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Breast cancer and coping among women of color: a systematic review of the literature

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Abstract

Breast cancer is the most commonly diagnosed form of cancer for women regardless of race/ethnicity. Women of color are diagnosed at later stages and experience greater mortality than their White counterparts. However, there has been comparatively little research on coping with breast among racial/ethnic minorities at time of diagnosis, during treatment, or in the course of survivorship. This is despite the fact that research has repeatedly shown that distress can impact disease progression and survival. The questions asked of this systematic literature review include: (1) What is known about coping with breast cancer among major racial/ethnic groups? (2) What are the strengths and gaps in research to date? Over 120 peer-reviewed published studies (1980–2012) were reviewed. A total of 33 met criteria for inclusion including 15 quantitative, 17 qualitative, and 1 mixed methods study. The majority of studies were small sample cross-sectional studies. Only five studies were longitudinal, and two randomized-controlled intervention trials sought to improve coping among survivors. The most common topic in both quantitative and qualitative studies was spirituality and coping among African American breast cancer patients. Thirteen studies included Latinas only or in combination with other groups. Only one quantitative and one qualitative study solely addressed the Asian American population exploring coping and adjustment. In the course of this systematic literature review, we elucidate what is known about coping with breast cancer among racial/ethnic minority women and identify priorities for future research.

Keywords

Breast cancer; Coping; Women

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Conflict of interest None

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Introduction

Breast cancer is the most commonly diagnosed form of cancer for women, regardless of ethnic background. In 2011, more than 230,480 women in the USA were diagnosed with breast cancer [1]. Yet not all women are affected equally. For example, White women are more likely than women of color with breast cancer to have a higher incidence [1], earlier diagnosis [1], better self-reported quality of life [2], and higher 5-year survival rate [3]. For early stage breast cancer patients, the relative survival rate among White women is 90.3 %, compared to 77.7 % among African Americans [3]. Disparities in survivorship can be attributed to differences in stage at diagnosis; these are often due to inequities in breast cancer screening, treatment, and post-treatment follow-up care [2–4]. Research demonstrates that how breast cancer patients cope has an impact on emotional distress [5, 6], depression [7], and long-term psychological adjustment [8–29]. Moreover, studies have shown how particular coping strategies, such as emotional expression [14, 17, 25], positive reappraisal [5, 7, 12], and social support [7, 17, 18] are beneficial to the emotional and physical well-being of breast cancer patients in general. However, far less is known about how these coping strategies differ among women of color with breast cancer. The purpose of this review is to answer the following questions: (1) What is known about coping with breast cancer among major racial/ethnic groups? (2) What are the strengths and limitations in the research on this topic to date? We limit our review to studies published in peer-reviewed journals between 1980 and 2012. We selected 1980 because of the earliest empirical studies on coping that emerged in the field of breast cancer at this time [30–35].

Implications of coping with breast cancer

Following Folkman and Lazarus (1980, 1984, 1988), we define coping as cognitive (e.g., how one thinks about the diagnosis) and behavioral (e.g., what one does about it) efforts to lessen and control the impact of a stressor [30–33]. In this paper, we refer to coping as a response to emotional distress and its triggering incidents. There is strong evidence that women with breast cancer experience emotional distress as they face a bewildering array of treatments and side effects that can adversely affect quality of life [8–11]. Burgess et al. has shown that during the first 2 years of survivorship, an estimated 30–45 % of women with breast cancer experience substantial psychological morbidity, including anxiety and depression [11]. For breast cancer patients, emotional distress can also have lasting negative physiological consequences [13, 15].

Although there is not at a universal definition or conceptualization of the construct of coping, there is general consensus that coping refers to an individual's thoughts and actions in response to a stressor [33]. Much of the research on coping among women with breast cancer has been influenced by the seminal work of Lazarus and Folkman [30–35] who described a three-step cognitive and behavioral process associated with coping. Specifically, the first two steps are *primary appraisal* in which the situation is evaluated (e.g., "Is this dangerous?") and *secondary appraisal*, consideration of what to do about it. The third step has two distinct subcomponents: taking action to help solve the problem (e.g., gathering information and seeking tangible support) and unconsciously or consciously working to address the emotional distress associated with the problem (e.g., expressing feelings of

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distress, accepting the reality of the situation, avoidance, emotional support-seeking). Dunkel-Schetter and colleagues expanded Lazarus and Folkman's model to include coping strategies such as seeking or using social support, focusing on the positive, distancing, cognitive escape avoidance, and behavioral escape avoidance [18]. The latter three styles may be positive in the short term but are ultimately negative in the long term. While positive active coping at diagnosis (e.g., fighting spirit) and social support have been shown to lead to positive long-term psychological adjustment [6, 7, 12, 14, 17, 18], denial, escapism, lack of personal control, helplessness, anxious preoccupation, fatalism, and avoidant forms of coping are associated with poor mental health outcomes among cancer patients [16, 19, 21, 22]. Another coping strategy, positive appraisal in the form of "benefit finding," in which the patient's discovery of benefits in their breast cancer experience appears to reduce distress [29, see Helgeson et al. for a review]. Several studies have shown that long-term sequelae of coping resources, such as acceptance and other cognitive strategies, positively affect breast cancer patients' adjustment to the disease for up to 3 years post-treatment [24, 25, 27]. In addition, coping through seeking and receiving emotional support at or near one's diagnosis (at 3 months) predicted a greater experience of post-traumatic growth at 8 years after diagnosis [30].

Many of the studies on responses to breast cancer diagnosis have included predominately White participants. However, coping may mean different things across cultures. Moreover, coping is not a singular concept but one that can include other dimensions including cultural responses to distress that have yet to be explored [31]. We follow Kagawa-Singer [36] in defining culture as "the core, fundamental, dynamic, responsive, adaptive, and relatively coherent organizing system of life designed to ensure the survival and well-being of its members." There has been debate about coping in that cultural psychologists have criticized the construct of coping as rooted exclusively in Western ideology by emphasizing the autonomous self and failing to attend to other cultural constructions that are more group oriented or collectivist in nature [37–40]. Research on coping and breast cancer to date has generally relied upon Euro-American individualistic theories that place primary emphasis on the self, with variations being attributed to individual dispositions [37–45].

Culture powerfully shapes people's explanations for cancer and therefore their beliefs regarding what can be done about it [36, 41–45]. Pasick and her colleagues have shown the influence of culture and social context on health behavior through the example of mammography screening utilization [41, 42]. Arguing that the dominant focus on individual cognition in behavioral research and health promotion fails to account for critical cultural dynamics, they show that shared group experiences influence how individuals think, feel, and act.

Although not yet explored among breast cancer patients, cultural psychologists have proposed an alternative interdependent model of coping that takes into account cultural differences among racial–ethnic groups in responses to stressful events and situations. In studying varied racial/ethnic groups, this coping model would consider the need for forbearance, interconnectedness, and family support during times of stress. Growing recognition of disparities across the cancer continuum from prevention through survivorship [46, 47] highlights the need to reconsider the assumptions, focus, and methods used to study

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coping among diverse breast cancer patient populations. Using 33 peer-reviewed research journal articles published between 1980 and 2012, we conducted a literature review in order to examine differences in coping among racial/ethnic minority women with breast cancer (primary aim). In doing this, we evaluate the data's strengths and limitations and make recommendations for future directions (secondary aim).

Methodology

Using the 32-year period from 1980 to 2012, we reviewed the literature on coping among American women of color who are breast cancer survivors. The earliest date marks the first significant papers on coping theory by Lazarus and Folkman [30–33]; these articles emerged in the context of initial attempts to understand psychological adaptations to breast cancer [30, 31, 46]. Our procedure was to identify relevant articles by searching PsychInfo, Medline, and CancerLit electronic databases using the keywords: *breast cancer*, *coping*, *Asian Americans*, *African Americans/Blacks*, *Latinas/Latinas*, and *racial/ethnic minorities*. To select articles for review, we used four inclusion criteria: (1) the study collected primary data from a sample of racial/ethnic minority women with breast cancer; (2) the study explored an aspect of coping processes and strategies at some point in the breast cancer continuum; (3) the study compared coping strategies across or within groups of racial/ethnic minority women with breast cancer (in quantitative studies); and (4) the researchers developed or used an existing measure of coping (in quantitative studies) to explore the relationship with a breast cancer outcome such as distress or quality of life. Initially, by using published abstracts, we identified 120 articles that met these criteria. Articles that addressed some or all of the criteria were read in their entirety by first and second authors. Those satisfying all four criteria were included in our review.

Results

A total of 33 studies met our criteria and were included in the review. As shown in Table 1, 15 studies used quantitative methods (i.e., they were descriptive survey studies or intervention trials) [48–62]; 17 used qualitative methods to produce descriptive studies (see Table 2) [63–79]; and 1 study used mixed qualitative and quantitative methods (see Table 3) [80]. Six quantitative studies followed a cohort of women longitudinally from diagnosis to the completion of treatment and through the years post-treatment (range of 6 to 20 months to 10 years) [50, 52, 56, 57, 60, 61] and two studies followed women post-treatment [50, 52]. Eleven qualitative studies retrospectively examined the narratives of women from time of diagnosis into survivorship [68, 70–80]. Sixteen studies included subjects with early stage breast cancer, examining coping at diagnosis and/or during treatment [48, 49, 51, 53–66, 68–80], while three addressed specific survivorship issues in early-stage breast cancer patients [50, 52, 67]. We found no studies examining patients' experiences coping with metastatic breast cancer.

The majority of the studies compared African American, Latina, and White women, although Ashing-Giwa et al. [74], Yoo et al. [66], Levine et al. [70, 80], Tam et al. [76], and Gotay et al. [58] also included a sample of Asian Americans. Four of the quantitative studies included multiethnic samples of White, Latinas, and African American women [49, 52, 54,

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57], and six studies used African American and White samples [48, 50, 56, 59, 60, 62]; another study focused on White and Asian American subgroups [58]. One quantitative study focused exclusively on African American women [51] and one on Latinas [61]. Among the qualitative studies, four included multiple ethnic groups [66, 67, 70, 74], but the majority (n =13) were ethnic-specific. Most of the qualitative studies (n =10) explored breast cancer among African Americans [63–65, 71, 73, 75, 78, 79], three were studies of Latinas [65, 68, 69], and one targeted Asian Americans [76]. The mixed methods study included the role of prayer in coping with, and adjustment to, breast cancer among women of color [80]. In the next section of the paper, we present detailed findings from our review.

Quantitative studies of coping in racial/ethnic minorities with breast cancer

Quantitative research emphasizes general description and causal theories using measurable variables to characterize groups and test hypotheses [81]. Quantitative data are used to assess broad trends, establish cause and effect of temporal data, measure prevalence, and reveal patterns of similarity and differences among groups and associations between behavior and constructs. Quantitative intervention studies also afford the potential for replication and generalization [81]. Table 1 details the quantitative studies on studies of coping among women of color with breast cancer; it includes sample size, research design, and key findings. In the following section, we summarize the design and data from these quantitative studies.

The majority of quantitative studies on breast cancer and coping among minority women were cross-sectional [50, 51, 53–55, 58, 59, 61–63], five were longitudinal observational studies [48, 52, 56, 57, 60], and two were randomized controlled trials testing the efficacy of a coping intervention [47, 52]. Eleven studies [47, 48, 50–52, 54, 56–58, 60, 62] had samples of 120 or more. Five articles had samples smaller than 120 participants [53, 55, 59, 61, 62].

Quantitative coping studies of racial/ethnic minority breast cancer patients report racial/ethnic differences and similarities. Pickler et al. [55] did not find racial/ethnic differences in self-efficacy, coping, and body image between White and non-White women, but their sample was comprised mostly of White women (66 %), and the overall sample size (n =92) was small. Fogel et al. [54] used the Brief COPE to examine Internet use as a method of coping for African American and White women, but did not find racial/ethnic differences between the groups. Culver et al. [57], in their longitudinal study of coping and distress among African American, found racial/ethnic differences in coping responses among Latinas and Whites. Latinas used humor (p <0.01) and more self-distraction than Whites (p <0.02) or African Americans (p <0.05). African Americans used religion as a way of coping more often (p <0.05) and vented less (p <0.05) than Latinas and Whites [57]. Other studies found additional racial/ethnic differences in coping responses: African Americans and Latinas practice religious coping more often than Whites [48]. Reynolds et al. reported that emotional expression was higher among Whites than African Americans [60]. African Americans were more likely to suppress emotion and engage in wishful thinking and problem solving compared to Whites [60]. In addition, Reynolds et al. [60] found that White women who suppressed their emotions had 1.9 times greater risk of mortality than those

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who had low or medium levels of emotional expression, but there were no such differences for the African American women. In coping with fears of recurrence, positive reappraisal was greater among African Americans than Whites [50, 52].

Quantitative intervention research to examine enhanced coping among cancer patients of color has been limited. Two randomized-controlled trials [50, 52] tested the efficacy of an uncertainty management intervention designed to reduce the fear of recurrence among older breast cancer patients who had completed treatment [52] and examined its lasting benefits in a 20-month follow up [52]. The intervention was based on earlier research by a team who studied uncertainty in African American and White breast cancer survivors [50, 52]. It consisted of two educational components: cognitive strategies (emotion-focused coping responses to fears of recurrence) and behavioral strategies (e.g., management skills, information, and resources for coping with treatment side effects). Both White and African American women who received the intervention showed significant improvements in cognitive reframing regarding uncertainty. However, the improvements among African Americans were more pronounced than for the White participants, and coping methods differed between the two groups. The White women in the intervention group were more likely to divert attention away from breast cancer while African American women were less likely to envision catastrophe [50]. The authors speculated that differences between Whites and African Americans could be related to the "willingness to endure continuing threats" (p. 975) among older African American women, which helps survivors to reduce catastrophic thoughts. In the 20 months follow up, researchers found that women who had undergone uncertainty management training reported continual improvements in coping skills, cognitive reframing, and cancer knowledge [52].

The coping measures most commonly used in breast cancer studies have been the *Ways of Coping* [82] and the *Brief COPE* [83]. Five of the quantitative studies reviewed here used The *Ways of Coping* scale [55, 56, 59, 60, 62]. Constructs in the *Ways of Coping* scale include the following strategies: confrontative coping, distancing, seeking social support, accepting responsibility, escape avoidance, problem solving, and positive reappraisal. The *Brief COPE* [83] contains 11 subscales: acceptance, active coping, substance use, behavioral disengagement, denial, humor, planning, cognitive reframing, self-distraction, use of religion, and venting. Five of the studies we reviewed [48, 49, 53, 54, 57] used *Brief COPE*.

Many of the quantitative studies appeared to assume that measures are universally relevant to diverse subpopulations and did not address validity and reliability in these groups. In fact, only four studies compared validity and reliability among racial/ethnic subgroups [50, 52, 58, 60]. Two studies [50, 52] demonstrated strong internal consistency and moderate correlations among items in the *Cognitive Coping Strategies Questionnaire* (Cronbach alphas, 0.70–0.90), while one found poor internal consistency among items across subgroups (Cronbach alphas, 0.50–0.60) in the coping scale of the QLQ-C30 [58]. An issue with using quantitative measures is that the measure must be reliable and valid for the population tested. Unfortunately, few coping measures have been validated for racial/ethnic minority populations. The *Brief COPE* has been validated for Greek [84], Spanish [85], French [86], German [87], and Korean speaking populations [88]. Lundqvist et al. [89] were able to validate the *Ways of Coping* scale with a Swedish population. Cousson-Gélie et al. [90]

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attempted to validate the Ways of Coping scale with a French population, but the factor structure was not the same as the original measure. To our knowledge, neither of these measures has been validated with other language groups or with women of color. Of the other coping measures used in these studies *Brief COPE* [91] and *Cognitive Coping Strategies* [92], only the *Cognitive Coping Strategies Questionnaire* was tested for reliability and validity among both African Americans and Whites (Cronbach alpha for African American women was similar to that of White women, 0.71–0.87 vs. 0.74–0.89) [50]. Together, this review of quantitative measures suggests that much work needs to be done to assess the utility of the three available coping measures among women with color, particularly those with breast cancer. We do not yet understand sufficiently whether coping strategies and their most valid and reliable measures differ by racial/ethnic orientation and by breast cancer status.

Qualitative studies of coping in racial/ethnic minorities with breast cancer

Qualitative research captures meaning and concepts, and an in-depth and nuanced understanding of processes that are more elusive in hypothesis-testing quantitative studies. In the last 12 years, 17 qualitative studies of coping and breast cancer among women of color have been published [62–79] (see Table 2). The majority used in-depth individual interviews (11 studies) [63–67, 69–72, 75, 77, 78] and six relied on focus groups [67, 68, 72, 74, 76, 79]. Qualitative studies explored coping at various stages of the breast cancer continuum, from diagnosis to long-term survivorship, highlighting differences and similarities across racial/ethnic groups. Topics included coping with decision-making [65, 69], coping with caring for children [63] and spouse [75], coping among women as they disclosed their diagnosis to others [66], coping and religion/spirituality [64, 65, 70–79], and how women adapted to cognitive impairment [67] and overall quality of life at the survivorship stage [68, 72–74]. Daveys et. al. [63], Ashing-Giwa et al. [72, 74, 76], Wilmoth [79], and Yoo et al. [66] showed that the coping responses of women of color were strongly affected by their concerns regarding caring for close relatives (e.g., spouses, children, and aging parents). These women coped by not burdening spouses, children, and family with their diagnosis.

Research on coping with breast cancer among African American, Latinas, and Asian women has been dominated by qualitative studies on the role and meaning of faith, spirituality, and the role of the church [64, 70–79]. As with the quantitative studies, the qualitative studies found that women of color were more likely than Whites to use spirituality, including faith in the divine and prayer, as a coping tool around treatment decisions [65, 69], side effects [71–74, 76, 77], intimacy concerns as a couple [75], body image issues [75, 79], and as a general resource.

The remaining qualitative studies of Latinas and Asian American women [68, 69, 72, 76] focus on strategies used to elicit social support from family and friends. Three studies of Latina women coping with breast cancer that examined the meaning of social support at different points in the breast cancer continuum [68, 69, 72] shared some common findings. First, women had different needs and different strategies at each point in the cancer continuum, whether at initial decision making or during treatment. English language skills

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complicated the adjustment at each stage. Even more significant, the cultural barriers they encountered made it difficult for respondents to adapt to their illness and to locating appropriate and accessible linguistic, cultural, and financial support [68, 69, 72]. Our review of qualitative studies suggests that few have focused on changes over the cancer continuum, and that most have concentrated on African American women's use of religion as a coping strategy.

A mixed methods study of coping with breast cancer

The majority of studies thus far have used either quantitative or qualitative methods. One study, however, investigated coping by blending qualitative and quantitative methods (see Table 3) [80]. Mixed methods research combines the strengths of quantitative methods that measure prevalence, trends, and associations with qualitative research that explores meaning and understanding, explaining the *how* and *why* of quantitative findings and identifying entirely new concepts not previously anticipated [93]. A mixed methods study by Levine et al. [80] focused on prayer as a way of coping with breast cancer, and found that although African Americans and Asians tended to pray more than Whites or Latinas; there were no significant differences between those who did and did not pray and distress, social support, or quality of life. They reported that women who prayed were able to find more positive aspects of their cancer experience than women who did not pray.

Discussion

Summary of findings

Our review of 33 research studies published between 1980 and 2012 examined what is known about how women from differing racial/ethnic backgrounds cope with breast cancer. Emotional distress associated with a breast cancer diagnosis is common to all women regardless of ethnicity, race, and culture [5–11]. As this review demonstrates, however, there are significant differences in how women of diverse cultures respond to related stressors. Results from the quantitative studies suggest variations in their coping strategies. In studies with multiple ethnic groups, positive forms of coping such as self-distraction [57], venting [53, 57], and positive reappraisal [52, 60] were more common among women of color than White women. More negative forms of coping such as emotional suppression [60], wishful thinking [60], and behavioral disengagement [57] were also more common among women of color than among Whites. Negative forms of coping, such as emotional suppression [60] and behavioral disengagement [57], were more likely to be associated with worse outcomes for women across race and ethnicity. Women who used these negative forms of coping experienced increased levels of distress [53, 57] and poorer survival [60]. In addition, most of these studies included either African American women only or African American and White women; very few had respondents of Latin or Asian American background.

Only a limited number of quantitative studies examined ways that women from diverse ethnic groups cope with breast cancer survivorship focusing primarily on diagnosis. Qualitative studies have been more likely to examine the various ways women cope at different stages, from diagnosis to treatment to survivorship. They illustrate variations in coping patterns in which some behaviors are encouraged and deemed appropriate, while

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others are more frequently used by White women only. This suggests that women of color tend to cope with breast cancer differently than White women. Moreover, the finding that coping was often dependent on how well significant others responded to the situation [63, 66] suggests that coping is a relational process centered on the ways that a woman's illness impacts those closest to her. For example, some studies indicated that women wanted to continue to care for their families to prevent them from feeling stressed and unduly focused on their well-being [63, 66, 74–76]. In contrast, studies of White women with breast cancer find greater encouragement of the direct expression of the patient's feelings in order to mitigate personal distress [14]. Qualitative studies also indicate that among racially/ethnically diverse subgroups, religious beliefs and norms affect appraisal and coping responses [64, 65, 70–79]. A common theme in both quantitative and qualitative studies was the use of spiritual beliefs and practices such as faith and prayer by women of color [48, 51, 53, 59, 61, 62, 64, 65, 70–80]. Positive spiritual and religious coping reduces distress and improves quality of life and physiological functioning [6]. These studies contribute to a growing recognition of the importance of spirituality in coping with breast cancer, and suggest coping strategies that could be enhanced and disseminated among women of different backgrounds.

Needed areas of research

Research on coping and breast cancer among White women has expanded steadily over the past 30 years, and ranges from small-scale qualitative studies to large population-based intervention trials [5–31]. Yet this review has illustrated that over this time period, research with women of color has been very limited, and that there are variations in coping among women of color as they pass through the earlier stages of diagnosis and treatment. These coping variations include the use of spirituality and interpersonal relations and processes that have not been fully explored in coping measures, particularly in quantitative studies. Preliminary evidence suggests the importance of looking at variations in coping strategies among different population subgroups over time. Since the majority of the literature is focused on early stage breast cancer, we do not know the coping strategies of women of color who are long-term survivors or who suffer from advanced-stage breast cancer. The fear of recurrence is a frequent worry and concern among all women who have had breast cancer [94]. Further studies need to be done on how women of color cope with fears of recurrence. Women with more advanced cancers may cope differently than women with early stage cancer [94, 95]. More studies of women with advanced breast cancer from different racial/ethnic groups should be conducted. Moreover, there were only three studies of coping in relation to body image and sexuality; they were limited to African Americans [55, 75, 79], and none included Latinas and Asian Americans.

As described above, we have identified fundamental areas where further research is needed. Moreover, we also identified gaps in the use and validation of coping and related measures among women of color and in in-depth exploration of sociocultural contextual influences on coping strategies. The quantitative studies we reviewed appear to rely on a singular concept of "good coping" derived from research among White women. Despite recognition that both positive and negative coping strategies differ by race/ethnicity among breast cancer survivors, most quantitative studies have relied on concepts and measures of coping

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developed and tested with predominantly non-Latina White samples. There has been little or no adaptation or modification of concepts and/or measures in studies with women of color. Hence, operationalization of concepts of coping among women of color are fairly limited and standardized, while concepts developed in studies of non-Latina White women have been viewed as universal. The important influences of language and culture in studying ways of responding to illness and adversity have not been adequately researched. Past research with racially/diverse breast cancer patients has shown that coping measures often fail to capture the social context of minority breast cancer patients, which often includes caring for the well-being of others [96, 97]. Rather, instruments have been based upon the behaviors of the majority population [96, 97] and then used as the gold standard, while disregarding the coping strategies of racial/ethnic minorities.

Additional research studies are imperative to further explore the many dimensions of coping within and across ethnically diverse populations. An area that should be prioritized is that of relational coping and breast cancer, which suggests that facing cancer is a “we” experience not limited to an individual, but rather one that is interdependent and shared with others, especially family members [41–43]. To date, “relational” approaches have been primarily directed at marital relations and the experiences of Whites facing breast cancer [98]. As the qualitative findings in this review indicate though, close and extended ties of family can help or hinder a woman’s trajectory through breast cancer. Understanding and exploring the dimensions of relational coping among women of color and their families is an area for further development.

The use of varied methodological modalities would improve our understanding of differences in coping strategies among women of color with breast cancer. Kagawa-Singer and Ashing-Giwa [44] suggest that culturally competent psychosocial oncology research should be conducted using mixed method designs. Qualitative studies using different racial/ethnic groups, relying on a combination of in-depth interviews, observations, and focus groups, can help to develop concepts, illuminate real-life contextual meaning and multilevel influences, and deeply explore cultural influences. In turn, these approaches may lead to an expanded repertoire of measures and interventions designed to address coping [44]. Folkman and Moskowitz [99] found that “narrative approaches are…useful for uncovering ways of coping that are not included in inventories” (pg. 750); they can validate existing concepts among different populations, leading to the development of valid, reliable measures appropriate to intervention research and quantitative studies.

Conclusions

In this review, we identified 33 articles on the topic of coping processes among women of color undergoing treatment or who have ended treatment for breast cancer. The literature has been mostly focused on African American and Latina women; there is little information on Asian American women or women from other racial or ethnic minority groups. Our results suggest that women of color tended to use more religious and spiritual strategies in coping with breast cancer along with a wide range of coping responses that may be either beneficial or detrimental to their health. Missing from the literature is a discussion of coping in relation to such aspects of the cancer experience as body image and sexuality. In addition to the

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areas above, missing from the quantitative research is the consideration of cultural, familial, and relational aspects that are integral to coping among all cancer patients. Stress, coping, and their correlates are concepts that are thus best understood as multidimensional and should not be studied in isolation from their social and cultural context.

Further research is necessary not only to validate the existing concepts of coping among different racial/ethnic groups, but with other populations as well (e.g., sexual minorities). In addition, our survey of the literature suggests that we need additional studies that test culturally competent interventions tailored to a particular population to determine whether they enhance coping with and recovery from cancer. Many people with cancer suffer because health-care professionals lack understanding of the cultural and environmental contexts in which they live. Further research into specific types of coping can be used to educate health care professionals on how to relate to cancer patients from different ethnic and sociocultural groups.

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Table 1

Racial/ethnic minorities, coping, and breast cancer: quantitative studies, 1980–2012 (=15)

Authors listed by year	Primary question	Methods	Sample	Coping measures	Results
Umezawa et al., 2010 [48]	Is belief in divine control related to coping strategies among women from different ethnic groups?	Descriptive, cross-sectional survey	Breast cancer patients: 92 Whites, 99 Latina, 66 African American,	Brief COPE	Belief in divine control was positively related to approach coping and acceptance and negatively related to behavioral disengagement, avoidance, and denial among Latinas but not the other groups. Overall, Latinas used approach coping more often and avoidance coping less often than Whites. African Americans used less approach coping than Whites and more positive reframing and avoidance coping than Latinas.
Maly et al., 2008 [49]	Are racial/ethnic disparities in older women's health-related quality of life and type of breast cancer treatment mediated by physician and individual variables? Does patient empowerment via communication with physician predict better quality of life? Do physician-related factors and patient cognitive factors mediate the relationship between race/ethnicity and quality of life and breast cancer surgery?	Descriptive, cross-sectional survey	Breast cancer patients: 99 Latina, 66 African American, 92 Whites	Brief COPE	Latinas had lower quality of life and choose breast-conserving surgery less often than whites. Quality of life was predicted by positive coping, less mistrust of the medical system, being non-Latina, greater breast cancer knowledge, perceived self-efficacy and fewer comorbidities. The effect of race on quality of life was partially mediated by medical mistrust.
Gill et al., 2006 [50]	What is the longer-term effect of an uncertainty management at 20 months?	Randomized controlled trial, longitudinal study	Breast cancer patients: 342 Whites, 141 African American	Cognitive coping strategies	At 20 months, the benefits of the intervention persisted with improvements in coping skills but also cognitive reframing and cancer knowledge.
Morgan et al., 2006 [51]	Are there relationships between spiritual well-being, religious coping, and quality of life among African American breast cancer patients in treatment?	Descriptive, cross-sectional survey	Breast cancer patients: 11 African American	Brief RCOPE	The women used more positive than negative religious coping. Spiritual well-being was significantly positively related to quality of life. Negative religious coping was related to poorer physical well-being.
Mishel et al., 2005 [52]	What is the efficaciousness of a uncertainty management intervention delivered to older African American and Caucasian long-term breast cancer survivors?	Randomized controlled Trial, longitudinal survey	Breast cancer patients: 149 African American 360 Whites	Cognitive coping strategies	After training in uncertainty management Whites women increased their use of coping self-statements, cognitive and behavioral coping, while African American women decreased catastrophizing.
Culver et al., 2004 [53]	What are differences and similarities in coping and distress across different racial/ethnic groups?	Descriptive, cross-sectional survey	Breast cancer patients: 26 African American, 151 Whites, 61 Latina	Brief COPE	Whites used more humor and less religious coping than Hispanics and African Americans.
Fogel et al., 2003 [54]	Are there racial differences in Internet use for medical information	Descriptive, cross-sectional survey	Breast cancer patients: 143 Whites, 37 African	Brief COPE	No differences in coping between Whites and African American/Hispanic women.

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Authors listed by year	Primary question	Methods	Sample	Coping measures	Results
	and potential of psychological benefits? and potential of psychological benefits?		American and Latina		
Pikler et al., 2003 [55]	Are there racial/ethnic differences in body image, self-efficacy in coping and coping?	Descriptive, cross-sectional survey	Breast cancer patients: 61 Whites, 20 African Americans, 5 Native American	Cancer behavior inventory Ways of Coping Questionnaire	No significant racial/ethnic differences in body image, coping and self-efficacy in coping.
Soler-Vila et al., 2003 [56]	Is there a relationship between psychosocial factors and survival in African American and White breast cancer patients?	Longitudinal survey	Breast cancer patients: 145 African American women, 177 White	Ways of Coping Questionnaire	White women had higher levels of denial, wishful thinking, fatalism, and less passive coping than African American women. Coping was not related to survival.
Culver et al., 2002 [57]	Are there racial/ethnic differences across time between coping and distress?	Longitudinal survey	Breast cancer patients: 8 African American, 53 Hispanic, 70 White	Brief COPE	White women used humor more and religious coping less than the other groups. Hispanic women used more self-distraction and venting than the other groups. White women also used venting more than African Americans. Behavioral disengagement predicted less postsurgical distress among Hispanic women while it predicted more distress among White women. Disengagement was related to greater distress for both Hispanic and White women.
Gotay et al., 2002 [58]	Does quality of life vary according to ethnicity?	Descriptive cross- sectional survey	Prostate and breast cancer patients: 126 breast cancer patients; 11 Filipino, 59 Japanese, 35 Whites, 19 Hawaiian	QLG-30 and introduction of coping domain (4 items)	There were no differences across ethnicity in terms of quality of life or coping in the breast cancer group.
Bourjolly and Hirschman, 2001 [59]	Are there racial differences in coping strategies and uses of social support between African American and White women with breast cancer?	Descriptive, cross-sectional survey	Breast cancer patients: 41 African American 61 White	Ways of Coping Questionnaire	African Americans were more likely to rely and feel more supported by on spirituality, while Whites relied more on family and friends.
Reynolds et al., 2000 [60]	Are there differences between styles of coping and breast cancer survival between African Americans and Whites?	Longitudinal survey	Breast cancer patients: 442 African American, 405 White	Ways of Coping Questionnaire	African Americans were more likely to use emotional suppression, wishful thinking, and positive reappraisal while Whites were more likely to express emotions, use problem-solving, and escapism. Emotional expression was related to lower risk of mortality.
Alferi et al., 1999 [61]	What is the relationship of religiosity to religious coping and distress in Catholic and Evangelical Hispanic women newly diagnosed?	Longitudinal survey	Breast cancer patients: 49 Latina	COPE	There were differences by religious affiliation. Catholic women who had high levels of religiosity had more distress, while Evangelical women with high levels of religiosity had less distress throughout the year.

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Authors listed by year	Primary question	Methods	Sample	Coping measures	Results
Bourjollly et al., 1999 [62]	How do appraisal, coping and coping resources impact social functioning between African American and White women with breast cancer?	Descriptive, cross-sectional survey	Breast cancer patients: 41 African American, 61 White	Ways of Coping Questionnaire	African American women had more difficulties with social functioning than Whites. Being African American was a significant predictor of poor functioning in terms of household activities.

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Table 2

Racial/ethnic minorities, coping, and breast cancer: qualitative studies 1980–2012 (*n* =17)

Authors listed by year	Primary question	Type of methods	Subsample sizes	Key findings
Davey et al., 2012 [63]	How do African American women cope with diagnosis and treatment and care for children?	Interviews	Breast cancer patients: 9 African American breast cancer patients	A way that women coped with their diagnosis was through protecting their child. Parents restrained their emotional responses around their child.
Gregg, 2011 [64]	How are spirituality and religiosity used as coping mechanisms African American women diagnosed with breast cancer?	Interviews	Breast cancer patients: 23 African American breast cancer patients	Spirituality was the main coping strategy. Spirituality gave a sense of security and stability. Also used acceptance and tried to maintain their pre-diagnosis duties (e.g., caregiving).
Sheppard et al., 2010 [65]	What factors influence African American women's adjuvant therapy decisions?	Interviews	Breast cancer patients: 8 African American breast cancer survivors 12 cancer researchers/clinicians.	Women used spiritual coping, however, this was not a factor in decision-making.
Yoo et al., 2010 [66]	How do racially/ethnically diverse women disclose their breast cancer diagnosis to others?	Interviews	Breast cancer patients: 44 African American, 54 Asian American, 25 Latina and 54 White	Different strategies for disclosure were used, all of which entailed emotion work. Respondents talked about the various elements of emotion work in the disclosure process including: managing others' worry, protecting and soothing others, and educating and instructing others.
Boykoff et. al., 2009 [67]	What are the effects of cognitive impairment on women's personal and professional lives of African American and White breast cancer survivors?	Focus groups Interviews	Breast cancer patients: 35 African American, 39 Whites	Respondents used a range of cognitive and behavioral strategies to with symptoms of cognitive impairment as a result of chemotherapy.
Buki et al., 2008 [68]	What are the experiences of immigrant Latina breast cancer survivors along the survivorship continuum, from diagnosis to long-term survivorship?	Focus groups	Breast cancer patients: 18 Latina	Social support helped the women to cope in each stage of the experience. Those who felt that they had adequate support used more positive coping styles.
Sheppard et al., 2008 [69]	How do Latina women cope with treatment decision-making?	Interviews	Breast cancer patients; 37 Latina	Most women would have liked help in asking questions. Women were most concerned about chemotherapy side effects.
Levine et al., 2007 [70]	What is the role of spirituality among breast cancer survivors from different ethnic groups?	Interviews	Breast cancer patients: 44 African American, 54 Asian American, 25 Latina, 54 White	Spirituality was important for most of the women. Spirituality was a source of comfort, self-transformation, and acceptance. However, some women felt angry at God. Prayer was also used to cope. African Americans and Latinas were more spiritual and felt more comforted than Whites and Asians. Christians also felt more comforted than other groups.
Simon et al., 2007 [71]	What is the role of spirituality throughout the breast cancer experiences of African American women?	Interviews	Breast cancer patients: 18 African American	Spirituality was used as a resource to cope with the stress of cancer, as a guide in decision making, to cope with treatment side effects, and find meaning in life and will to live.

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Authors listed by year	Primary question	Type of methods	Subsample sizes	Key findings
Ashing-Giwa et al., 2006 [72]	What is the impact of breast cancer among Latina survivors?	Key informant Interviews Focus groups	Breast cancer patients: 26 Latina 6 key informants	Spirituality (e.g., prayer) was the main strategy for coping. They gained comfort and insight through church attendance. Other strategies: support, encouragement, and comfort from family members; cognitive avoidance and distraction.
Lopez et al., 2005 [73]	How do African American breast cancer survivors perceive and address their quality of life concerns?	Photovoice method	Breast cancer patients: 13 African American	Women used spirituality to accept their diagnosis gain strength, and find purpose in life. Felt that God would take care of them and heal them.
Ashing-Giwa et al., 2004 [74]	How does culture and socio-ecological factors impact HRQOL and psychosocial experiences among African American, Asian American, Latina and Caucasian cancer survivors?	Focus groups Key informant interviews	Breast cancer patients: 24 African American, 34 Asian, 26 Latina, 18 Whites 20 health professionals	Spirituality and prayer used more to cope among African American, Asian American, and Latina women than Whites women. Support from others helpful in coping for all groups. Whites also used exercise, assistance from health care practitioners and pets to cope. Key informants felt that women coped by using distraction and relying on families.
Sanders et al., 2004 [75]	What were the intimate and personal concerns of women with breast cancer? How do women cope with changes to their personal and intimate relations?	Interviews	Breast cancer patients: 15 African American	Spirituality was the main source of coping. Support from others, including church members and family, positive thoughts, communication with others, and acceptance of their illness and disfigurement from surgery were also important.
Ashing et al., 2003 [76]	What are the experiences and concerns of Asian American women diagnosed with breast cancer?	Focus group Interviews Key informant interviews	Breast cancer patients: Asian American women: 10 Korean 11 Chinese, 13 mixed Asian 6 health professionals	Family and spiritual support were central to their ability to cope and recover Spirituality and prayer gave them strength, peace, and reduced their fears. God is ultimately in control of their healing and future, and will health them. Being socially active, eating a good diet, and having a positive attitude were key factors in coping.
Henderson et al., 2003 [77]	How do African American women cope with breast cancer?	Interviews	Breast cancer patients: 66 African American	Coping strategies described by African American women included relying on prayer, avoiding negative people, developing a positive attitude, having a will to live, and receiving support from family, friends, and support groups.
Lackey et al., 2001 [78]	What are the experiences of African American women living with breast cancer?.	Interviews	Breast cancer patients: 13 African American	Spirituality was the main way of coping with their cancer. Women prayed for guidance.
Wilmoth et al., 2001 [79]	What are the personal and relationship concerns for African American breast cancer survivors?	Focus groups	Breast cancer patients: 24 African American	Women coped by acceptance and learning to live with their illness.

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Table 3

Racial/ethnic minorities, breast cancer, and coping: mixed methods studies 1980–2012 (*N* =1)

Author listed by year	Primary question	Types of methods	Sample sizes	Key findings
Levine et al., 2009 [80]	What are the racial/ethnic differences in use of prayer among breast cancer survivors? How is the use of prayer related to mood and quality of life?	Interviews measurements (No coping measure used)	Breast cancer patients: 44 African American, 54 Asian American, 25 Latina and 54 White	Eighty-one percent of the women prayed. There were no significant differences between the groups for any of the psychological, social support, or quality of life variables with the exception of higher benefit finding and spiritual well being among those who prayed. The data did show that women who prayed were able to find more positive contributions from their cancer experience than women who did not pray. The interviews showed that those who prayed tended to be African American or Asian, Catholic or Protestant.