

Mammography: Review of the Controversy, Health Disparities, and Impact on Young African American Women

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Background: Ongoing debate about mammography screening for women in their 40s has brought awareness to the opportunities and challenges for achieving optimal breast health in young African American women and in battling health inequities that place them at greater risk for mortality from breast cancer. Despite the screening controversy, a need exists to understand the complex issues related to mammography knowledge, attitudes, and behaviors of young minority women, while empowering them to take an active role in their breast health care.

Objectives: The purpose of this article is to describe the complicated issues related to screening in young African American women within the context of the uncertainty about the evidence surrounding screening practices.

Methods: Literature was reviewed to garner a comprehensive update of the mammography screening controversy and its impact on mammography practices.

Findings: Nurses should be aware of the mammography screening controversy and breast cancer risk assessment and how they affect young women's participation in mammography screening. Mammography screening should be a shared decision between the patient and healthcare provider. A better understanding of breast health and its effect on young minority women is needed. Nurses have a prominent role to advocate for, empower, and educate patients as they face the task of deciding whether to begin or continue mammography in their 40s.

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The recommendation of mammography screening for women in their 40s has been contentious since inception (Christie, 1977; Hale & deValpine, 2014; Shapiro, Venet, Strax, Venet, & Roeser, 1985). Recommendations are debated, and consensus about best practice guidelines for women has not been reached—most notably, the optimal age to initiate, optimal interval (annually versus biennially), and the age at which screening should stop (Jatoi & Baum, 1993; Quanstrum & Hayward, 2010). Theoretical concern also exists that low-dose radiation from screening mammography potentially may induce breast cancer in women who harbor mutations in the *BRCA1* or *BRCA2* genes. These

genes are responsible for DNA repair, and mutations in these genes may reduce the ability to repair damage from low-dose radiation (Foulkes, 2008; Frankenberg-Schwager & Gregus, 2012; Swift, Morrell, Massey, & Chase, 1991; Taylor, 1992). In addition, mammography screening is associated with false positives, which may result in unnecessary biopsies and anxiety and which have been associated with a significant rate of breast cancer overdiagnosis (i.e., finding lesions that never would progress and are not life-threatening) and increased lead time (i.e., the time that mammography-detected cancers remain in the preclinical phase) (Bleyer & Welch, 2012; Christie, 1977; Hale & deValpine, 2014; Jatoi & Baum, 1993). Although opinions