

African American Breast Cancer Patients and God Locus of Health Control:  
What We Know and What We Need to Know

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**Abstract (148 words):** Breast cancer mortality rates are significantly higher for African American women than white women in the United States, killing one out of every 31 African American women in the United States. There are many factors that contribute to this health disparity. Research has suggested that God Locus of Health Control (GLHC) might be one factor that affects how African American women engage with healthcare services (in particular, cancer care services). However, research on GLHC is in the nascent stages; gaps in the literature reveal important opportunities for further research. Moving forward, it is important to (1) research how GLHC affects adjuvant therapy adherence, (2) develop more appropriate GLHC scales for African American people, and (3) improve research methodology surrounding GLHC and breast cancer. With these improvements, it might be possible to better engage African American women's religious beliefs and improve how we care for this important patient population.

In recent decades, breast cancer mortality rates have decreased in the United States due to advancements in screening tools and adjuvant therapy (surgery, radiation and chemotherapy) (DeSantis, Ma, Bryan, & Jemal, 2014). Unfortunately, these reductions have not been evenly dispersed; breast cancer mortality rates are 40% higher for African American women than White women (Centers for Disease Control and Prevention, 2018; DeSantis et al., 2014). This inequity is a critical public health issue, as approximately one in every 31 African American women in the United States die from breast cancer (DeSantis, Siegel, & Jemal, 2018). Research suggests that many factors contribute to higher breast cancer mortality rates for African American women; they include but are not limited to poor screening practices (DeSantis et al., 2014), limited access to healthcare (Bach et al., 2002), and non-adherence to adjuvant therapies (Hershman et al., 2005). In order to improve breast cancer survival rates for African American women, researchers have attempted to gain a deeper understanding of the moderators, mediators and mechanisms that contribute to this decreased utilization of suggested cancer healthcare practices by African American women. Repeatedly, God Locus of Health Control (GLHC), the belief that God is responsible for one's good health or affliction with disease (Wallston et al., 1999), has been suggested as a contributing factor to negative breast cancer screening and treatment behaviors (Champion, 1994; Holt, Clark, Kreuter, & Rubio, 2003). A full examination of the research on GLHC reveals a more complex picture, with significant gaps that (if properly studied and applied to healthcare practices) hold the potential to decrease breast cancer mortality rates for African American women; this paper will examine current research and suggest future steps.

## **What We Know**

GLHC is a subgroup of External Health Locus of Control (EHLC), where people believe that forces outside of themselves (God, powerful others, or chance) are responsible for health, disease and healing (Bailis, Segall, & Chipperfield, 2010). On the other side of the spectrum is Internal Health Locus of Control (IHLC), where people believe that they are in control of their own health and are responsible for the way that they deal with disease (Bailis et al., 2010). Studies have shown that African American persons are more likely to ascribe to GLHC than White persons (Barg & Gullatte, 2001; Sheppard et al., 2010; Umezawa et al., 2012). The prevalence of GHLC among African American populations has been attributed to religious/spiritual (R/S) cultural practices that are more prevalent in minority communities than White communities (Barg & Gullatte, 2001; Harper et al., 2013).

Studies have largely shown that GLHC is associated with negative health behaviors including religious and medical fatalism (Barg & Gullatte, 2001), depression (Aarts et al., 2015), delayed treatment (Kinney, Emery, Dudley, & Croyle, 2002), and poor health behaviors (Franklin et al., 2007). Breast cancer studies have claimed GHLC to be linked with poor screening practices (Holt et al., 2003; Kinney et al., 2002), and non-adherence to adjuvant therapy (Atkins & Fallowfield, 2006). These negatives stand in contrast to the positive effects that have been associated with IHLC; including enhanced emotional well-being (Náfrádi, Nakamoto, & Schulz, 2017), better medical adherence (Ahmedani, Peterson, Wells, Rand, & Williams, 2013), increased adherence to advised screening practices (Kinney et al., 2002) and improved quality of life (McLaughlin et al., 2013). These studies suggest that one's beliefs that God is in control of one's health might contribute to heightened breast cancer mortality rates.

However, while research has generally stressed the negative effects of GHLC, the division may not be that simplistic. One criticism of this viewpoint is that HLC is more gradient than most research presents. GHLC can occur in tandem with IHLC components (Best, Spencer, Hall, Friedman, & Billings, 2015). A study labeled one potential mixture of GHLC and IHLC as the “collaborative” coping style between oneself and God and found it to be more beneficial for patients facing illness and existential concerns (McLaughlin et al., 2013). Another study contradicts the negative interpretation of GLHC, showing that *what* people believe about how and why God controls one’s health is what determines positive or negative effects (Ryan & Francis, 2012). Relatedly, Holt and colleagues suggest that there is a difference between active and passive GLHC (Holt et al., 2003). These studies suggest that GLHC might not be strictly negative, and that the intricacies of GLHC are worth exploring and engaging.

One group of researchers has studied GLHC from a different vantage point, trying to use it as a strength rather than resign it to a weakness. Best and colleagues consulted a group of African American women to develop three religious themes that could be used to motivate African American women to participate in cancer screenings (Best et al., 2015). The three religious messages they discovered and later used in health advertisements were: 1) “the body as a temple,” 2) “going to the doctor does not make you faithless,” and 3) “God did not give us the spirit of fear”(Best et al., 2015). While future studies need to be done to see the outcomes of this religiously-tailored messaging, this is one method to potentially transform GHLC from a health barrier into a strength.

In summary, a review of the literature reveals that GLHC has a complex relationship with breast cancer health behaviors. Newer research points in a promising direction of how to engage GLHC as essential cultural components of care, rather than a weakness. This is an important

direction, because it can transform practice rather than merely being description. That being said, there is much that still needs to be known in order to best engage this issue.

### **What We Need to Know**

There are three gaps in the literature that are critical to address. First, and perhaps most importantly, very little research focuses on the specific beliefs that contribute to Health Locus of Control (HLC) and how health messaging can be tailored to populations based on religious/spiritual themes. While Best and colleagues expanded knowledge by studying R/S messaging for breast cancer screening (Best et al., 2015), to my knowledge, no literature currently exists on how R/S messaging can be used to encourage adherence to adjuvant therapy. R/S-informed barriers to adjuvant therapy compliance may be different than barriers that exist to breast cancer screening. Moreover, messages that address these issues may also differ. This is a critical component to understand in order to reduce mortality rates, since adjuvant therapies are so effective (DeSantis et al., 2018).

A second gap in the literature arises from the approach that many studies have taken to measure HLC. The majority of studies use the Multidimensional Health Locus of Control Scale (MHLC) or elements from this scale (Aarts et al., 2015; Atkins & Fallowfield, 2006; Kinney et al., 2002). While this is a verified tool and serves as the golden standard, as Holt and colleagues observe, the MHLC was not developed for African American people, and may be biased towards White religiosity (Holt et al., 2003). New scales might better describe African Americans' HLC. Furthermore, the MHLC does not elucidate what specific scriptures, or practices inform peoples' HLC beliefs. Qualitative research techniques may provide deeper insight into the specific aspects of R/S that contribute to one's HLC and health choices. This is a suggested methodology going forward.

A third gap in the literature exists due to methodological limitations of the sampling methods of previous research. Best and colleagues used convenience sampling, drawing their sample from another study; this yielded a sample of all college-admitted or college-matriculated women (Best et al., 2015). This sample is not representative of African American women as a whole since HLC beliefs, specific R/S beliefs, and health practices vary across educational attainment levels (Gullatte, Brawley, Kinney, Powe, & Mooney, 2010). Thus, more research is needed to understand the healthcare and R/S viewpoints of less-educated, African American women. Other studies recruited participants from physician waiting rooms (Atkins & Fallowfield, 2006; Holt et al., 2003; Kinney et al., 2002). While this sampling method included people of various educational levels, it excluded patients who do not show up for regular doctors' appointments. This could produce a biased sample that potentially excludes a critical population: people who do not show up to doctors' appointments because of their HLC beliefs. A randomized sample would provide the better results and provide greater opportunity for generalizing the findings.

## **Conclusion**

In summation, breast cancer is a critical public health issue for contemporary healthcare and public health workers to tackle, as well as a being an injustice that society must address. Breast cancer is the most common cancer among African American women, affecting about 1 in 9 African American women, and killing about 1 in every 31 African American women in the United States (American Cancer Society, 2018). Research suggests that GLHC has a complex, but perhaps powerful, relationship with African American women's engagement with breast cancer healthcare. The critical gaps in research point us in the direction of what must be done next to address this critical issue. It is with great hope that I propose this issue as a central topic

for healthcare providers to research and address in order to properly care for African American women.

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