



CE 2.5 contact hours

ABSTRACT: *Persistent (chronic) pain prompts older African Americans (AAs) to utilize a combination of biomedicine (BM) and spiritual medicine (SM) for pain management. Because less is known about how older AAs use these pain management interventions, health-care providers are unable to provide holistic care and optimal pain management. Using a Christian and Afrocentric perspective, this article reviews older AAs' use of BM and SM, offering recommendations on how to integrate BM and SM for pain management.*

KEY WORDS: *African American, biomedicine, geriatrics, nursing, older adult, persistent pain, spiritual medicine*



Staja Q. Booker, MS, RN, is a geriatric nurse whose research and clinical interest is culturally-centered pain management in older adults. Her doctoral dissertation explores older African Americans' pain treatment practices and preferences for osteoarthritis.

Accepted by peer-review 4/9/2014.

The author is the recipient of the Patricia G. Archbold Award through the National Hartford Center of Gerontological Nursing Excellence.

SDC Supplemental digital content is available for this article. Direct URL citations appear in the printed text and are provided in the HTML and PDF versions of this article at journalofchristiannursing.com. SDC is included in the iPad version.

The author declares no conflict of interest.

DOI:10.1097/CNJ.0000000000000152

Cultura Creative (RF) / Alamy

Older African Americans' Beliefs about Pain, Biomedicine, and Spiritual Medicine

By Staja Q. Booker

Persistent pain, formerly referred to as chronic pain, is physical pain occurring for a period of three months or longer (American Geriatrics Society [AGS], 2009), and pain requires a variety of treatment approaches (Pasero & McCaffery, 2011). Although persistent pain affects at least 100 million Americans (Institute of Medicine, 2011), it is particularly problematic for older African Americans (AAs) (Baker & Green, 2005). Approximately 28% of older AAs experience persistent pain (Reyes-Gibby, Aday, Todd, Cleeland, & Anderson, 2007), as well as marked pain management and health outcome disparities (Mossey, 2011). For example, pain intensity is underestimated in AAs (Staton et al., 2007), contributing to underscreening (Burgess et al., 2013) and undertreatment (Meghani, Byun, & Gallagher, 2012; Wyatt, 2013). To manage and cope with persistent pain, older AAs (i.e., 50 years and older) use a combination of biomedicine and spiritual medicine, with spiritual medicine being an essential management intervention.

Biomedicine (BM) addresses the physical body through biological and genetic manipulation and is operationalized through physical, surgical, pharmacological, cognitive, and behavioral interventions. Spiritual medicine (SM) addresses the mind and spirit and is operationalized through spiritual, cognitive, and behavioral interventions. Spiritual interventions may include faith healing, laying on of hands, anointing

with oil, prayer and meditation, attending church and religious events, Bible and other spiritual readings, listening to gospel music, and ministerial and community service.

Despite cultural heterogeneity, many AAs, particularly AA elders, are immersed in the Christian faith, religion, and spirituality (Chatters, Nguyen, & Taylor, 2014). Nearly 90% of older AAs report being religious, whereas 60% endorse being spiritual (Taylor, Chatters, & Jackson, 2007). Integrating African traditions with Christianity, AAs use faith as a coping and survival mechanism to deal with the “harsh realities of life” (Cherry & Giger, 2012, p. 177), such as the impact of discrimination on physical pain (Burgess et al., 2009).

PAIN AND SPIRITUALITY IN OLDER AFRICAN AMERICANS

Persistent pain is modulated by complex intersecting biological, psychological, social, cultural, spiritual, existential, and even historical factors. It has been theorized that the density of serotonin receptors may relate to spiritual tendencies and mood, as well as pain, suggesting a complex and dynamic relationship between biological and

spiritual factors (Wachholtz & Pearce, 2009). Perhaps this explains AAs' typical presentation with an aggregation of spiritual, psychological, and somatic complaints (Cherry & Giger, 2012). Evidence suggests that although AAs have a lower physical tolerance for pain when compared to other racial and ethnic groups (Rahim-Williams, Riley, Williams, & Fillingim, 2012), they may mitigate this with a higher emotional tolerance of pain, due to their spiritual and religious foundation (Campinha-Bacote, 2012; Spencer & Burke, 2011). For example, an older AA stated, “My faith, I know my faith has allowed me to endure a lot of pain, emotional and physical pain” (Ibrahim, Zhang, Mercer, Baughman, & Kwoh, 2004, p. 1320).

Despite a sound evidence base on the general relationship between pain and spirituality (i.e., Wachholtz, Pearce, & Koenig, 2007), less is known about pain and spirituality in older AAs. For example, little research has examined the spiritual explanations behind some of older AAs' pain beliefs and management practices or how to integrate BM and SM for best pain management. Although holistic pain management

begs attention to emotional, social, cultural, physical, and spiritual purviews, domains of culture and holism (i.e., body, mind, and spirit) are absent in current pain guidelines developed for older adults. Consequently, in current practice, BM and SM remain independent, rather than interdependent.

Aside from The Joint Commission's mandate of spiritual assessment in patient-centered care, healthcare providers should ethically support patients' spiritual practices to foster respect for persons and inclusion in care. African Americans desire information on the use of spirituality in pain management, but providers rarely discuss spiritual issues in practice (Wachholtz & Pearce, 2009), possibly due to time limitations, since over half of pain-related discussions are limited on average to six minutes (Henry & Eggly, 2012). The purposes of this article are to review what is known about older AAs' use of bio and spiritual medicine, to understand how they currently use BM and SM, and to provide nursing recommendations on how to integrate BM and SM for pain management. An extensive bibliography overviewing AAs and pain management is available online as supplemental digital content at <http://links.lww.com/NCF-JCN/A40>.

BELIEFS ABOUT PAIN, BIOMEDICINE, AND SPIRITUAL MEDICINE

Buck and Meghani (2012) conclude that distinct differences exist in the frequency, specificity, and extensiveness in the spiritual language of pain between African and Caucasian Americans. These differences result in unique expressions of spirituality to manage pain. For example, Caucasian Americans with persistent pain felt abandoned by God (Rippentrop, Altmaier, Chen, Found, Keffala, 2005), whereas AAs' found that pain allowed for a deeper connection with God (Buck & Meghani, 2012). This section describes AAs' use of bio and spiritual medicine in relation to four common AA pain beliefs.

Belief #1: To be pain free is a sign of being healthy, whereas pain is a sign of illness, progression of disease, and growing older.

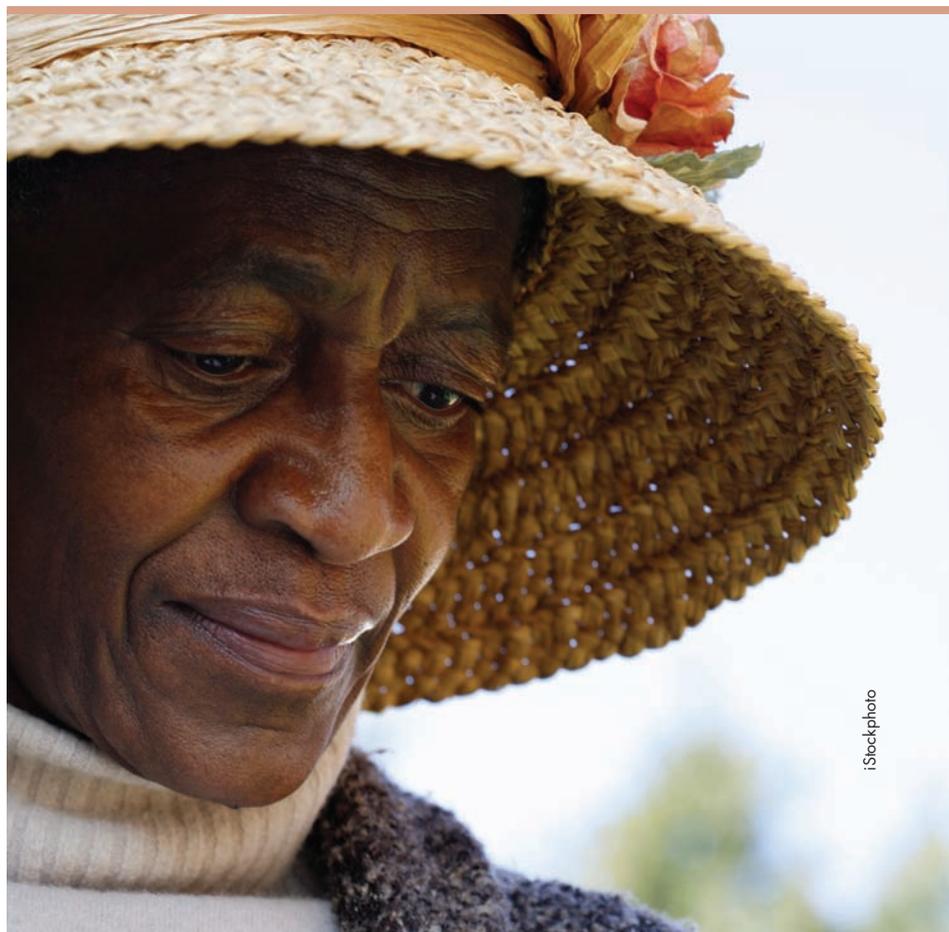
Biomedical Response: *To be healthy is to be able to get up in the morning, go where you want to, do what you want to, and...have no pain* (Martin et al., 2010, p. 316). Twenty percent of older AAs equate having no pain and feeling good as indicators of good health (Collins, Decker, & Esquibel, 2006). Persistent pain may, or may not, be associated with a recognizable or well-defined disease process (AGS, 2009). However, many AAs believe pain is a sign of illness, progression of disease, or function of old age, despite the current understanding that underlying mechanisms linking pain with aging are not normal (Campinha-Bacote, 2012).

Spiritual Response: *What I see is sometimes the pain might come to me as if I did something wrong. It is not a punishment....It is something that I should have to repent of right away* (Meghani & Houldin, 2007, p. 1183). Although some AAs believe evil forces are responsible for pain (Campinha-Bacote, 2012) or pain is a punishment (Cherry & Giger, 2012; Genesis 3:16), many view pain and suffering as a privilege (quoting Romans 8:17; 2 Timothy 2:12), a calling, a transcendental platform to help others, or a test from

God (Buck & Meghani, 2012) to build their faith, patience, and perseverance for a greater testimony (Romans 5:2-5). Cognitive dissonance and paradox are not uncommon in AA culture, and AAs may hold pessimistic and optimistic views concurrently (Campinha-Bacote, 2012). However, when illness is viewed as a punishment, it may be more difficult to have confidence that treatment will be effective (Cherry & Giger). Alternatively, AAs' future orientation allows them to find comfort in biblical promises such as Revelation 21:4 (NIV), "He will wipe every tear from their eyes. There will be no more death or mourning or crying or pain."

Belief # 2: Pain treatments associated with minimal side effects and invasiveness are preferred, but ultimately God is the healer.

Biomedical Response: *Some of that medicine will ease your pain, and some of that medicine have side effects* (Martin et al., 2010). Although many older AAs use pain medications, they are usually reluctant to do so, opting more often for pain treatments that are least invasive and have limited side effects (Martin et al.). In fact, researchers have found that AAs' decision to take analgesics is highly



iStockphoto

influenced by the potential for side effects (Meghani, Chittams, Hanlon, & Curry, 2013). Therefore, pain treatments perceived as *safe* such as herbs, teas, liniments, creams, salves, metal bracelets, and rest are preferred (Silverman, Nutini, Musa, King, & Albert, 2008). Other factors that influence AAs' decision to take pain medications include intensity and presence of pain (Campinha-Bacote, 2012); fear of overmedication (Baldwin, 2001); fear of addiction or dependence; belief that pain medications do not control but cover up pain (Meghani & Houldin, 2007); belief that certain medications, such as generics, are not potent (Sewell, Andreae, Luke, & Safford, 2012); limited access to certain analgesic medications at pharmacies serving minority communities (Green, Ndao-Brumblay, West, & Washington, 2005); provider underprescribing (Meghani et al., 2012); expensive cost (Loeb, 2006); and belief that God is the ultimate healer.

Approximately 28% of older AAs experience persistent pain, as well as marked pain management and health outcome disparities.

If AAs are not currently experiencing moderate-severe pain, they may be more reluctant to take medication, opting instead to take medicines on an as-needed (PRN) basis versus around-the-clock (routine)—despite recommendations that pain medication be taken on a scheduled basis to reduce recurrence of pain, breakthrough pain, and side effects (McLennon, Adams, & Titler, 2007). Indicative of their belief in flexibility in adherence (Cherry & Giger, 2012), older AAs may save medications for later or take less than the recommended dose (Portenoy, Ugarte, Fuller, & Haas, 2004). When questioned about medication adherence and compliance, AAs may reason that “it doesn’t feel right” (Campinha-Bacote, 2012, p. 109) or “I don’t like how it makes me feel.” One study found that preoperative teaching on

pain management reduced the amount of pain medications used postoperatively by AA older adults (Johnson-Umezulike, 1995). Conceivably, if AAs were provided with education on management of persistent pain, apprehension and unresolved fears regarding pain medications could be lessened. To prevent undertreatment of pain, nurses should assess older AAs’ perspective on medications, dispel myths about pain medication (Spencer & Burke, 2011), and encourage nonpharmacological treatments.

The desire for less intensive treatment may influence surgical decision-making as well. Conditions such as osteoarthritis respond well to total joint replacements; however, AAs utilize joint replacement surgery at much lower rates than Caucasian Americans (Cram et al., 2012). Fear of surgery, postsurgical pain, and belief that surgery will not alleviate pain serve as reasons for low utilization

(Fiargo, Williams-Russo, & Allegrante, 2005). Ang, Ibrahim, Burant, Siminoff, and Kwok (2002) found that older AAs who engage in prayer are less likely to consider total joint replacements for osteoarthritis. Therefore, it is important older AAs are informed of various management approaches and are encouraged to seek prompt medical attention for acute onset or worsening of pain, to avoid detrimental health outcomes.

Spiritual Response: *I think, more than medicine, is prayer for getting rid of your ailments and getting back to health* (Martin et al., 2010, p. 322). Older AAs make reference to “Doctor Jesus,” or Jesus as a “doctor in the sickroom,” believing God is the ultimate healer (Campinha-Bacote, 2012; Martin et al., 2010). Sometimes strong belief in God is associated with reduced medication compliance (Wilson, 2011) because

some older AAs sense that medications are ineffective, and God didn’t intend for dependence on medications to cure illness (Martin et al., 2010; Wilson, 2011). For example, an older AA stated, “I really don’t have to have the medicine ‘cause he [God] said put your trust in him and he will do the rest” (Proverbs 3:5-6) (Shellman, 2004, p. 313). Such statements should not be confused with fatalistic thinking (Campinha-Bacote, 2012) but indicate God-mediated control over all situations (Hayward & Krause, 2013). Although older AAs place their trust and belief in God, they also believe that healthcare providers can be used as instruments or vessels by God (Johnson, Elbert-Avila, & Tulsy, 2005).

Faith (or *Imani*) and prayer are central in older AAs’ daily lives and in their decision-making (Philippians 4:6; 1 Thessalonians 5:17), and nearly 90% of older AAs engage in prayer (Taylor et al., 2007). Consistent across studies are AAs’ higher rates of prayer to cope with pain and other chronic illnesses in comparison with Caucasian Americans, implying that AAs may view prayer as superior to traditional medical care (Gagnon, Matsuura, Smith, & Stanos, 2014) because Philippians 4:6 says, “But in everything by prayer and petition, with thanksgiving, present your requests to God.” This strong connection to prayer may also be explained by the popular hymn, *What a Friend We Have in Jesus*, “O what needless pain we bear, all because we do not carry everything to God in prayer” (Scriven, 1857).

Older AAs frequently ask to “be lifted up” through intercessory prayer (Taylor et al., 2007) by spiritual leaders, community elders, church mothers, “prayer warriors,” or the “saints.” They may quote, “Is anyone among you sick? Let him call the elders of the church to pray over them and anoint him with oil in the name of the Lord. And the prayer offered in faith will make the sick person well” (James 5:14-15, NIV). Many AA churches hold prayer services, and in decades past, these were referred to as a *tarry service*, in which parishioners spent hours in prayer and devotion at the altar, awaiting the Spirit of the Lord

to fall, or to receive a word or deliverance directly from God. In addition to prayer, AAs may practice *laying on of hands* as a deliverance method (Campinha-Bacote, 2012) or treatment for pain (Fiargo et al., 2005; Gagnon et al., 2014). Nevertheless, "If patients attempt to rely solely on their higher power for... health without any form of collaborative problem solving, or if patients use negative religious/spiritual coping styles, they are more likely to have poorer long-term health outcomes" (Wachholtz & Pearce, 2009, p. 131).

Belief# 3: Be strong and refrain from complaint or verbalization of pain.

Biomedical Response: "I wake up with aches because I have arthritis, but my aunt told me a long time ago, don't talk about it" (Loeb, 2006, p. 142). Older AAs prefer not to complain or excessively talk about pain (Cherry & Giger, 2012), believing that pain is an inevitable way of life and something that must be endured (Campinha-Bacote, 2012; Portenoy et al., 2004). It is believed that talking about pain does not provide any relief benefits and only increases pain as a function of the "psychological amplification of pain" (Meghani & Houldin, 2007, p. 1183) because "for as he thinketh in his heart, so is he" (Proverbs 23:7, KJV). Perhaps if nurses convey to older AAs the concept of "reporting" pain versus "complaining of" pain, they may be more apt to report pain and be open to treatment (Booker, Pasero, & Herr, 2015).

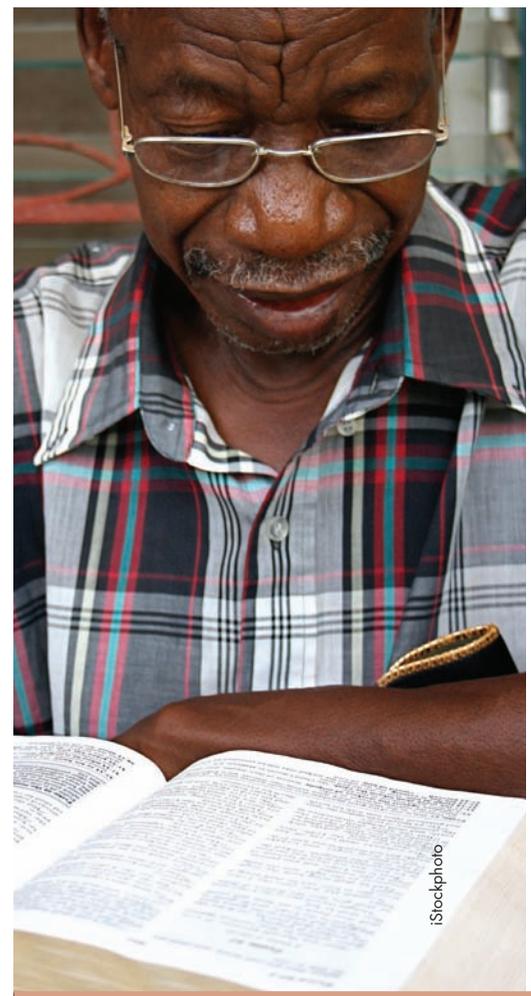
Patient-centered nursing care agrees with the classic work by McCaffery (1968) that "pain is whatever the experiencing person says it is, existing whenever he says it does" (p. 95). Because older AAs are less vocal about pain (Baker & Green, 2005), pain can also be whatever the experiencing person *does not* say it is. Nurses should observe for silent prayers, nonverbal cues, specific pain descriptors, and linguistic life assessments. For example, older adults in general may use alternative pain descriptors such as discomfort, ache, sore, stiff, hurt, or tender (Hadjistavropoulos et al., 2007), and older AAs may use additional pain descriptors (Booker, Pasero, & Herr, 2015).

Examples of linguistic life assessments are, "I'm thankful to be alive" or "Jesus suffered, so why am I any different?" This is characterized as the living paradox, in which blessings or thankfulness can be experienced during times of pain, as well as in its relief (Buck & Meghani, 2012). Older AAs may report an underestimated pain rating to stay within the bounds of being a *good patient*. In fact, more older AAs have described their pain as mild as compared to Caucasian Americans (Johnson-Umezulike, 1999), despite having higher numerical pain ratings (Mingo, McIlvane, Jefferson, Edwards, & Haley, 2013; Parmelee, Harralson, McPherron, DeCoster, & Schumacher, 2012). As a result, pain is minimized, internalized, and inadequately managed in older AAs.

Spiritual Response: *Do everything without complaining or arguing* (Philippians 2:14) *and in everything give thanks* (1 Thessalonians 5:17; Psalm 69:29-30). Complaining of pain is viewed as unacceptable in older AA culture; it is perceived that complaining is inappropriate, selfish, and does not reflect strength. Older AAs' disbelief in complaining of pain is related to their spiritual beliefs as reflected in a popular gospel song, "I Won't Complain." They may cast their cares to God (Psalm 55:22), and instead of complaining, bestow a garment of praise instead of despair (Isaiah 61:3). In fact, older AAs admit that having a positive outlook and a joyful attitude helps to deal with pain (Park, Hirz, Manotas, & Hooyman, 2013).

Belief # 4: Although depression secondary to persistent pain is common, older AAs are likely to have a negative perception of depression.

Biomedical Response: "Depression is less accepted in the Black community... They say, 'You crazy'" (Conner et al., 2010, p. 974). Although depression and pain commonly coexist in older AAs (Baker, Buchanan, Small, Hines, & Whitfield, 2011; Beissner et al., 2012), depression in older AAs is generally underdiagnosed and undertreated because it is masked by multiple morbidities, and older AAs do not discuss this with healthcare providers or



family (Conner et al., 2010; Wittink, Joo, Lewis, & Barg, 2009). This is, in part, due to the negative stigma that depression and other mental health issues carry in the AA community (Conner et al., 2010). This is significant because depression alters communication, response to, and treatment of pain; and older AAs may be unaware of this relationship. Research further shows that depression levels in older AAs with persistent pain increased during and after interventions (Beissner et al.; Gagnon et al., 2014). Thus, it is speculated that undertreated depression may explain limited improvement in chronic pain, despite opioid therapy (Lavin & Park, 2011). Because it is believed that depression and pain may mediate health behaviors (Patil, Johnson, & Lichtenberg, 2008), it is important for older AAs to understand depression can be treated in various ways, such as exercise, cognitive-behavioral therapy, and medication. In fact, some antidepressant medications are indicated as adjuvant pain treatments, without significant adverse effects (Gaynor, Liu, Weller, & Wohlreich,

2013). Nurses can reassure older AAs that depression is not a sign of weakness or failure and can be effectively treated with “mood stabilizers” rather than “anti-depressants.”

Spiritual Response: *“Do not let your hearts be troubled. You believe in God; believe also in me”* (John 14:1). Older AAs immersed in religion and faith beliefs may believe depression is the trick of the devil, as his attempt to place negative and sorrowful thoughts into the minds of Christians. Subsequently, older AAs may deny the presence of depression and forgo appropriate medical care for depression or persistent pain, for fear of being labeled crazy, mistrust of providers, and lack of knowledge and access to care (Conner et al., 2010). Older AAs often equate depression with losing faith but simultaneously use faith to overcome depression (Wittink et al., 2009), along with Scripture (Psalm 34:18; Matthew 11:28-30).

PAIN MANAGEMENT INTERVENTIONS

A strong multimodal pain management plan consisting of pharmacological (BM) and nonpharmacological interventions (SM) is needed for optimal analgesia in AA older adults. Christian nurses, and especially faith community nurses, play an important role in implementing multimodal pain management. To ensure culturally acceptable and quality pain management, plans of care must be individualized, based on the benefit/risk ratio, best practices in pain management, and older AAs’ needs and preferences. The following considerations are intended to enhance clinical practice in integrating in BM and SM.

There are several caveats to pharmacological management in AAs. Metabolism of drugs by the cytochrome P450 2D6 (CYP2D6) is prolonged due to lower CYP2D6 activity in people of African descent, as compared to Caucasians (Gaedigk,

Other considerations are to “start low, go slow, but get to a therapeutic goal” in older adults. The therapeutic goal involves patient-reported acceptable pain level, therapeutic drug levels, and limited adverse patient-reported outcomes. Do support older AAs’ continued use of current medications, provided they are not contraindicated. Consult the BEERs (American Geriatrics Society 2012 Beers Criteria Update Expert Panel, 2012) and STOPP (Screening Tool of Older Persons’ Prescriptions) criteria (Gallagher, Ryan, Byrne, Kennedy, & O’Mahony, 2008) to ensure that prescribed and over-the-counter medications are appropriate for older adults.

Nonpharmacological strategies such as distraction, massage, cold/warm therapy, guided imagery, exercise, position change, and SM should be offered and initiated simultaneously with pharmacological treatment. Spiritual activities not only provide encouragement but also serve as an effective form of distraction. Nurses can initiate Bible reading (in-person or a recording) or prayer (aloud or silent). Though AAs may pray aloud, some may prefer silent prayers or private prayers (Matthew 6:9). Play music such as gospel, smooth jazz, relaxing, or other preferred genres, in patient rooms. If an older AA doesn’t have access to music devices, request the family or Recreational Therapy to provide materials. Utilize pastoral care services or encourage personal spiritual leaders to visit and counsel.

In long-term care or in the community, encourage group Bible study, prayer, and church attendance. Visits to the chapel or others’ rooms (per facility protocol) in assisted living or skilled nursing settings promote ambulation, socialization, and spiritual engagement.

CONCLUSION

Because the life expectancy of AAs is growing, an increased prevalence of persistent pain is expected. As Christian nurses, it is our duty not only to support and encourage

Although older AAs place their trust and belief in God, they also believe that healthcare providers can be used as instruments or vessels by God.

One way to counteract depression is through soul therapy, a combination of laughter and music therapy (Campinha-Bacote, 2012). Laughter is said to be the best medicine, whereas music soothes the soul. In fact, AAs use spiritual humor to cope with cancer pain (Buck & Meghani, 2012), and they use gospel songs, hymns, and Negro spirituals to help them through tough times (Hamilton, Sandelowski, Moor, Agarwal, & Koenig, 2013). Music therapy has been found to decrease pain in AAs (Siedlecki, 2009); however, spiritual music (gospel) was not a music therapy option offered. Because AAs desire spiritually-based nursing interventions, a range of music genres, including gospel, should be offered to AAs. Healthcare providers are encouraged to integrate BM and SM to manage pain and to maintain continuity of care.

Bradford, Marcucci, & Leeder, 2002; Wilson, 2011). When AAs are prescribed doses equal to those prescribed for Caucasian Americans, approximately 40% have higher drug blood levels, which increases the risk for adverse effects such as toxicity (Wilson, 2011). As a result of genetic polymorphisms, a small percentage (0.5%) of AAs obtain no pain relief from codeine, because of the absence of the 2D6 isoenzyme needed to transform codeine to morphine (Payne, Medina, & Hampton, 2003). Nonsteroidal anti-inflammatory drugs for pain management should be avoided in older AAs, considering the age-related effects and drug-disease interactions that can result (Johnson & Weinryb, 2006). It is important for nurses to explore these concerns with patients and discuss methods that allow optimal pain relief.

patients but also to provide high-quality pain management, based on empirical evidence, patient preferences, and culturally-sensitive best practices. Though some pain and spiritual beliefs and practices may appear peculiar, each is associated with meaning and shaped from life experiences. Therefore, displaying respect for beliefs is imperative. Healthcare providers must remember that even in patients' strength, there also may be pain.

Pain heightens older AAs' awareness of God and deepens their spiritual relationship; "For it is commendable if a man bears up under the pain of unjust suffering because he is conscious of God" (1 Peter 2:19) and "If we suffer, we shall reign with him" (2 Timothy 2:12). Effective pain management is crucial for life satisfaction. As nurses, we have the privilege to improve the quality of life for older AAs. We join with Scripture in noting, "Beloved, I pray that all may go well with you and that you may be in good health, even as your soul is well" (3 John 1:2, MEV). 

American Geriatrics Society. (2009). Pharmacological management of persistent pain in older persons. *Journal of the American Geriatrics Society*, 57(8), 1331-1346. doi:10.1111/j.1526-4637.2009.00699.x

American Geriatrics Society 2012 Beers Criteria Update Expert Panel. (2012). American geriatrics society updated Beers criteria for potentially inappropriate medication use in older adults. *Journal of the American Geriatrics Society*, 60(4), 616-631. doi:10.1111/j.1532-5415.2012.03923.x

Ang, D. C., Ibrahim, S. A., Burant, C. J., Siminoff, L. A., & Kwok, C. K. (2002). Ethnic differences in the perception of prayer and consideration of joint arthroplasty. *Medical Care*, 40(6), 471-476.

Booker, S., Pasero, C., & Herr, K. A. (2015). Practice recommendations for pain assessment by self-report with older African American adults. *Geriatric Nursing*.

Baker, T. A., Buchanan, N. T., Small, B. J., Hines, R. D., & Whitfield, K. E. (2011). Identifying the relationship between chronic pain, depression, and life satisfaction in older African Americans. *Research on Aging*, 33(4), 426-443. doi:10.1177/0164027511403159

Baker, T. A., & Green, C. A. (2005). Intra-race differences among Black and White Americans presenting for chronic pain management: The influence of age, physical health, and psychosocial factors. *Pain Medicine*, 6(1), 29-38.

Baldwin, K. A., Humbles, P. L., Armmer, F. A., & Cramer, M. (2001). Perceived health needs of urban African American church congregants. *Public Health Nursing*, 18(5), 295-303.

Beissner, K., Parker, S. J., Henderson, C. R., Jr., Pal, A., Iannone, L., & Reid, M. C. (2012). A cognitive-behavioral plus exercise intervention for older adults with chronic back pain: Race/ethnicity effect? *Journal of Aging and Physical Activity*, 20(2), 246-265.

Buck, H. G., & Meghani, S. H. (2012). Spiritual expressions of African Americans and Whites in cancer pain. *Journal of Holistic Nursing*, 30(2), 107-116.

Burgess, D. J., Gravelly, A. A., Nelson, D. B., van Ryn, M., Bair, M. J., Kerns, R. D., ... Partin, M. R. (2013). A national study of racial differences in pain screening rates in the VA health care system. *Clinical Journal of Pain*, 29(2), 118-123. doi:10.1097/AJP.0b013e31826a86ae

Burgess, D. J., Grill, J., Noorbaloochi, S., Griffin, J. M., Ricards, J., van Ryn, M., & Partin, M. R. (2009). The effect of perceived racial discrimination on bodily pain among older African American men. *Pain Medicine*, 10(8), 1341-1352. doi:10.1111/j.1526-4637.2009.00742.x

Campinha-Bacote, J. (2012). People of African American heritage. In L. Purnell (Ed.), *Transcultural health care: A culturally competent approach* (pp. 91-114). Philadelphia, PA: F. A. Davis.

Chatters, L. M., Nguyen, A. W., & Taylor, R. J. (2014). Religion and spirituality among older African Americans, Asians, and Hispanics. In K. Whitfield & T. A. Baker (Eds.), *Handbook of minority aging* (pp. 47-62). New York, NY: Springer.

Cherry, B., & Giger, J. N. (2012). African-Americans. In J. N. Giger (Ed.), *Transcultural nursing: Assessment and intervention* (pp. 162-206). St. Louis, MO: Elsevier-Mosby.

Collins, C. A., Decker, S. I., & Esquibel, K. A. (2006). Definitions of health: Comparison of Hispanic and African-American elders. *The Journal of Multicultural Nursing*, 12(1), 14-19.

Conner, K. O., Copeland, V. C., Grote, N. K., Rosen, D., Albert, S., McMurray, M. L., ... Koeske, G. (2010). Barriers to treatment and culturally endorsed coping strategies among depressed African-American older adults. *Aging and Mental Health*, 14(8), 971-983.

Cram, P., Lu, X., Kates, S. L., Singh, J. A., Li, Y., & Wolf, B. R. (2012). Total knee arthroplasty volume, utilization, and outcomes among Medicare beneficiaries, 1991-2010. *Journal of the American Medical Association*, 308(12), 1227-1236. doi:10.1001/2012.jama.11153

Fiargo, M. K., Williams-Russo, P., & Algrante, J. P. (2005). Expectation and outlook: The impact of patient preference on arthritis care among African Americans. *Journal of Ambulatory Care Management*, 28(1), 41-48.

Gaedigk, A., Bradford, L. D., Marcucci, K. A., Leeder, J. S. (2002). Unique CYP2D6 activity distribution and genotype-phenotype discordance in Black Americans. *Clinical Pharmacology and Therapeutics*, 72(1), 76-89.

Gagnon, C. M., Matsuura, J. T., Smith, C. C., & Stanos, S. P. (2014). Ethnicity and interdisciplinary pain treatment. *Pain Practice*, 14(6), 532-540. doi:10.1111/papr.12102

Gallagher, P., Ryan, C., Byrne, S., Kennedy, J., & O'Mahony, D. (2008). STOPP (Screening Tool of Older Persons' Prescriptions) and START (Screening Tool to Alert Doctors to Right Treatment). Consensus validation. *International Journal of Clinical Pharmacological Therapeutics*, 46(2), 72-83.

Gaynor, P. J., Liu, P., Weller, M. A., & Wohlreich, M. M. (2013). Comparison of safety outcomes among Caucasian, Hispanic, Black, and Asian patients in duloxetine studies of chronic painful conditions. *Current Medical Research and Opinion*, 29(5), 549-560.

Green, C. R., Ndao-Brumblay, S. K., West, B., & Washington, T. (2005). Differences in prescription opioid analgesic availability: Comparing minority and white pharmacies across Michigan. *Journal of Pain*, 6(10), 689-699.

Hadjistavropoulos, T., Herr, K., Turk, D. C., Fine, P. G., Dworkin, R. H., Helme, R., ... Williams, J. (2007). An interdisciplinary expert consensus statement on assessment of pain in older persons. *Clinical Journal of Pain*, 23(1 Suppl.), S1-S43.

Hamilton, J. B., Sandelowski, M., Moore, A. D., Agarwal, M., & Koenig, H. G. (2013). "You need a song to bring you through": The use of religious songs to manage stressful life events. *The Gerontologist*, 53(1), 26-38. doi:10.1093/geront/gns064

Hayward, R. D., & Krause, N. (2013). Trajectories of late-life change in God-mediated control. *The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, 68(1), 49-58. doi:10.1093/geronb/gbs054

Henry, S. G., & Eggle, S. (2012). How much time do low-income patients and primary care physicians actually spend discussing pain? A direct observation study. *Journal of General Internal Medicine*, 27(7), 787-793. doi:10.1007/s11606-011-1960-x

Ibrahim, S. A., Zhang, A., Mercer, M. B., Baughman, M., & Kwok, C. K. (2004). Inner city African-American elderly patients' perceptions and preferences for the care of chronic knee and hip pain: Findings from focus groups. *The Journals of Gerontology: Series A: Biological Sciences and Medical Sciences*, 59(12), 1318-1322.

Institute of Medicine. (2011). *Relieving pain in America: A blueprint for transforming prevention, care, education, and research*. Washington, DC: National Academies Press.

Johnson, J., & Weinryb, J. (2006). Safe pharmacologic treatment strategies for osteoarthritis pain in African Americans with hypertension, and renal and cardiac disease. *Journal of the National Medical Association*, 98(7), 1126-1135.

Johnson, K. S., Elbert-Avila, K. I., Tulskey, J. A. (2005). The influence of spiritual beliefs and practices on the treatment preferences of African Americans: A review of the literature. *Journal of the American Geriatrics Society*, 53(4), 711-719.

Johnson-Umezulike, J. (1995). Controlling the pain. *The Nursing and Allied Health Journal for Minorities*, 3(1), 22-25, 38.

Johnson-Umezulike, J. M. (1999). A comparison of pain perception of elderly African Americans and Caucasians. *Nursing Connections*, 12(2), 5-12.

Lavin, R., Park, J. (2011). Depressive symptoms in community-dwelling older adults receiving opioid therapy for chronic pain. *Journal of Opioid Management*, 7(4), 309-319.

Loeb, S. J. (2006). African American older adults coping with chronic health conditions. *Journal of Transcultural Nursing*, 17(2), 139-147.

Martin, S. S., Trask, J., Peterson, T., Martin, B. C., Baldwin, J., & Knapp, M. (2010). Influence of culture and discrimination on care-seeking behavior of elderly African Americans: A qualitative study. *Social Work in Public Health*, 25(3), 311-326. doi:10.1080/19371910903240753

McCaffery, M. (1968). *Nursing practice theories related to cognition, bodily pain, and man-environment interactions*. Los Angeles, CA: UCLA.

McLennon, S. M., Adams, S., & Titler, M. G. (2007). Evidence-based guideline: Persistent pain management. *Journal of Gerontological Nursing*, 33(7), 5-14.

Meghani, S. H., Byun, E., & Gallagher, R. M. (2012). Time to take stock: A meta-analysis and systematic review of analgesic treatment disparities for pain in the United States. *Pain Medicine*, 13(2), 150-174. doi:10.1111/j.1526-4637.2011.01310.x

Meghani, S. H., Chittams, J., Hanlon, A. L., & Curry, J. (2013). Measuring preferences for analgesic treatment for cancer pain: How do African-Americans and Whites perform on choice-based conjoint (CBC) analysis experiments? *BMC Medical Informatics and Decision Making*, 13, 118. doi:10.1186/1472-6947-13-118

- Meghani, S. H., & Houldin, A. D. (2007). The meanings of and attitudes about cancer pain among African Americans. *Oncology Nursing Forum*, 34(6), 1179–1186.
- Mingo, C. A., McIlvane, J. M., Jefferson, M., Edwards, L. J., Haley, W. E. (2013). Preferences for arthritis interventions: Identifying similarities and differences among African Americans and Whites with osteoarthritis. *Arthritis Care and Research*, 65(2), 203–211. doi:10.1002/acr.21781
- Mossey, J. M. (2011). Defining racial and ethnic disparities in pain management. *Clinical Orthopaedics and Related Research*, 469(7), 1859–1870.
- Park, J., Hirz, C. E., Manotas, K., & Hooymann, N. (2013). Nonpharmacological pain management by ethnically diverse older adults with chronic pain: Barriers and Facilitators. *Journal of Gerontological Social Work*, 56(6), 487–508.
- Parmelee, P. A., Harralson, T. L., McPherron, J. A., DeCoster, J., & Schumacher, H. R. (2012). Pain, disability, and depression in osteoarthritis: Effects of race and sex. *Journal of Aging and Health*, 24(1), 168–187. doi:10.1177/0898264311410425
- Pasero, C., & McCaffery, M. (2011). *Pain assessment and pharmacologic management* (1st ed.). St. Louis, MO: Mosby-Elsevier.
- Patil, S. K., Johnson, A. S., & Lichtenberg, P. A. (2008). The relationship of pain and depression with various health-promoting behaviors in African American elders. *Rehabilitation Psychology*, 53(1), 85–92. doi:10.1037/0090-5550.53.1.85
- Payne, R., Medina, E., & Hampton, J. W. (2003). Quality of life concerns in patients with breast cancer: Evidence for disparity of outcomes and experiences in pain management and palliative care among African-American women. *Cancer*, 97(1 Suppl.), 311–317. doi:10.1002/cncr.10175
- Portenoy, R. K., Ugarte, C., Fuller, I., & Haas, G. (2004). Population-based survey of pain in the United States: Differences among White, African American, and Hispanic subjects. *The Journal of Pain*, 5(6), 317–328.
- Rahim-Williams, B., Riley, J. L., 3rd, Williams, A. K., & Fillingim, R. B. (2012). A quantitative review of ethnic group differences in experimental pain response: Do biology, psychology, and culture matter? *Pain Medicine*, 13(4), 522–540.
- Reyes-Gibby, C. C., Aday, L. A., Todd, K. H., Cleeland, C. S., & Anderson, K. O. (2007). Pain in aging community-dwelling adults in the United States: Non-Hispanic Whites, non-Hispanic Blacks, and Hispanics. *Journal of Pain*, 8(1), 75–84.
- Rippentrop, E. A., Altmaier, E. M., Chen, J. J., Found, E. M., & Keffala, V. J. (2005). The relationship between religion/spirituality and physical health, mental health, and pain in a chronic pain population. *Pain*, 116(3), 311–321.
- Scriven, J. (1857). *What a friend we have in Jesus*. Public domain.
- Sewell, K., Andreae, S., Luke, E., & Safford, M. M. (2012). Perceptions of and barriers to use of generic medications in a rural African American population, Alabama, 2011. *Preventing Chronic Disease*, 9, E142 [electronic journal]. doi:10.5888/pcd9.120010
- Shellman, J. (2004). “Nobody ever asked me before”: Understanding life experiences of African American elders. *Journal of Transcultural Nursing*, 15(4), 308–316.
- Siedlecki, S. L. (2009). Racial variation in response to music in a sample of African-American and Caucasian chronic pain patients. *Pain Management Nursing*, 10(1), 14–21.
- Silverman, M., Nutini, J., Musa, D., King, J., & Albert, S. (2008). Daily temporal self-care responses to osteoarthritis symptoms by older African Americans and Whites. *Journal of Cross-Cultural Gerontology*, 23(4), 319–337. doi:10.1007/s10823-008-9082-6
- Spencer, C., & Burke, P. (2011, July/August). The impact of culture on pain management. *Academy of Medical-Surgical Nurses newsletter*, 20(4), 1, 13–15.
- Staton, L. J., Panda, M., Chen, I., Genao, I., Kurz, J., Pasanen, M., ..., Cykert, S. (2007). When race matters: Disagreement in pain perception between patients and their physicians in primary care. *Journal of the National Medical Association*, 99(5), 532–538.
- Taylor, R. J., Chatters, L. M., & Jackson, J. S. (2007). Religious and spiritual involvement among older African Americans, Caribbean Blacks, and non-Hispanic Whites: Findings from the national survey of American life. *The Journal of Gerontology. Series B, Psychological Sciences and Social Sciences*, 62(4), S238–S250.
- Wachholtz, A. B., & Pearce, M. J. (2009). Does spirituality as a coping mechanism help or hinder coping with chronic pain? *Current Pain and Headache Reports*, 13(2), 127–132.
- Wachholtz, A. B., Pearce, M. J., & Koenig, H. (2007). Exploring the relationship between spirituality, coping, and pain. *Journal of Behavioral Medicine*, 30(4), 311–318.
- Wilson, L. D. (2011). Cultural competency: Beyond the vital signs. Delivering holistic care to African Americans. *Nursing Clinics of North America*, 46(2), 219–232. doi:10.1016/j.cnur.2011.02.007
- Wittink, M. N., Joo, J. H., Lewis, L. M., Barg, F. K. (2009). Losing faith and using faith: Older African Americans discuss spirituality, religious activities, and depression. *Journal of General Internal Medicine*, 24(3), 402–407.
- Wyatt, R. (2013). Pain and ethnicity. *Virtual Mentor*, 15(5), 449–454. doi:10.1001/virtualmentor.2013.15.5.pfor1-1305



Instructions for Taking the CE Test Online

- Read the article. The test for this CE activity can be taken online at www.NursingCenter.com/CE/CNJ. Find the test under the article title. Tests can no longer be mailed or faxed. You will need to create a username and password and login to your free personal CE Planner account before taking online tests. Your planner will keep track of all your Lippincott Williams & Wilkins online CE activities for you.
- There is only one correct answer for each question. A passing score for this test is 13 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
- This CE test also is available for viewing at www.journalofchristian nursing.com in the table of contents for this issue under **CE Test Preview**
- Visit www.nursingcenter.com for other CE activities and your personalized CE planner tool.
- For questions, contact Lippincott Williams & Wilkins: 1-800-787-8985.

Registration Deadline: September 30, 2017

Disclosure Statement: The authors and planners have disclosed that they have no financial relationships related to this article.

Provider Accreditation:

Lippincott Williams & Wilkins, publisher of *Journal of Christian Nursing*, will award 2.5 contact hours for this continuing nursing education activity.

Lippincott Williams & Wilkins is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider-approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 2.5 contact hours. Lippincott Williams & Wilkins is also an approved provider of continuing nursing education by the District of Columbia and Florida, CE Broker #50-1223. Your certificate is valid in all states.

Payment and Discounts:

- The registration fee for this test is \$24.95 for nonmembers; \$17.95 for NCF members.

CE For more than 40 additional continuing education articles related to care of older adults, go to NursingCenter.com/CEConnection and search “gerontology.”