



BONE HEALTH FLASH APTA Bone Health SIG

Hello Bone Health SIG Members,

Heading into the second half of 2020, we continue to be faced with challenges related to health on many levels, including bone health. We thought it pertinent to address racial disparities as related to osteoporosis management, physical activity, nutrition and patient education. Although **African American women** tend to have higher bone mineral density (BMD) than white **women** throughout life, they can still be at significant risk of developing **osteoporosis**.

According to NIH National Resources Center: Studies highlight the risk that African American women may face with regard to developing osteoporosis and fracture.

- Insufficient calcium and vitamin D intake: African American women may be at increased risk for osteoporosis due to decreased calcium consumption, and diminished vitamin D production due to skin pigmentation. Higher rates of obesity also contribute to low vitamin D levels.
- African Americans are more prone to lactose intolerance than are other groups. Lactose intolerance can hinder optimal calcium intake. People with lactose intolerance often may avoid milk and other dairy products that are excellent sources of calcium because they have trouble digesting lactose, the primary sugar in milk.
- Diseases more prevalent in the African American population, such as [sickle cell anemia](#) and [lupus](#), are linked to an increase risk of developing osteoporosis.

- African American women are less likely than white women to participate in health screenings for osteoporosis or to receive an osteoporosis therapy when they are diagnosed with the disease.

Wright, N.C., Melton, M.E., Sohail, M. *et al.* Race Plays a Role in the Knowledge, Attitudes, and Beliefs of Women with Osteoporosis. *J. Racial and Ethnic Health Disparities* 6, 707–718 (2019). <https://doi.org/10.1007/s40615-019-00569-w>

This article investigated how knowledge, attitudes, values, and beliefs among women with osteoporosis can explain racial disparities in bone health. We quantitatively compared scores of the “Osteoporosis & You” knowledge scale and each domain (internal, powerful others, and chance) of the Multidimensional Health Locus of Control scale by race using *t* tests. We qualitatively explored potential racial differences in attitudes, values, and beliefs in the domains: (1) osteoporosis and bone health concerns, (2) knowledge about osteoporosis, (3) utilization of medical services for osteoporosis, (4) facilitators of osteoporosis prevention activities, and (5) barriers to osteoporosis prevention activities. A total of 48 women (White: 36; African American: 12) enrolled in the study. White women had a mean (SD) of 7.8 (0.92), whereas African American women score a 6.6 (2.6) ($p = 0.044$) out of 10 on the Osteoporosis & You Scale. The powerful others domain was significantly higher among African American for both general and bone health [General Health — African American: 26.7 (5.9) vs. White: 22.3 (3.8); $p = 0.01$]. Qualitative thematic analysis revealed differences by race in knowledge, types of physical activity, coping with comorbidities, physician trust, religion, and patient activation. Using both quantitative and qualitative methods, **our study identified racial differences in knowledge, attitudes, and beliefs in women with osteoporosis that could result in racial disparities in bone health, indicating the need to improve education and awareness about osteoporosis in African American women.**

Please submit any articles or information for the Bone Health SIG FLASH to: Lisa Hamilton, Vice Chair at lisahamiltonpt@gmail.com

Be well and stay strong,
The APTA Geriatrics Bone Health SIG