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Patient Self-Management: Impact of Racism-related Vigilance in the Management of Hypertension in African-Americans

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It is important to understand the role that discrimination plays in health disparities. Studies have shown a possible link between racial and ethnic disparities in hypertension and discrimination (Hicken, Lee, Morenoff, House, & Williams, 2014). Racism-related vigilance, also known as anticipatory stress due to discrimination, has been described as a set of thoughts and behaviors caused by a perceived need to constantly monitor and modify behavior (Himmelstein, Young, Sanchez, & Jackson, 2015). As an understudied mechanism, this paper will discuss racism-related vigilance, and its role in health outcomes in hypertensive African-Americans (AAs). This paper will also attempt to provide insight on how the absence of a culturally competent health care system may predispose AAs to developing stress-induced hypertension due to racism-related vigilance. This paper will explore how community partnership programs may be beneficial interventions for building resilience and promoting positive health behaviors among hypertensive AAs in the face of discrimination-related vigilance.

Background

To understand the role that racism-related vigilance plays in health disparities and chronic disease management, health care professionals must first acknowledge that there are events of racial discrimination that AAs endure and/or anticipate on a daily basis (Himmelstein et al., 2015). Evidence supporting the link between racism-related vigilance and wear and tear on bodily functions, demonstrates that vigilance is an important determinant of hypertension in AAs; as studies have shown that it causes a continual activation of the biological stress response systems (e.g., autonomic and hypothalamic–pituitary–adrenal systems) characteristic of this type

of anticipatory and perseverative stress (Hicken et al., 2014). In addition, there must be a shared awareness between the patient and the health care professional of the toxic impact that prolong exposure to environmental stressors may have on one's health and well-being (Hicken et al., 2014).

There must be careful consideration given to the demoralizing history of medical ethics, as it relates to the exploitation of AA subjects for the purposes of experimental medical science; and how those events continues to shape AAs' perception of health care and medicine (Arrington, 2015). To address the various factors that contribute to racism-related vigilance, one should first examine the longstanding history of medical experimentation on AA communities from colonial times to the present (Arrington, 2015). According to Arrington (2015), from a colonial perspective black bodies were perfect for experimental exploitation because they were in abundance, subhuman, and replaceable. Arrington (2015), also points out that AAs' vulnerability to institutional abuses, such as forced sterilization and the Tuskegee syphilis experiment, continues to generate AAs' distrust in the U.S. health care system. Arrington (2015) has coined the term "Afro-cultural trauma" to define the traumatic events that continue harm the collective identity of AAs in the United States. And thus, it would be equally important to take into account that these traumatic events would threaten one's worldview and/or negatively influence one's sense of the meaning of justice (Smith, Abeyta, Hughes, & Jones, 2015).

In a study examining the relationship between discrimination, stress, vigilance, and depression, it was found that racial discrimination is a causative factor in psychological distress; as discrimination through anticipatory vigilance was found to be a key aspect of understanding the stress inducing effect of discrimination (Himmelstein et al., 2015). Furthermore, to adequately discuss strategies to improve health behaviors in hypertensive AAs, health care

professionals must explore the role that race, racism and discrimination continues to play in maintaining the socioeconomic conditions that have been constructed for without regard to how it would limit AAs' access to essential quality-of-life factors (Hutson et al., 2012). The lack of access to good medical care, affordable and efficient transportation, adequate housing, high-quality education, jobs that pay a livable wage, and green recreational spaces are among the most common environmental factors influencing health outcomes among AAs today (Hutson et al., 2012).

Social and Behavioral Theories of Change

Health Belief Model and Vigilance

The Health Belief Model (HBM) is considered one of the most widely used conceptual frameworks of health behavior research. Since the 1950s, the HBM has been used to understand and predict health-related behaviors based on the assumption that individuals will take action to protect their health according to their subjective perception of the severity of the illness; susceptibility of contracting a disease; benefits of behavioral changes; and ability to overcome barriers to change behavior (Kamran, Ahari, Biria, Malpour, & Heydari, 2015). For example, Theory of Planned Behavior indicates factors used to determine a person's intention to perform a behavior such as, their attitude regarding the behavior; impact of social pressure or acceptance; and expectation of success in performing contemplated behavior (Geyen, 2012). And so, Theory of Planned Behavior suggests that when people believe they have access to resources, opportunities, and the ability to perform a behavior they will most likely take action (behavior change) (Geyen, 2012).

The HBM can be used as a framework to develop interventions to address some of the most common factors associated with poor health behaviors and outcomes in health in

hypertensive AAs. However, as it relates to racism-related vigilance or anticipatory stress, the HBM lacks the capacity to evaluate the sociocultural context of health behaviors or the various sources of AAs' collective attitudes towards health. Furthermore, the HBM fails to explore the role that influencing factors such as familial history, socioeconomic status, and stress plays in self-efficacy and self-management of an illness.

Social Cognitive Theory and Vigilance

Social Cognitive Theory (SCT) refers to a psychological model of behavior that was introduced in the 1970s (Denler, Wolters, & Benzon, 2014). Since its introduction into behavior research, SCT has been applied to studies focused on understanding how to motivate learning and promote changes in behavior (Denler et al., 2014). SCT rests on the following assumptions, that learning occurs through observation within a social context; an individual's belief about consequences or outcomes are most likely to ensue if particular behaviors are performed; self-efficacy depends an individual's belief that they will successfully perform a task; goal setting is a cognitive representation of a desired or preferred outcome; and self-regulation is dependent upon goal setting (Denler et al., 2014). In general, SCT argues that there is a reciprocal interaction between the person, environment, and behavior (Denler et al., 2014). Moreover, SCT assumes that people possess the ability to influence their own behavior and environment in a purposeful, and goal-directed fashion (Denler et al., 2014).

According to SCT, the environment has a significant impact on behavior; however an individual through self-regulation, forethought, and self-reflection may employ substantial influence over their own outcomes and the environment (Denler et al., 2014). Therefore, SCT can be used as a model to develop strategies within a health care system that is focused on supporting health care providers with providing culturally sensitive and culturally competent

care to improve health outcomes in hypertensive AAs. Thus, interventions to promote health behaviors and reduce stress in hypertensive AAs, should be developed from a psychosocial and socio-medical context with an understanding of the role that racism-related vigilance and subsequent toxic stress plays in the management of hypertension in AAs.

Applying Theory for Change

Behavior Change Theory asserts that behavior changes occur through a series of stages including pre-contemplation, contemplation, and preparation prior to action; and thus, promoting changes in behavior is a gradual process that may require interventions that are tailored to facilitate completion of each stage (Sudore et al., 2013). There are several factors or processes that may be considered to understand the various stages of change in behavior, such as the following: (a) knowledge or understanding of the importance of changing the behavior (b) contemplation of engaging in the behavioral change, (c) self-efficacy to complete the behavioral change, and (d) readiness to complete the behavioral change (Sudore et al., 2013). As Shern, Blanch and Steverman (2014) argues, there is a need for a new action plan in public health to focus on reducing toxic stress to improve racial disparities in health and health-seeking behaviors in underserved populations. And so, improving health behaviors in hypertensive AAs may require reducing possible sources of environmental stressors. Shern et al., (2014) suggests that innovative strategies be explored for preventing or reducing extreme stress; promoting resilience; and providing trauma-informed care.

Interventions

Since the enactment of the Affordable Care Act (ACA), there has been a recent expansion of preventive services (Shern et al., 2014). Along with the recent expansion of preventive services, there has also been an increase in community-based services to enhance the

accessibility of health care services to the most vulnerable and underserved populations. According to Shern et al. (2014), one of the most essential functions of public health is to monitor and prevent the spread of disease-causing circumstances; and therefore, it is essential for health care providers to identify the factors that contribute to toxic stress and subsequent poor health outcomes to develop effective interventions that meet the specific needs of hypertensive AAs. Studies have found that community partnership programs were effective strategies for promoting changes in health behaviors among AAs (Tucker et al., 2016). Additionally, as Tucker et al. (2016) points out, there are also social, ecological, and cultural determinants of health that are common among AAs who are most at risk for poor health outcomes. For example, Tucker et al. (2016) suggests that barriers in promoting recommended lifestyle changes, among AAs at risk for hypertension or managing hypertension include living in dangerous neighborhoods that deter outdoor physical activities and living in food deserts. Evidence suggests that collaborating with community organizations, such as churches and other faith-based organizations, provide health care professionals with access to a wide range of resources to promote health behaviors and improve attitudes about medicine and health care among hypertensive AAs (Tucker et al., 2016).

Establishing a community church-based health-empowerment program at a predominantly AA church, designed to increase health-promoting behaviors, could be an effective intervention for health care providers to form a partnership with a vulnerable population (Tucker et al., 2016). This intervention could occur over a six-month period, and a health care team made up of nurses, could monitor a group made up of hypertensive AAs, on a bi-weekly basis to learn about ways to motivate change in health behaviors in hypertension management. At the first meeting, the health care team could use the Daily Discrimination Scale

(Appendix A) to survey participants on their personal experience or perception of the role discrimination plays in health and well-being. The health care team could also facilitate group discussions on health behaviors to develop the most effective strategies to promote positive changes, such as increasing physical activity for weight loss in obese/overweight individuals. Furthermore, participants could meet with the health care team to engage in interactive group activities such as educational workshops, bi-weekly weight check-ins, or review of daily food diaries. The health care team, could refer to SCT to guide teaching on health lifestyle choices to identify "personal, modifiable, cognitive-behavioral variables (i.e., health motivation; health self-efficacy; active coping styles/skills for managing emotions such as stress, depression, and anger; self-praise for positive health behaviors; and health knowledge/responsibility) in increasing health-smart behaviors" (Tucker et al., 2016, p. 2). Essentially, the program would allow health care providers to collaborate with hypertensive AAs, to provide culturally sensitive and culturally competent care that empowers participants to engage in health promoting behaviors.

Causation of Racism-related Vigilance

According to Arrington (2015), cultural trauma due to a history of racism towards AAs, has left an indelible mark that remains in the consciousness of AAs. Institutional and structural racism has contributed to establishing and maintaining the living conditions that has resulted in generations of AAs being exposed environmental stressors and toxic stress (Hutson et al., 2012). As it is well documented, chronic exposure to toxic stress causes persistent activation of the stress response and subsequent exposure to stress hormones (Shern et al., 2014). SCT can be used as a model to explain how toxic stress and trauma, in combination with genetic vulnerability, plays a major role in disparities in hypertension (Appendix B), and in one's overall health and well-being (Shern et al., 2014). Racism-related vigilance or anticipatory stress due to

discrimination has been found to be linked to a wide range of negative health indicators and outcomes (Himmelstein et al., 2015). Himmelstein et al. (2015), also points out that racism-related vigilance negatively impacts health indirectly by increasing unhealthy stress-coping behaviors (Himmelstein et al., 2015). Studies have also shown that racism-related vigilance directly effects and influences health behaviors, as it affects both physical and mental health, through the constant and increasing activation of the stress response. Toxic stress has serious impacts human well-being, environmental well-being, and economic well-being (Shern et al., 2014). Researchers found that poorer cardiovascular outcomes, including decreased elasticity of large arterial vessels, along with higher blood pressure in those reporting higher compared to lower levels of anticipated racism-related vigilance (Hicken et al., 2014). Furthermore, continual activation of the biological stress response systems was found to cause an increase in oxidative stress and inflammation that is characterized by the development of numerous cardiovascular diseases (Hicken et al., 2014). As Hicken et al.'s (2014) study also concluded, chronic exposure to environmental stressors would lead to dysfunction of the biological stress response systems, which would affect the body's ability to respond properly to further stress (acute or chronic, physical or psychological). And so, nurses and other health care professionals should utilize inventions in patient care that are focused on stress management, promoting positive coping skills, and connecting hypertensive AAs to community-based health promotion programs for self-management and preventive services.

Conclusion

In conclusion, understanding the role that racism-related vigilance plays in disparities in health does not negate the importance of promoting health-seeking behaviors among hypertensive AAs. However, exploring the relationship between racial discrimination, vigilance,

toxic stress, and hypertension does provide insight on how these factors contribute to negative outcomes in health. Furthermore, health care providers and AA patients must establish a partnership that reflects understanding of the mechanisms through which discrimination operates in health disparities to ensure that AAs, and other communities that are considered minority groups, receive quality culturally competent care. Ongoing research of the relationship between racism-related vigilance and hypertension may lead to further understanding on other underlying contributors to poor health outcomes in hypertensive AAs, as well as create potential interventions to promote positive health-seeking behaviors among AAs (Himmelstein et al., 2015).

References

Arrington, J. (2015). The Flexner Report and the African-American Health Experience: Collective Memory and Identity as Shaped by Afro-cultural Trauma and Re-membering. *Vanderbilt Undergraduate Research Journal*, 10. doi: http://dx.doi.org/10.15695/vurj.v10i0.4063

Denler, H., Wolters, C., & Benzon, M. (2014). *Social Cognitive Theory*. Retrieved from http://www.education.com/reference/article/social-cognitive-theory/

Geyen, D. J. (2012). Behavioral changes for African Americans to improve health, embrace culture, and minimize disparities. *ECI Interdisciplinary Journal of Legal and Social Policy,* 2. Retrieved from http://ecipublications.org/ijlsp/vol2/iss1/2/

Hicken, M. T., Lee, H., Morenoff, J., House, J. S., & Williams, D. R. (2014). Racial/ethnic disparities in hypertension prevalence: reconsidering the role of chronic stress. *American Journal of Public Health, 104*(1), 117-123. doi:10.2105/AJPH.2013.301395

Himmelstein, M. S., Young, D. M., Sanchez, D. T., & Jackson, J. S. (2015). Vigilance in the discrimination-stress model for Black Americans. *Psychology & Health, 30*(3), 253. doi: 10.1080/08870446.2014.966104

Kamran, A., Ahari, S. S., Biria, M., Malpour, A., & Heydari, H. (2015). Determinants of patient's adherence to hypertension medications: Application of health belief model among rural patients. *Annals of Medical and Health Sciences Research, 4*(6), 922-927. doi: 10.4103/2141-9248.144914

Shern, D. L., Blanch, A. K., & Steverman, S. M. (2014). *Toxic Stress, Behavioral Health, and the Next Major Era in Public Health*. Retrieved from http://www.mentalhealthamerica.net/sites/default/files/Toxic%20Stress%20Final_0.pdf

Smith, A. J., Abeyta, A. A., Hughes, M., & Jones, R. T. (2015). Persistent grief in the aftermath of mass violence: The predictive roles of posttraumatic stress symptoms, self-efficacy, and disrupted worldview. *Psychological Trauma: Theory, Research, Practice, and Policy, 7*(2), 179. doi:10.1037/tra0000002

Sudore, R. L., Stewart, A. L., Knight, S. J., McMahan, R. D., Feuz, M., Miao, Y., & Barnes, D. E. (2013). Development and Validation of a Questionnaire to Detect Behavior Change in Multiple Advance Care Planning Behaviors. *PLoS ONE, 8*(9). doi: 10.1371/journal.pone.0072465

Tucker, C. M., Wippold, G. M., Williams, J. L., Arthur, T. M., Desmond, F. F., & Robinson, K. C. (2016). A CBPR Study to Test the Impact of a Church-Based Health Empowerment Program on Health Behaviors and Health Outcomes of Black Adult Churchgoers. *Journal of Racial and Ethnic Health Disparities*, 1-9. doi: 10.1007/s40615-015-0203-y

Appendix A

Daily Discrimination Scale

In the past 12 months, how often have . . .	Yes	No	Unsure
1. you been treated with less respect than other people?			
2. you been treated unfairly at restaurants or hospital?			
3. people criticized your accent or the way you speak?			
4. people acted as if they think you are not smart?			
5. people acted as if they are afraid of you?			
6. people acted as if they think you are dishonest?			
7. people acted as if they're better than you are?			
8. you been threatened or harassed?			

Appendix B

Afro-cultural Trauma and Discrimination Stress Model