Safren, 2014). Depression also increases healthcare expenditures because of the associated costs with prescriptions and additional treatment. Work by Bhattacharya, Shen, Wachholtz, Dwlbedi, and Sambarmoochi (2016), however, showed that healthcare that incorporates treatment for

depression reduces healthcare costs for patients with a chronic health condition and depression over time. Bhattacharya and colleagues (2016) reported that total healthcare expenditures were reduced by as much as 28% for patients who had chronic health conditions and depression when the patients received treatment for their depression.

Conclusion

The full extent of the relationship between chronic health conditions and depression is not clear because depression may not be reported by persons in underserved communities seeking treatments for physical health problems for several reasons including (1) an unawareness of signs and symptoms of depression, (2) an unawareness of the association between physical health problems and depression, and (3) fear of the negative stigma associated with depression. Related to (1) and (2), public health policy needs to include intervention for

those who are diagnosed with depression and for those who have additional risk factors that place them at risk for chronic health conditions such as CVAs.

Public health policies that are designed to target prevention and reduction of chronic health problems need to address health in a holistic manner. Prevention-based models that target chronic physical illnesses usually include the attainment of physical goals as their outcome. A more dynamic rendering of the prevention-based model include early awareness of symptoms related to chronic physical illnesses, early awareness to symptoms related to emotional distress or depression and prevention modalities that address these symptoms.

Depression treatment may act as a buffer against the stress that leads to and exacerbates the severity of chronic health conditions. Regarding the fear of the negative stigma, it is time to debunk the stereotypic depictions of the strong African American female caricature. The truth of the matter is that a strong African American female is one who understands the dynamics of balance in all that she does. The strong African American female should be one who understands the need of self-care as a means of negating the voluminous documentation that indicates that she is a weakened vessel emotionally and physically. She should minimize the voices of tradition and cultural norms that say that you do not need help for emotional and mental health concerns.

Depression is treatable. Treatments are usually individualized and may include various combinations of medications, psychotherapy, social support, self-care, physical care and/or alternative therapies. An appropriate diagnosis is important for optimal management of symptoms. The inclusion of patient-specific treatment(s) for depression can help to prevent undesirable health conditions and outcomes.

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Commentary

Designing and Implementing a Prevention Program that Targets Language and Literacy Development

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Introduction

Over the past decade, there has been a wealth of studies that have documented the negative effects of poverty on child development (Brooks-Gunn, Duncan, Klebanov, & Sealand, 1993; Duncan, & Brooks-Gunn; 2000; Hammer & Weiss, 1999; Hart & Risley, 1995; Mayer, 1997). The results of this work has led to a growing interest in using the skills of speech-language pathologists (SLPs) to work with families from diverse sociocultural and economic backgrounds from a prevention model (Oetting, Pruitt, & Roy, 2006; Watkins, Lybolt, & Furey, 2002).

A lot of attention has been given to the components of home literacy practices including home literacy environments and parent-child book reading interactions (Morgan, 2005; NELP, 2009; Purcell-Gates, 2004; Roberts et al., 2005; van Kleeck, 2006; Weigel et al., 2006). Researchers have examined home literacy practices including shared book reading frequency, maternal reading strategies, child's enjoyment of reading, and maternal sensitivity. The work done in this area has shown that early literacy practices influence later academic success. For this reason it is imperative for all children not only to have exposure to literacy practices prior to formal education, but to also become accustomed to the types of literacy behaviors that will be required in an academic setting.

The purpose of this paper is to describe a caregiver training program that is designed to ensure that children from minority cultures enter school with the pre-literacy skills necessary to deal with the literacy demands of mainstream school practices. Caregiver training programs involve teaching caregivers how to help their children develop language and literacy skills and encourages caregivers to increase the frequency and quality of activities that facilitate language and literacy activities in their homes (Crain-Thoreson, Dahlin, & Powell, 2001; deJong & Leseman, 2001; Hoff-Ginsberg, 1991; Senechal, LeFevre, Thomas, & Daley, 1998). The logic behind this training is that by targeting both areas (quantity and quality) one would typically see change in the children's receptive language skills, emergent reading behaviors, and concepts of print and letter knowledge, increasing their chances for success in literacy development and academics.

The parent training program described here was developed using the sociocultural theoretical perspective of language-literacy development and Vygotsky's theory of social learning. The sociocultural theoretical perspective of language-literacy development views book reading practices as culturally defined and language development is considered in its cultural context (Bronfenbrenner, 1979). Vygotsky's (1978) theory of social learning purports that language develops as a result of children being active in their environment and through the interactions that occur between children and adults. Considering research from the field of

prevention science which suggests that prevention programs are successful only if there is a fit between the source, the message, and the audience, the program was described to each participant and the link between the behaviors targeted, language and literacy development, and later academic success were explicitly stated.

Influenced by Vygotsky's social learning theory and the prevention science literature, I designed a training program that occurred in the caregivers' and children's natural environment and was based on training activities and materials that were relevant and a cultural "fit" for the participants. The training program was used with 20 African American mothers/grandmothers and their preschool children in southern Louisiana. The purpose of the training program was to increase the parents' use of evidence-based strategies during book reading with their children. The program is detailed next.

Parent Training Program

Prior to the training program, a caregiver-child shared book reading activity was video-recorded and from the recording, the caregiver's reading behaviors were classified and tallied for pre-training data. To begin the training program, each caregiver received an orientation and a reading schedule. During the orientation, the importance of reading was explained and it was explained to the participants that the literature suggests that certain behaviors increase the benefits of shared reading. Following the orientation, a pamphlet that provided a written definition of each behavior and two written examples was used as a way to introduce each behavior. The four behaviors that were targeted included (1) text to life utterances (comments and questions about the story used by the caregiver to make connections to the child's experiences (Hammer et al., 2005; van Kleeck et al., 1997); (2) interpretations (utterances in which caregivers asked the child to make predictions or required the child to make inferences about the story); (3) references to print (any comments, questions, or requests about print); and (4) tracking print (the adult reader runs her finger under the text as she reads).

The program consisted of three days of training. Each day of training began with a review of the pamphlet that explained each of the four targeted behaviors. The primary instructional strategy for Day 1 of the training program was a four-minute training video. After reviewing the pamphlet, the caregiver watched the training video with the SLP/researcher. For each of the behaviors targeted in the video, a definition of the behavior was followed by three different brief vignettes in which an adult was depicted using the target behavior during shared book reading with a preschool child. For example, for tracking the print, three different vignettes showed an adult pointing to the text as she was reading.

The primary instructional strategy for Day 2 of the training program was modeling. After reviewing the pamphlet, the SLP/researcher modeled or read with the child utilizing the targeted behaviors while the parent observed. While reading the book with the child, the SLP/researcher used each targeted behavior at least three times.

The primary instructional strategy for Day 3 of the training program was video feedback. After reviewing the pamphlet, the caregiver was asked to engage her child in a book reading session using the behaviors that were being targeted. The interaction was video-recorded. After the parent finished reading the book to her child, the SLP/researcher and the parent watched the videotape and the SLP/research provided

verbal feedback to the caregiver. Throughout the training, parents/caregivers were encouraged and allowed to ask questions during the modeling and feedback sessions.

At the end of each training day, a probe was collected to measure use of the targeted behaviors. After the probe, each caregiver was given two books and was asked to read the two books two times over the next day to practice using the targeted behaviors. A final probe was collected a week after the training program ended to measure how well the caregivers maintained the newly learned reading behaviors.

Results and Recommendations

Detailed results from the parent training study can be found in Morris (2010). In short, analyses of the data revealed that all of the caregivers increased their use of the behaviors targeted in the training program and that book reading sessions increased in length and quality suggesting the parents were a lot more interactive than they had been prior to the training. Qualitatively, parents were very positive about the training and reported they really enjoyed learning the strategies. Some even commented that they did not realize the need to do these things while reading with their children. These comments highlight the importance of sharing the knowledge we have as professionals with parents and caregivers so that they understand the impact that they can have in their child's learning.

Based on the findings of my caregiver training program, below I provide some suggestions for designing effective parent training programs.

1. **Provide parents with written information** about the program that they can refer back to in the absence of the professional. Recall that each session began with a pamphlet. The parents kept a copy of the pamphlet so that they could refer to it if they needed to during the practice with their child.
2. **Identify the fit or the motivation for the participants** and make sure the population you are training will be motivated by the proposed outcome. For example, during the orientation the connection between the training and the possible outcome for the children was explained. The parent was able to identify from the very beginning why adding these strategies to her repertoire would help her child in the future in regards to academic success.
3. **Present information using different methods of instruction**: For the current program, three different types of training strategies were utilized: a training video, modeling, and video feedback. Parents commented that they really enjoyed having the information presented in a variety of ways.
4. **Allow participants to practice the behaviors being targeted and provide feedback.** When asked if they preferred one method of training over the other, many stated they really enjoyed the last training session the most because it allowed them to get feedback immediately about how they were doing. They also commented that they liked for the SLP/researcher to point out missed opportunities and found praise from the SLP/researcher to be encouraging. The video feedback allowed them to experience immediate reinforcement.
5. **Provide home-based or community-based training as opposed to training at the university or clinic.** The program discussed was a home-based training program. Of the 60 training sessions conducted, the majority were completed at the participants' home or community (90%, n = 54) rather than at the university (10%, n=6) . The six sessions that were completed at the university were at the

6. request of the participants. Home-based or community-based training provides a more natural context for the family and it is more convenient for the family.
7. **Provide additional resources if necessary for the training to be successful**. Do not put the burden on the family to obtain additional resources. For example, in my training program, the
8. families did not have to purchase their own practice materials. Instead, the SLP/researcher provided the books for the families to use to practice the behaviors and the families were able to keep the books once the program was completed.
9. **Have a genuine interest in the populations being trained.** Families know if researchers are genuinely interested in the welfare of their children or loved ones.

Conclusion

In summary, in the area of parent training and prevention, all speech-language pathologists, educators, and other public health professionals have a duty to the populations that they serve. The parent training program outlined in this paper was used with parents of typically developing children in an effort to facilitate language and literacy development, however the instructional strategies used can be applied to prevention and training programs in various areas of public health (e.g., nutrition, exercise, dental care).

Acknowledgement

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Commentary

A Preventive Intervention Model for Preschool Children Who Are At-Risk for Language and Literacy Difficulties

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Introduction

During the early childhood years, children develop knowledge about print (i.e., print knowledge), sound (i.e., phonological awareness), and oral language (e.g., vocabulary, grammar). Print knowledge, phonological awareness and oral language provides the foundation for literacy and learning that enables children to learn to read in early primary grades and then read to learn in later primary grades. Reading, then, is an essential skill because it is the gateway to learning and future success in life.

The purpose of this paper is to describe the Preschool Language and Literacy Enrichment Clinic (PLLEC) at Jackson State University,[1] a clinic designed to help children build their foundation for literacy and learning. The goal of the PLLEC is to provide speech, language, and literacy experiences, from a preventative model, to at-risk preschool children, ages three to five years, in an inner city preschool center using a collaborative and an embedded-explicit approach. Targeting the emergent literacy skills of preschool children who are considered to be at-risk, or vulnerable, for later literacy problems is a form of primary prevention because the intent is to arrest, or prevent, reading problems before they are able to manifest. The PLLEC takes this focus by promoting the development of appropriate pre-literacy and language skills within preschool classrooms using evidence-based methods. Before describing the PLLEC, we start by reviewing the literature that guided the conceptualization of our language and literacy prevention program.

Vocabulary as a Focus of the PLLEC

Vocabulary instruction is a critical component of language and literacy programs for early learners because of the role of vocabulary in language development and later reading achievement (Spencer, Goldstein, and Kaminski, 2012). Children's vocabulary – words that are both heard and spoken – have been shown to be

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[1] The Department of Communicative Disorders, housed within the School of Public Health, at Jackson State University operates the Preschool Language and Literacy Clinic through its Central Mississippi Speech, Language, Hearing Clinic.

related to and predictors of later literacy skills (Hart & Risley, 1995; National Early Literacy Panel, 2008). Hart and Risley (1995) as an example, found a positive relationship between the number of words parents addressed to their children across time and the number of words spoken by the children at age three. That is, the more words children heard, the more words the child used at age three. Subsequent analyses showed that vocabulary measures (use and rate of growth) at age three were predictive of language and literacy skills at ages nine and ten – namely receptive vocabulary, receptive and expressive language, and reading comprehension. More recent studies have also shown children's early vocabulary skills to be related to their later literacy skills such as phonemic awareness (Ouelette & Haley, 2013), word reading (Kim, Apel & Al Otaiba, 2013; Ouelette, 2006), and spelling (Kim, Apel & Al Otaiba, 2013).

Emergent Literacy as a Focus of the PLLEC

Emergent literacy refers to children's preliterate skills related to reading and writing that are typically acquired in the preschool and kindergarten years before the achievement of conventional literacy. The four main areas of emergent literacy that are shown to be most pivotal in transitioning students from being 'pre-readers' to 'readers' are phonological awareness, print concepts, alphabet knowledge and literate language. These skills are achieved by young children through exposure to literacy-promoting activities such as shared storybook readings with adults (e.g., parents, teachers), playing word games and rhyming, experience with print through books and magazines, and the use of crayons, pencils, and markers during every day routines at home, school, and play (Justice & Kaderavek, 2002). Exposure to these types of literacy activities helps to prepare children for the formal teaching of reading and writing in kindergarten and the elementary grades.

Children's early exposure to literacy activities has an important impact on their future literacy skills as well. Studies show that children's early measured phonological awareness abilities are predictive of their spelling (Kim, Apel & Al Otaiba, 2013) and word reading when measured at a later time (Kim, Apel & Al Otaiba, 2013; National Early Literacy Panel, 2008). That is, children who had higher emergent literacy skills (i.e., phonological awareness) at younger ages were likely to have higher spelling and word reading at older ages.

The Preschool Language and Literacy Clinic

Given the critical roles that early vocabulary development and emergent literacy skills play in later literacy skills, we created our PLLEC to provide structured language and emergent literacy enrichment sessions to help local preschool children, many of whom are considered to be at-risk, develop the foundational skills needed for successful literacy development. Guided by the work of Justice and Kaderavek (2004), Kaderavek and Justice (2004), and Spencer, Goldstein and Kaminiski (2012), we adopted an embedded-explicit approach for teaching vocabulary and emergent literacy skills. Embedded approaches are more naturalistic and child directed and include repeated exposure to storybooks as a natural context whereas explicit approaches are adult-directed and focus on continuous, organized exposure to specific emergent literacy targets, such as phonological awareness (Justice & Kaderavek, 2004; Kaderavek & Justice, 2004). Typically, emergent literacy approaches in classroom environments have been either embedded or explicit; but when combined, the embedded-explicit model takes an integrative approach to emergent literacy intervention which Justice and Kaderavek (2004) argue to be effective for use with at-risk children.

Through a collaborative and an embedded-explicit approach, the goal of the PLLEC is to prevent literacy problems before they manifest by enriching children's language and promoting emergent literacy skills. This goal is accomplished by providing weekly classroom-based language and literacy enrichment sessions to children ages three to five by graduate student-clinicians assigned to the PLLEC. The graduate student clinicians work collaboratively with their speech-language pathology supervisors and the classroom teachers to plan and implement language and literacy enrichment sessions to preschool children in their respective classrooms. Language and vocabulary enrichment, concept development, and increasing phonological awareness skills are the focus areas of the sessions. These skills are targeted through shared storybook readings, explicit mini lessons that focus on either basic preschool concepts or phonological awareness, craft projects, and writing activities. All activities are language-rich with an emergent literacy focus.

The following is a sample PLLEC lesson using *The Frog with the Big Mouth* book written by Teresa Bateman and illustrated by Will Bateman (2008) designed by graduate student-clinicians (the second, third, and fourth authors) assigned to the PLLEC. After gathering the children on the carpet, the shared storybook reading session begins by reviewing book concepts (e.g., front of the back, back of the book, spine of the book, author, illustrator, title, words) as a way to target the children's print knowledge. The storybook is read to the children using techniques that make book readings interactive, engaging, and language-rich. Briefly, interactive book reading involves the children in the story-sharing process by asking the children questions related to the story, answering the children's questions, soliciting predictions from the children, relating the book to the children's personal experiences, elaborating on the children's ideas and asking the children to recall information from the story (Rodriguez, Hines & Montiel, 2009). Using *The Frog with the Big Mouth* book as an example, questions related to the story (e.g., Where did the frog live? What did the frog like to eat?), to the child's life (What other animals have you seen that are speckled?), and those that require the child to make predictions (e.g., What do you think the animal with the bright beak and big feathers is?) can be asked during the reading. This interactive style of the storybook reading, rather than just having the children to silently listen, functions to engage the children in the reading session. The graduate student-clinicians use other ways to engage the children in the storybook reading such as reading with enthusiasm, varying intonation, voice pitch and volume, using hand movements, gestures, and repetitive phrases, having the children to imitate sounds, and embedding short songs and chants in the storybook reading. In this way, children are actively participating in the shared storybook session, making it more likely that they will recall and retain information and lessons from the story.

Language richness is the other important aspect of the shared storybook reading and it is accomplished in many ways. One of the primary ways that we make the language and literacy enrichment session language-rich is by naturally embedding the teaching of three to five vocabulary words. Vocabulary words from the storybook are selected using the procedures of Spencer, Goldstein, and Kaminiski (2012) and are first introduced during the storybook reading using child-friendly, developmentally appropriate definition and activities. Words are used naturally, as often as possible, throughout the storybook reading and other activities of the session as a way to give the children multiple exposures to the words increasing the likelihood that they will learn them and eventually use them. Vocabulary words that can be targeted in a session centered around *The Frog with the Big Mouth* book are: enormous (defined as very, very big), suddenly (defined as quick, fast), speckled (defined as having spots), and nervous (defined as scared or worried).

The explicit aspect of the enrichment session targets concept development or phonological awareness. During this time, a specific language or emergent literacy skill is taught during a whole-class mini lesson and then each child is given the opportunity to practice the skill. Using *The Frog with the Big Mouth* book as an example, the mini lesson could focus on extending the children's understanding of the word enormous by reviewing the word, discussing the definition and things (e.g., animals) that are enormous. This can be followed by calling the children up one-at-a-time to identify the animal that is enormous out of a field of two picture cards that shows one animal that is large and one animal is considerably smaller (e.g., an elephant and a mouse).

The explicit aspect of the enrichment session can also be used to teach specific emergent literacy skills such as segmenting words into syllables. After explicitly teaching this skill and covering examples, each child can be called up one-at-a-time to identify the number of syllables in different words from the storybook. The child can be orally presented with a word along with a picture of it and asked to count out the syllables by either clapping his/her hands or raising a finger for each syllable. After indicating the correct answer, either independently or through scaffolding or assistance from the graduate student clinician, the child can get to "feed" the word cards into the "enormous" mouth of a large cardboard frog as a positive reinforcement.

The next activity in a typical PLLEC session is the craft activity. In this activity, the children make a craft that is based on the storybook that was read. In a craft activity centered around *The Frog with the Big Mouth,* the graduate student clinicians can lead the children in making a speckled frog with a big mouth using materials such as green paper plates, construction paper, googly eyes, felt fabric, and party blowers. The craft activity is a time for the graduate student clinicians to continue to expose the children to the targeted vocabulary words that were first introduced during the storybook reading session by naturally using the words, as often as possible, during the craft. Other language facilitation techniques and conversational strategies (e.g., self-talk, parallel talk, asking questions, and sentence clozes) are also appropriate for the graduate student clinicians to use during the craft as a way to develop the children's language skills. The craft activity is also a great opportunity to work on language skills such as following multiple step directions that are presented orally (e.g., "Let's make our frog speckled. Fold the paper plate in half and then glue the red spots all over the body of the frog.").

The final activity of the PLLEC is an oral and written language activity. The graduate student clinicians usually start the activity by reviewing the elements of the story (e.g., characters, actions, problem) and discussing a theme or concept related to the story. In an activity centered around *The Frog with the Big Mouth* which is a story about a frog that eats many things, the graduate student clinicians can lead a discussion about the things that different animals and amphibians eat. Next, the graduate student clinicians can present the children with a poster board that displays a large frog with an enormous mouth. After reviewing the definition of the word enormous, each child can be given a pictured card of a fly and called to come up one-at-a-time to tell something that he/she likes to eat. As each child comes up and tells one thing that he/she likes to eat, the graduate student-clinicians can write the child's response on the pictured card and then give it to the children to glue it on the frog's mouth. After all responses are affixed to the frog's mouth, the clinicians can read all of the responses aloud, being sure to point to the words in each response as they are read. As illustrated by this example activity, the oral and written language activity is designed to teach children that their ideas can be spoken, written, and read for communication.

Conclusion

Findings from the existing literature has been used to guide the planning and implementation of the PLLEC at Jackson State University which is designed to enhance the language and emergent literacy skills of young children, many of who are considered to be at risk, for later literacy difficulties. More than three years after the start of the PLLEC, the clinic appears to be beneficial. The sessions are mutually enjoyed by the children, teachers, and graduate student clinicians. Most importantly, the children have acquired and developed various language and emergent literacy skills as evidenced by data collected every session on each child. Future steps should include conducting formal research studies that document the effectiveness of the program model in improving and advancing vocabulary and emergent literacy skills with preschool children, extending the PLLEC beyond the current once weekly schedule, and the possible development of a full-week preschool program housed within the Communicative Disorders Department at Jackson State University.

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Commentary

Preventing Illiteracy: Improving the Practice of Selecting Reading
Assessments or Early Learners

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Introduction

The inability to read well is associated with social ills such as dropping out of school, delinquency, inadequate health care, unwanted pregnancy, and chronic underemployment (Moats & Tolman, 2009). Inadequate reading skills are especially prevalent in urban schools. Teachers utilize many tools to combat illiteracy to include instruction and assessment. It is important for teachers to have a thorough understanding of the nature of young children's learning and development as well as an understanding of what research tells us about the purpose and methods of assessments with young children (Howard, Cooke, Agnamba & Bornfreund, 2014).

The use of assessments to determine students' needs and for effective instructional planning and delivery is an important element of the teaching and learning process. The selection of the most appropriate form of assessment is also important. Considerations for selecting an assessment include its technical quality (e.g., psychometric properties); feasibility; and credibility with parents, education constituencies, and the public; and students' learning styles (Silver, Strong, & Perini, 2000).

Contrary to views of some researchers that assessments during preschool (pre-k) and prior to formal literacy training do not yield reliable results (Rathvon, 2004), another school of thought is that early reading screenings conducted in the pre-k and kindergarten (k) years are critical because they can be used to initiate preventative reading strategies and interventions that can lead to positive changes in children's early reading skills (Brooke, 2007). Johnson, Pool, and Carter (2009) suggested that the screening measure should be accurate; therefore, reducing the number of less reliable cases (i.e., false negatives and false positives). Pool and Johnson (n.d.) concluded the following:

> Sensitivity (accuracy in identifying at risk students who in fact later perform poorly on a
> future measure) and specificity (accuracy in identifying not at risk students who later
> perform positively on a measure) are key aspects to consider in evaluating the validity
> and reliability of a screening measure for identifying students who are at risk for later
> reading problems. (para. 6)

In other words, high levels of sensitivity and specificity, along with other psychometric properties such as validity and reliability, are critically important aspects of standardized screening tests for accurate identification, prevention and intervention of early reading difficulties.

This review will discuss The *Early Growth Indicator Benchmark Assessment (EGIBA*) and the *Mississippi Curriculum Test, second edition* (*MCT2),* two widely used reading assessments in Mississippi urban school districts. *The Early Growth Indicators Benchmark Assessment* is a publication of Houghton Mifflin and has been used nationwide since 2005. The assessment is administered at the pre-k level and consists of several brief assessment activities designed to measure preschool skills needed for later school years. The assessment contains subtests related to word parts, beginning sound, letter recognition, word knowledge, listening comprehension, oral counting, and number recognition. The *Mississippi Curriculum Test* (MCT) is based on the Lexile Framework® for Reading, a scientific approach to reading and text measurement. Lexile measures are based on two well-established predictors of how difficult a text is to comprehend: semantic difficulty (word frequency) and syntactic complexity (sentence length) (*Interpretive Guide for Teachers and Administrators*, 2007).

The research on student performance illustrates the importance of early and accurate assessments to identify children who may encounter difficulties in attaining language and literacy skills (Badian, 2000). Questionable is whether assessments used at the pre-k level serve to effectively predict the potential success of students in later grades and the need for referrals for enhancing language acquisition. Predictive validity, or the ability of a test to predict future performance on a later administered test, is an important property of assessment tests, particularly at the early grades (e.g., pre-k and k). Given that many school districts administer assessments at each grade level and multiple times a year, assessment tests that have high predictive validity are critical in identifying students who are on the path to poor performance or reading failure so that academic enhancements can be implemented. Although some studies have traced student performance and referrals from pre-k through elementary grades (Henry, Gordon, Henderson, & Ponder, 2001), gaps remain in the literature on this issue and in some districts, such as districts in Mississippi, no studies have been conducted on the predictive ability of pre-k assessments on the future performance of elementary students despite the usefulness of this type of information.

Special Education: Disproportionate Referrals and RTI as a Prevention Model

Special education referrals are recommendations that students are assessed for placement in special education programs. Recommendations from teachers making initial referrals for special education services are based on several factors. Among them are the perception of the need for special education and belief of the inability or the atypical ability of a student to learn; the belief that a student will not benefit from regular education instruction; ineffective practices to improve student achievement; and the inability of a student to make academic progress (Diamond, 2006). Referrals for special education services have also been attributed to influences of cultural and racial bias (Noguera, 2008) which have been observed with the disproportional number of Black males and other minorities referred to special education (Rodriguez, 2010).

Referrals, based on cultural and racial biases, have historically led to the disproportionate representation of Black males and other minorities in special education programs. A Response to Intervention (RTI) approach is an approach from a prevention model that is designed to help distinguish between those students whose achievement problems are due to a learning disability and those students whose achievement problems are due to other issues such as lack of prior instruction. As applicable to provisions stipulated in IDEA 2004, RTI is a strategy designed to not only prevent learning difficulties, but to also serve as a developmental intervention through tiers of intervention (Brozo, 2011). The basic premise of RTI involves three tiers of support. Tier 1 includes universal screenings and core classroom instruction. Tier 2 includes targeted, small group, and individual interventions. Tier 3 involves intensive individual instruction as prescribed by an individualized education plan (IEP). Referrals for special education evaluations are often reduced through use of this approach. "RTI techniques have been favored for reducing the likelihood that students from diverse racial, cultural or linguistic backgrounds are incorrectly identified as having a disability" (Klotz & Canter, 2007, p. 2).

Referrals may be linked to specific types of assessments used in RTI and the referral process. Methods used to assess student learning have been classified as direct and indirect (Maki, 2004). Direct methods are those most frequently employed in schools. Direct methods have been characterized as appropriate sources for identifying student learning and include standardized tests, performance-based assessments, and locally designed tests. According to Maki (2004), standardized instruments provide "evidence of what students know or can do within the universe and framework of questions, prompts, and tasks of an instrument; evidence to track student learning… assessing student learning through multiple lenses" (p.1). However, the National Research Council (2001) suggested that in selecting or designing assessments, consideration should be placed on the linkage of the assessment to cognitive learning and its ability to enable inferences to be drawn for decision making.

Maki (2004) suggested that locally designed tests are more likely closely aligned with expected learner outcomes of the school or district and are formatted to reflect the types of tests students are administered in the classroom setting, which is an advantage of this form of direct assessment. *The Mississippi Curriculum Test* (MCT) is a form of direct assessment designed in accordance with expected learner outcomes for students in the state of the proposed study. The test measures expected student outcomes in reading at the third grade level. In concert with district expectations, students are assessed for their abilities to apply specific skills that would suggest they are capable of experiencing success in later grades. For example, students scoring at the advanced level are said to consistently perform at a level beyond that required for success; proficient level scorers demonstrate mastery on the measures required for success; while students scoring at the basic level demonstrate partial mastery and may have some difficulty with content at the next grade level (Simmons, 2008).

Direct assessments are employed to make special education referrals. The second criterion requires the administration of research-validated interventions and frequent monitoring of academic progress. Evidence of a learning disability is the failure of the student to demonstrate significant improvement in academic skills through RTI strategies (Kratochwill et al., 2007).

A Need for Assessments With Predictive Validity

Problematic in selecting assessments for reading, literacy, and screening for special education services is the lack of predictive validity data in the instructional manuals of the tests (Rathvon, 2004). Brown and Coughlin (2007) examined the predictive validity of five benchmark assessments used in the Mid-Atlantic Region. They were *4Sight Math and Reading*, *Measures of Academic Progress (MAP) Math and Reading*, *STAR Math and Reading*, *Study Island Math and Reading*, and *TerraNova Math and Reading*. According to the researchers, "the report finds that evidence is generally lacking of their predictive validity with respect to state assessment tests" (Brown & Coughlin, 2007, p. iii). Although the *TerraNova* showed evidence of predictive validity, it was limited to one state assessment. Brown and Coughlin (2007) concluded from their review of literature that few studies have examined the predictive validity of benchmark assessments used in schools across the country. No studies have examined the predictive validity of the *Early Growth Indicators Benchmark Assessment* and the *MCT 2,* two tests that are commonly used in Mississippi's urban elementary schools.

Summary

The research reviewed here identifies important gaps in the existing literature and highlights the importance of selecting assessment instruments appropriate for accurate referrals and identification, and for planning and implementing instructional interventions. Basic to both the selection of assessments and intervention measures is knowledge of child growth and development as well as evidence of acceptable psychometric properties such as predictive validity. This knowledge is key in identifying measures and practices that address theoretically sound expectations of actions that a given learner is potentially ready to perform.

Although debatable, frequently accepted among educators is the importance of beginning screenings in the early years. We theorize that screening assessments with good predictive validity used in the early years paves the way for teachers to more effectively plan and implement the additional instruction and interventions that children need to learn. Likewise, such assessments support other data that teachers use to make referrals for special education services.

Implications of Findings

Assessment tools are used to guide student learning and also to refer students for special services such as those designed to enhance language acquisition. The existing literature shows that studies that have examined the predictive accuracy of the standardized instruments used to assess young children's literacy skills is limited. This is unfortunate because being able to predict how a student may perform is critical in planning instruction to accommodate the student's needs so that the potential for achieving is maximized. The findings of this literature review highlight the need for future studies that examine the psychometric properties (e.g., sensitive, specificity, validity) of standardized tests used in school districts. This type of information can be used to identify and recommend the use of those that best identify students who are likely to struggle academically so that supportive instruction and interventions can be implement to prevent reading failure and maximize learning.

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Commentary

Recruitment and Retention of Males and Persons from Minority Backgrounds into the Fields of Communication Sciences and Disorders

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Diversity in higher education brings benefits to the classroom (Carnevale & Fry, 2000, Diversity Digest, 2000; Rudenstine, 2001) and increases the quality of learning (Anderson, 2007; Rudenstine, 2001; Smith, 1991). Diversity in the college classroom promotes intellectual development (Knefelkamp & David-Lang, 2000), reduces students' level of racial prejudice (Chang, 2000; Diversity Digest, 2000), increases their tolerance towards racial and gender differences (Diversity Digest, 2000), and facilitates students' explorations of diverse perspectives (Carnevale & Fry, 2000; Diversity Digest, 2000; Hansena, Owanb & Panc, 2015).

A major proportion of racial and ethnic minority students in the U. S. have unequal access to higher education (Ntiri, 2001; McCowan, 2016). Many minority students experience a variety of personal, environmental, and institutional barriers that result in limited or no access to college and university education (Opp, 2001; McCowan, 2016; Thomason & Thurber, 1999). Some of these students have difficulties that include financial difficulty, inadequate support systems and low scores on college prep entrance exams.

Limitations of financial assistance can be a major reason that minority students choose to attend college (Busher, James & Piela, 2015; Brasher, 2016; Stewart, Russell, & Wright, 1997). As financial assistance increases so too does minority enrollment in postsecondary education (Lee, 1991). If an institution is committed to recruiting and retaining its minority enrollment; then it must find ways to provide financial assistance to students when making admission decisions (Thomason & Thurber, 1999).

Some minority students are academically under-prepared for college (Simon, 1993; Thomason & Thurber, 1999). Some of these students have attended high-poverty schools that lacked adequate resources (Haycock, 2001). The situation is exacerbated by a tendency in some public schools for minority students to be placed in general education coursework, as opposed to advanced placement courses, where they are less likely to be challenged academically. In schools where students are not challenged academically, the students appear to exhibit lower educational aspirations (Ntiri, 2001; Grant-Thomas, 2015).

Given these issues, traditional recruitment plans are not always sufficient when seeking to recruit and to retain minority students (Lee, 1991; Thomason & Thurber, 1999). It is important that any institution or profession seeking to attract minorities research and implement evidence-based strategies for attracting minority students (Chambliss, 2000; Dumas-Hines, 2001; Diversity Pipeline Alliance, 2002) as well as creative, innovative ones (Langford-Hall, 2016; McCowan, 2016).

Under-Representation of Males and Racial/Ethnic Minorities in Communication Sciences and Disorders

Communication impairments affect people of both genders, all ages, and all backgrounds (e.g., regional, cultural, socioeconomic, linguistic). To serve an increasingly diverse population, communication sciences and disorders academic programs must recruit a more diverse student body in order to produce a workforce that better reflects the demographics of the individuals who receive services for communication disorders. Recruitment of two specific groups has been the focus of the American Speech-Language Hearing Association (ASHA): males and racial/ethnic minority students.

The Council of Academic Programs in Communication Sciences and Disorders (CAPCSD) and ASHA tracks the demographic characteristics of students in academic programs in Communication Sciences in Disorders. The 2014-2015 academic year showed that across the 175 communication sciences and disorders undergraduate programs in the United States that provided enrollment data separated by gender, 4.75% of the students were male. The percentage of male students across the various types of graduate programs in speech-language pathology ranged from 2-17%. The percentage of males was higher in the various types of audiology graduate programs and ranged from 14-30% (CAPCSD & ASHA, 2016).

The 2014-2015 academic year showed that across the 175 communication sciences and disorders undergraduate programs in the United States that provided enrollment data separated by race/ethnicity, 24.5% of the students were from a racial/ethnic minority background. The percentage of minority students across the various types of graduate programs in speech-language pathology ranged from 15-48%. The percentage of minority students in the various types of audiology graduate programs ranged from 9-12% (CAPCSD & ASHA, 2016).

In Mississippi, the percentages of enrolled male students are lower than what was reported for the United States. In Mississippi, in 2014-2015, 3% of enrolled undergraduate students were male, 2% of enrolled speech-language pathology graduate students were male, and there were no male audiology graduate students. Data in Mississippi showed that in 2014-2015, almost 35% of enrolled undergraduate students were from a racial/ethnic minority background, almost 18% of enrolled speech-language pathology graduate students were from a racial/ethnic minority background, and there were no audiology graduate students from racial/minority backgrounds.

In 2015, ASHA had a membership of 185,847 speech, language and hearing specialists and aspiring professionals. Of this number, the proportion of male constituents was 4.8%. The percentage of ethnic minority constituents was 7.8%. Given that communication disorders affects individuals of both genders and individuals from all ethnic backgrounds – and some disorders, disproportionately affects males and minority students (Tomblin, Records, Buckwalter, Zhang, Smith & O'Brien, 1997; Black, Vahratian, Hoffman, 2015) – lack of males and minority students in communication sciences and disorders program is concerning.

Recruitment and Retention in Communication Sciences and Disorders

To address these concerning shortages, concerted efforts must be made to target these males and individuals from minority backgrounds. Suggestions for recruitment and retention are below:

- Target incoming freshmen male students who are usually shopping for a major.

- Target and recruit male students from minority backgrounds from linguistics, English, education, engineering, neuroscience and pre-medicine departments. For males that aspire to pursue medical careers, recruiters can highlight the medical aspects of the field (e.g., fiber optic endoscopy for the assessment of swallowing functions, modified barium swallow evaluations, hearing screenings) and discuss aspects of medical careers that use specialized equipment such as nasometers and audiometers. Recruiting efforts should emphasize that speech-language pathology and audiology are essentially "applied neuroscience" fields. For males who aspire to pursue education careers, discuss various settings and service delivery models within school settings (e.g., individual, small-group, consultative, collaborative).

- Highlight the earning potential in the professions across various settings using ASHA survey data available at http://www.asha.org/Careers/Salary-Data/.

- Highlight future job outlook using data from the Bureau of Labor Statistics' website available at http://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm and http://www.bls.gov/ooh/healthcare/audiologists.htm. These websites can be used to show students that the "job outlook" for these professions are rated as "much faster than average," implicating that there will be jobs available upon graduation.

- Engage other students in recruitment efforts. Since minority students are more attracted to campuses where there is a visible minority cohort, it is a sound strategy to encourage other minority students to assist with outreach at any recruitment event (Lowenstein, 1997; Stewart, Russell, & Wright, 1997; Talbert, Larke, & Jones, 1999). Some universities do this through "ambassador" programs. Currently enrolled students can be trained to be department and program ambassadors. As ambassadors, the students can be trained to give recruitment presentations, answer frequently asked questions, and give tours of the departments' facilities. Ambassadors can become student-mentors for newly enrolled students.

- Connect students to university and discipline-specific mentoring programs or assign a mentor from the local professional community to students. A mentor is an individual with expertise who can help develop the career of a mentee. Research has consistently shown that mentored individuals are generally more satisfied and committed to their professions than non-mentored individuals.

Conclusion

Diversity has many benefits in higher education including increasing the quality of learning and promoting intellectual development that involves students' explorations of diverse perspectives. Certain public health field such as communication sciences and disorders lack diversity in student enrollment. There are shortages of male students and students from minority backgrounds in the fields of communication sciences and disorders. The low enrollment of male and minority students in communication sciences and disorders programs lead to critical shortages of professional speech-language pathologists and audiologists who are male or from an ethnic minority background.   These percentages are disproportionate to the representation of males (49%) and individuals from ethnic minority backgrounds (28%) in the U. S. population (U. S. Census Bureau 2010). The student enrollment statistics are also disproportionate to the percentages of male and individuals from minority backgrounds that have certain communication disorders (e.g., specific language impairment as documented by Tomblin, Records, Buckwalter, Zhang, Smith & O'Brien, 1997). The disproportionate representation of males and minorities in the nation's health workforce (e.g., fields of communication sciences and disorders) is a factor contributing to well-documented health disparities (U.S. Commission on Civil Rights, 2010).

An important step in reducing health disparities is recruiting and retaining males and individuals who are from minority backgrounds to public health fields such as communication sciences and disorders. It is important that any institution or public health profession seeking to attract minorities design recruitment activities that identify target populations (e.g., undecided majors or currently enrolled science, engineering, linguistics, education majors), create and use buzz words in recruitment speeches (e.g., "applied neuroscience field"), and make use of evidence-based and innovative strategies for attracting minority students. Once the recruitment process has been successful, retention efforts such as mentoring should be immediately initiated.

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