

REVIEW

A qualitative meta-synthesis examining the role of women in African American men's prostate cancer screening and treatment decision making

Erin M. Bergner¹ | Emily K. Cornish¹ | Kenay Horne² | Derek M. Griffith^{1,3} 

¹Center for Research on Men's Health, Vanderbilt University, Nashville, TN, USA

²Tennessee State University, Nashville, TN, USA

³Center for Medicine, Health and Society, Vanderbilt University, Nashville, TN, USA

Correspondence

Derek M. Griffith, Center for Medicine, Health and Society, Vanderbilt University, PMB #351665 2301 Vanderbilt Place, Nashville, TN 37235, USA.

Email: derek.griffith@vanderbilt.edu

Funding information

National Center for Advancing Translational Sciences, Grant/Award Number: UL1TR000445-08 and 2UL1TR000445-08; National Institute of Diabetes and Digestive and Kidney Diseases, Grant/Award Number: R21-DK095257 and 7R21DK095257-02; National Cancer Institute, Grant/Award Number: 5U54CA163066; American Cancer Society, Grant/Award Number: RSG-15-223-01-CPPB; Aetna Foundation, Grant/Award Number: 15-0046

Abstract

Objective: Being an African American man is a risk factor for prostate cancer, and there is little consensus about the use of screening, early detection, and the efficacy of treatment for the disease. In this context, this systematic review examines the roles women, particularly wives, play in African American men's prostate cancer screening and treatment decision making.

Methods: We searched OVID Medline (R), CINAHL (EBSCO), PsychInfo (EBSCO), PubMed, Cochrane Library, ERIC (Firstsearch), and Web of Science to identify peer-reviewed articles published between 1980 and 2016 that reported qualitative data about prostate cancer screening, diagnosis, or treatment in African American men. We conducted a systematic review of the literature using study appraisal and narrative synthesis.

Results: Following Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines for identifying and screening 1425 abstracts and papers, we identified 10 papers that met our criteria. From our thematic meta-synthesis of the findings from these publications, we found that women played 3 key roles in African American men's decision making regarding prostate cancer screening, diagnosis, or treatment: counselor (ie, offering advice or information), coordinator (ie, promoting healthy behaviors and arranging or facilitating appointments), and confidant (ie, providing emotional support and reassurance).

Conclusions: Women are often important confidants to whom men express their struggles, fears, and concerns, particularly those related to health, and they help men make appointments and understand medical advice. Better understanding women's supportive roles in promoting positive mental and physical outcomes may be key to developing effective interventions to improve African American men's decision making and satisfaction regarding prostate cancer screening and treatment.

KEYWORDS

African American men, oncology, prostate cancer, prostate cancer screening, prostate cancer treatment, qualitative research, social support, women

1 | INTRODUCTION

Wives often assume some responsibility for their husbands' health,^{1,2} and this is particularly heightened when men are diagnosed with serious or chronic health issues like prostate cancer.^{3,4} Prostate cancer is the most commonly diagnosed nonskin cancer^{5,6} and a leading killer of men living in the United States.⁷ African American men have a substantially higher prostate cancer incidence rate and more than twice the prostate cancer mortality rate^{6,8} than that of non-Hispanic White

men. Women play a particularly influential role in men's cancer-related decision making, serving as a source of information and supporting how men interpret and use prostate cancer information to make decisions.^{9,10} They are often important confidants to whom men express their struggles, fears, and concerns, particularly those related to health.^{11,12} In early stages of prostate cancer, men report that their wives help them to process and retain information.¹³ Women also empower men in their lives to regain a sense of control and complement men's coping strategies.¹⁴ While the literature predominately

focuses on the role of wives and significant others as key sources of social support, other women in men's lives (sisters, mothers, grandmothers, friends, nieces, and daughters) were identified as important sources of social support.^{15,16} While we know social support—particularly the support of women—is critical for men to cope with the stress of prostate cancer risk, it is unclear what roles women play in the context of African American men's prostate cancer screening and treatment.

Efforts to reduce disparities in prostate cancer are complicated by the continued controversy regarding screening and treatment options for prostate cancer.^{5,17} The US Preventive Services Task Force currently does not recommend prostate-specific antigen-based screening for prostate cancer, regardless of age or high-risk status (family history or African American race).⁵ The US Preventive Services Task Force, however, does acknowledge that some men will continue to request screening and some physicians will continue to offer it. In such circumstances, the Task Force states that screening should reflect patient preferences,⁵ a position also shared with organizations such as the American Cancer Society¹⁸ and American Urological Association.¹⁹ Men's decisions regarding prostate cancer screening are influenced by factors such as socioeconomic status,²⁰ education level,^{21,22} age,²¹ disease knowledge,^{20,21,23-25} fear and denial,^{20,25} self-efficacy,²³ patient-provider communication,²⁰ and trust in the physician or medical system.^{9,20,22,24,26} African American men may forego visits to the doctor because of fear and prior negative experiences with health professionals.²⁷ Such doctor-patient limitations can hinder the shared and informed decision-making process regarding prostate cancer screening advocated by the American Cancer Society and American Urological Association. Additionally, some men are reluctant to consult their doctors, subscribing to the belief that it is not masculine to seek help.²⁸

When men are screened for prostate cancer and receive results that are of concern, there are a number of treatment options: watchful waiting (observation and physical examination with palliative treatment of symptoms), active surveillance (periodic monitoring with prostate-specific antigen tests, physical examinations, and repeated prostate biopsy) with discussion about treatment at the sign of disease progression or worsening prognosis, and surgery or radiation therapy.²⁹ There is no consensus about the optimal treatment of localized prostate cancer. Treatments for prostate cancer carry significant risks, including urinary incontinence, erectile dysfunction, bowel dysfunction, and even death, and many of these side effects are common and persistent.^{5,30} Several studies have also identified negative psychological consequences commonly associated with prostate cancer treatment, such as reduced feelings of masculinity, anxiety, depression, stress, diminished self-esteem, feelings of inadequacy, and self-consciousness regarding sexual performance that can affect men's sense of self and masculinity.³¹⁻³³ In addition, these physical and psychological symptoms can interfere with men's ability to work and contribute financially to a family.^{33,34}

Social support may improve men's mental health, facilitate their help seeking, and enhance informed decision making regarding screening and treatment for key chronic diseases like prostate cancer.^{9,25} Significant gender differences in the relationship between social support and specific health practices have been found after controlling for other factors with a social context.^{35,36} Additionally, research

suggests that the relationship between coping with screening, diagnosis, and treatment of chronic diseases like prostate cancer and distress depends on the quality of dyadic functioning and being part of a strong dyad may serve as a buffering factor.^{37,38} Although men with positive marital interactions tend to have better health habits (eg, better eating habits, less substance abuse, and more adequate sleep), the relationship between men and social support is not well understood.³⁹ Social support theory emphasizes the importance of social influence and support in shaping and maintaining health behavior.⁴⁰ Social support is a multidimensional construct composed of emotional, instrumental, informational, and appraisal support.⁴¹ Emotional support consists of expressions of caring, listening, and empathy, whereas instrumental support involves tangible aid and assistance (eg, transportation, financial help, and providing food or other resources). Informational support includes the provision of advice, suggestions, and information, and appraisal support generally involves feedback that is useful for self-evaluation.⁴¹⁻⁴³ Each type of support is important for African American men to receive in the context of prostate cancer screening and treatment decision making, yet how women fulfill the role of providing these types of social support is not well understood.

In this paper, we systematically review how the qualitative literature defines and describes women's roles in African American men's prostate cancer screening and treatment. All presented studies included descriptive findings on the role of women, which for this paper we conceptually distinguished into broad types of supportive attributes, behaviors, or acts seen across the prostate cancer screening to treatment continuum. We focus on African American men because of the high incidence, prevalence, and mortality from prostate cancer and because simply being an African American man puts one at risk for prostate cancer. This creates a unique context in which men are making decisions about prostate cancer screening and treatment.

2 | METHODS

2.1 | Key question

The key question we aim to answer in this systematic review is: What roles do women play in African American men's prostate cancer screening and treatment decision making? There is little consensus about the cause of prostate cancer, use of screening and early detection, and appropriate management options for early stage disease, yet being an African American man is in and of itself a risk factor for the disease. This context heightens the need to understand the key supportive roles that women play in the lives of African American men negotiating prostate cancer risk, screening, and treatment.

2.2 | Study design and eligibility criteria

Studies were eligible for review if they met the following criteria: (1) original studies that enrolled participants who self-identified as African American men; (2) reported qualitative data from any qualitative method subtype about prostate cancer screening, diagnosis, or treatment; (3) published in English; (4) published between the dates of 1980 and 2016; (5) at least 10% of the study sample was African American; (6) were peer-reviewed; and (7) mentioned the role of

women and social supports in prostate cancer screening, diagnosis, or treatment. We conducted this review using the ENTREQ (Enhancing transparency in reporting the synthesis of qualitative research) statement as a framework for transparent reporting of qualitative meta-syntheses.⁴⁴ Studies using qualitative research methods were identified to more effectively explore the complex intersection of personal characteristics (gender, race/ethnicity, age, income, etc), identities (gender, ethnic/racial), statuses (marital, employment), and psychosocial factors (attitudes, perceived norms, beliefs, values, and motivations) that are behavior specific, as well as more global interpersonal characteristics.⁴⁵ The goal of using a qualitative approach was to develop a composite description of “what” and “how” people experience a particular phenomenon in ways that a quantitative approach would not provide.⁴⁶ We also followed Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines because they are the recommended procedures for conducting, describing, and reporting systematic reviews and meta-syntheses.^{44,47}

2.3 | Information sources

With the assistance of a reference librarian, we determined search terms to use to ensure accurate identification of relevant articles. Search terms consisted of a combination of terms related to the

following topics and phrases: prostate cancer, colorectal cancer, colon cancer, rectal cancer, African American, blacks, women, females, screening, treatment, qualitative, and diagnosis. We identified studies to review through an online search of the following databases: OVID Medline (R), CINAHL (EBSCO), PsychInfo (EBSCO), PubMed, Cochrane Library, ERIC (Firstsearch), and Web of Science, using the reference management system, EndNote X10. We conducted the final comprehensive search among all the databases in December 2016.

2.4 | Study selection and data collection

Through the aforementioned search process, we identified 1425 articles. Removing duplicates left 475 articles to be assessed for relevance in 2 phases with inclusion criteria developed to assess the content and use of the study findings (Figure 1). Phase 1 consisted of reviewing all 475 abstracts of identified articles to ensure articles met inclusion criteria. Through reviewing the abstracts in phase 1, we excluded a total of 178 articles for the following reasons: 19 were literature reviews, 21 articles did not include an abstract, 71 studies reported clinical trials or other nonapplicable article types, 24 did not discuss prostate or colorectal cancer, 1 paper was published prior to 1980, 21 studies included samples of less than 10% African American men, and 21 studies reported findings from non-US study samples.

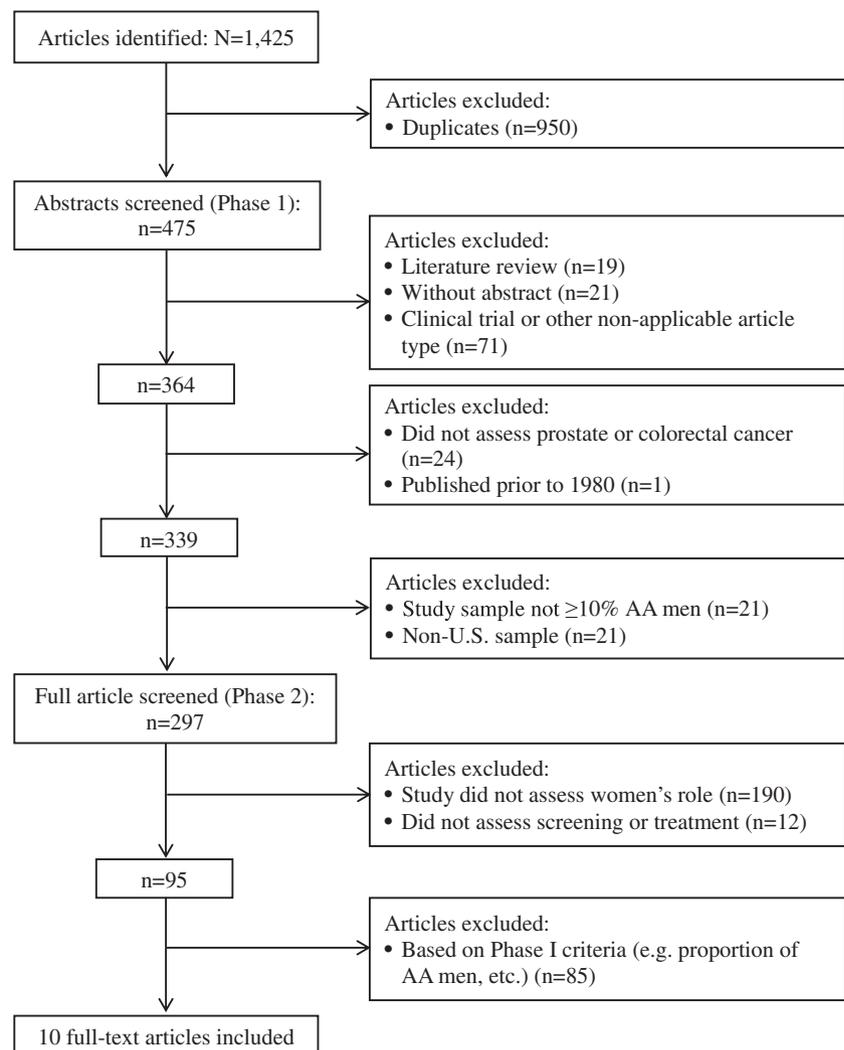


FIGURE 1 Preferred Reporting Items for Systematic Reviews and Meta-analyses flow chart for identifying pertinent articles for women's roles in the screening and treatment of prostate cancer among African American men

Screening in phase 2 consisted of reviewing the full text of 297 articles identified as “included” and “unsure” in phase 1. In this phase, 287 more articles were removed: 190 articles were excluded because they did not include findings related to women's roles, 12 did not include any discussion of screening or treatment, and 85 did not meet eligibility criteria upon further review. This resulted in a total of 10 articles remaining that met all inclusion criteria. We sought to include studies focused on both prostate and colorectal cancers because of the significant differences in the efficacy of screening and treatment for these 2 cancers yet the high incidence and mortality rates for African American men. However, we found no papers whose findings pertained to the role of women within the colorectal cancer screening and treatment of African American men. Thus, our results from this review only focus on the role of women in African American men's prostate cancer screening and treatment decision making.

2.5 | Data analysis

The research team iteratively developed the code book that 2 team members used to organize the data. Two coders reviewed the potential studies—an undergraduate student researcher and a senior research specialist—and the reviewers regularly met with the principal investigator who oversaw the study and other study staff. While interrater reliability was not calculated, consensus among the coders, senior investigator, and staff was reached in all cases. Consensus was first reached between the student research and the senior research specialist and then brought to the larger team for review. We extracted information from each eligible paper including study aims, information about study design and data collection procedures (eg, sample characteristics and research setting), and analytic approach; characteristics of the sample included the size, mean age of participants, gender (% male), and race/ethnicity (% African American). Text under the headings “Results/Conclusions” was extracted, and findings related to African American men's perceptions and experiences of prostate cancer, screening, and treatment, and descriptive information about social support involving women was identified and noted from the included studies for further review.

Our primary objective for data analysis was to understand the role that women play in prostate cancer screening and treatment processes of African American men. We took all of the findings from the eligible papers and conducted a thematic meta-analysis to identify codes to help understand the data.⁴⁸ Thematic analysis is considered appropriate when researchers are seeking to discover, organize, and describe interpretations of the data.⁴⁸ Results from eligible papers were exported into Microsoft Word documents. Significant passages within the findings were highlighted, and margin notes were made to (a) summarize themes within each document and (b) document potential questions, connections, underlying themes, and possible implications of the text for further analysis. We used an inductive approach to identify and group findings that best represented key concepts discussed by participants that cut across codes and represented themes.^{48,49} More specifically, we used highlighting and margin notes to (a) summarize themes within each document, using a combination of in vivo restatements of the data and direct quotes, and (b) document potential questions, connections, underlying themes, and possible implications of the text for further analysis. We then looked for similarities across codes

and grouped themes that were discussed by the authors until agreement was reached. The cross-cutting themes that were used to organize the results emerged from the separate analysis of all 10 included articles. The systematic data organization and analysis process we used is similar to methods previously used by the senior author and colleagues,⁵⁰⁻⁵³ and results are reported according to AMSTAR guidelines (Supporting Information).⁵⁴

3 | RESULTS

3.1 | Study characteristics

The 10 included studies provide a diversity of aims, sample sizes, study designs, and results within the framing of the adopted eligibility criteria (Table 1). These studies predominately used purposive sampling, with the exception of 2 studies^{55,56} that used convenience sampling. Along with purposive sampling, Jones and colleagues⁵⁹ also used “snowball” sampling. Four studies^{56,57,59,63} recruited participants from medical centers, 5 studies^{15,55,58,60,62} recruited participants from the community, and 1 study⁶¹ recruited participants from both community and medical sites.

While inclusion criteria allowed for articles from 1980 to 2016, no articles published prior to 2000 were found that met inclusion criteria. The samples of 3 studies⁵⁹⁻⁶¹ consisted of men only. In all but one study,⁵⁶ the entire sample was African American. Participants of 5 studies^{56,57,59,61,63} were diagnosed with prostate cancer and underwent treatment, which included surgery,^{59,61,63} chemotherapy,⁶¹ radiation therapy,^{59,61,63} or hormone therapy.^{59,61} In 2 studies, only African American men with no history of prostate cancer were included.^{60,62} Sample size in studies ranged from 14 to 81 participants. Most studies obtained data directly from participants through semistructured interviews^{57,59,60,63} or focus group discussions.^{15,55,56,58,61,62} Owens and colleagues⁶² included additional survey data collected prior to and following education sessions. Study findings pertained to prostate cancer knowledge and decision making,^{55,58,60,62} communication about prostate cancer,¹⁵ posttreatment experiences, largely focusing on sexual functioning,^{56,63} and social support.^{55,57,59,61}

All studies included descriptions of the role of women, which we coded into broad types of supportive attributes, behaviors, or acts seen across the prostate cancer screening to treatment continuum (Table 2). Most of the articles did not indicate the role women played in men's lives; however, when studies explicitly mentioned women's roles, they primarily discussed the role of wives or spouses. In addition, there were some instances where men referred to other family members (sister, daughter, mother, and niece) or a friend providing support in one or more of the described roles. From these analyses, we found that women's roles tended to fall into 3 categories: counselor (ie, offering advice or information), coordinator (ie, promoting healthy behaviors and arranging or facilitating appointments), and confidant (ie, providing emotional support and reassurance). Discussion of women playing the role of counselor was identified in 7 studies,^{15,57-62} the role of confidant was identified in 5 studies,^{15,56,57,61,63} and mention of women playing the role of coordinator was found in 6 studies.^{15,55,58,60-62}

TABLE 1 Characteristics of 10 included studies

Author	Study Aims/Research Questions	Overall Research Design/Data Collection Procedures	Sample Characteristics	Sampling Procedures	Setting	Data Analytic Approach
Blocker et al ⁵⁵	Knowledge, beliefs, and barriers associated with prostate cancer prevention and screening behaviors among African American men	Focus groups (n = 4)	N = 29 (14 male and 15 female, 100% African American, age range 34-68 y old)	Convenience	Community sample in North Carolina	Thematic analysis using constant comparative method
Boehmer and Clark ⁵⁶	To explore the perceptions of men and their wives regarding changes caused by metastatic prostate cancer and its treatment	Focus groups (n = 17; 15 with patients and 2 with patients' wives)	N = 27 (20 male, 45% African American, mean = 69 y and 7 female, 29% African American)	Convenience	Clinical sample from 3 hospitals in Texas	Grounded theory using constant comparative method
Friedman et al ¹⁵	To assess the practices, barriers, and recommended strategies for prostate cancer communication among African American families	Focus groups (n = 22; 11 male groups and 11 female groups)	N = 81 (43 male, 100% African American, mean = 52 y and 38 female, 100% African American, mean = 50 y)	Purposive	Community sample from South Carolina	Constant comparative method
Hamilton and Sandelowski ⁵⁷	To determine the types of social supports African Americans use to cope during the periods of diagnosis, treatment, and posttreatment of cancer	Semistructured interviews	N = 28 (13 male, 100% African American, mean = 67 y and 15 female, 100% African American, mean = 60 y)	Purposive	Clinical sample from North Carolina	Grounded theory using constant comparative method
Hunter et al ⁵⁸	To examine the perceptions of African Americans regarding their susceptibility to and screening for prostate cancer	"Listening sessions" (presentation and discussion)	N = 46 (38 male and 8 female, 100% African American, mean = 55 y)	Purposive	Community sample in North Carolina	Identified emergent themes using grounded theory approach
Jones et al ⁵⁹	To examine the interactions and impact of family and friends of prostate cancer survivors	Semistructured interviews	N = 14 (14 male, 100% African American, mean = 70 y)	Purposive and "snowball"	Clinical sample from southeastern medical center	Identified emergent themes
Jones et al ⁶⁰	To explore African American men's experiences in decision making regarding prostate cancer screening	Semistructured interviews	N = 17 (17 male, 100% African American, mean = 52 y)	Purposive	Community sample from rural Virginia	Hermeneutic phenomenological approach using iterative comparative analysis
Jones et al ⁶¹	To explore social support and economic barriers to cancer care experienced by African American men	Focus groups (n = 5)	N = 23 (23 male [11 rural and 12 urban], 100% African American, mean = 73 y)	Purposive	Community sample from Virginia and Maryland	Hermeneutic phenomenological approach using thematic analysis
Owens et al ⁶²	To examine African American men's and their female relatives, friends, and significant others' knowledge and cancer-related decision making within the context of a prostate cancer education program	Pilot education intervention consisting of 4 in-group education sessions and presurvey/postsurvey (n = 49)	N = 81 (43 male, mean = 51 y and 38 female, mean = 50 y, 100% African American)	Purposive	Community sample from South Carolina	Thematic analysis using constant comparative method; quantitative analysis using nonparametric frequencies/percentages
Rivers et al ⁶³	To describe salient psychosocial concerns related to sexual functioning among African American prostate cancer survivors and their spouses	Semistructured interviews	N = 24 (12 male, 100% African American, mean = 60 y and 12 female)	Purposive	Clinical sample from cancer center and nonprofit organization	Constant comparison method and content analysis

TABLE 2 Roles of women in African American Men's prostate cancer and screening treatment decision making

Role	Definition of Role	References that Included Discussion of Role
The counselor	Women as an informational source for men and play a role in facilitating men to make informed decisions about screening and treatment options	Jones et al ⁵⁹⁻⁶¹ Hamilton and Sandelowski ⁵⁷ Friedman et al ¹⁵ Hunter et al ⁵⁸ Owens et al ⁶²
The coordinator	Women as "instigators" of helping men to schedule medical appointments, encourage doctor visits, seek prostate cancer screening, eat healthy, and obtain prostate care	Blocker et al ⁵⁵ Friedman et al ¹⁵ Hunter et al ⁵⁸ Jones et al ^{60,61} Owens et al ⁶²
The confidant	Women as a key source of support, particularly emotional support, which also included encouragement and concern	Boehmer and Clark ⁵⁶ Friedman et al ¹⁵ Hamilton and Sandelowski ⁵⁷ Jones et al ⁶¹ Rivers et al ⁶³

3.2 | The counselor

Men frequently acknowledged that women, particularly wives, were integral partners in their decisions about whether to undergo prostate cancer screening,⁶⁰ treatment, and which treatment options to pursue.^{57-59,61} Men valued the advice of their spouse and other female family members and seriously considered their opinions when deciding whether to undergo prostate cancer screening or if cancer was detected, which treatment option was best.⁵⁹⁻⁶¹ Women served as sources of information for men and helped to support men's informed decisions.^{15,62}

Men reported that their spouses or close female relatives offered valuable information and support by sharing family history or their own experiences that were particularly critical in men's decision making. For example, one man decided to be screened for prostate cancer after his sister and daughter revealed details of a family history of the disease.⁶⁰ Some men noted the importance of their wives and female family members in helping them understand complicated medical information.^{57,59,60,62} Men highlighted that help from their spouses or female relatives, particularly those with health care experience, was essential in clarifying and translating medical information for them. One man, for example, went to his daughter, a nurse, for prostate cancer information. While he reported receiving adequate information from his doctors about his prostate cancer diagnosis, he relied on his daughter for help understanding medical language and answering questions about his prostate-specific antigen level.⁵⁷ Findings from Hunter and colleagues⁵⁸ also suggest that men may comprehend information more clearly when it is presented by these key women in their lives, who can present the information in a nonintimidating manner. Men valued the input of their wives and female relatives, believing they, as trusted family, had men's best interests in mind.^{60,62}

3.3 | The coordinator

In addition to offering insights and counsel, key women in men's lives helped to facilitate men's health promoting activities, such as encouraging doctor visits and scheduling medical appointments, seeking prostate cancer screening, and eating healthy.^{15,55,58,60,61} Additionally,

prostate cancer screening was facilitated by men receiving adequate information, trusting their health care provider, and receiving the instrumental support of family members.^{60,62} Participants reported that African American men do not go to the doctor because of poverty, low perceived need, and African American men placing the needs of their families ahead of their own health.^{55,58} Despite these barriers, women often prompted men to see the doctor and helped men get medical support for prostate problems and potential prostate cancer-related issues. Close family members assisted men by scheduling clinic appointments, cooking healthy meals, and attending to other daily life activities.^{15,60} African American men also reported relying on their wife or significant other to help them engage in health promoting behaviors such as healthy eating.^{55,62}

3.4 | The confidant

Men in these studies reported that family members, particularly wives, were confidants and pillars of emotional support. Key women in African American men's lives provided love, care, showed concern, and garnered trust,^{57,61} and in doing so, they facilitated men's ability to verbally express cancer-related concerns to them during their prostate cancer diagnosis and treatment.⁶¹ Men's comfort in talking with women about prostate cancer depended on the strength of their relationship and men's prostate cancer knowledge.^{15,56} For example, Friedman and colleagues¹⁵ found that a man was more likely to report that he was comfortable discussing prostate cancer with a woman if she was his wife.

While some men described trusting relationships with women in their lives and feeling open with them regarding their medical concerns, other men reported discomfort in sharing their fears, uncertainties, and feelings about physical changes such as erectile dysfunction.^{56,63} Women expressed encouragement, communicated optimism, and helped men feel better about themselves. Wives boosted their husbands' morale by telling jokes and enhanced men's self-esteem by reassuring them that their sexual performance was not tied to their masculinity.⁵⁶ Moreover, Rivers and colleagues⁶³ found that with encouragement from their spouse, some men were less concerned about their sexual functioning.

4 | DISCUSSION

Women, particularly wives, have a unique and critical role in men's health but particularly in prostate cancer screening and treatment decision making. Women's active engagement in addressing men's health is often heightened when men have concerns about, are diagnosed with, or have symptoms of chronic health issues like prostate cancer.³⁷ From our review of the qualitative literature exploring women's roles in African American men's prostate cancer screening and treatment decision making, we found that women played the roles of counselor, coordinator, and confidant. These findings map onto and expand the current literature for social support.⁴¹ The role of counselor appears to be consistent with the notion of informational support; the role of coordinator is most consistent with instrumental support; and the role of confidant is congruent with the notions of emotional and appraisal support.

Consistent with the counselor role, key women in men's lives, particularly spouses, may play an important role in encouraging African American men in their lives to seek medical care.⁵⁵ In a study by Woods and colleagues,⁶⁴ more than 75% of respondents reported they would seek prostate cancer screening if asked to by a significant other. Wives attempt to influence their husbands' health behaviors in a myriad of ways with varied levels of success.^{11,12} In exploratory research by Lewis and colleagues,¹² focus group participants described over 30 distinct strategies they used to improve their spouses' health behaviors, ranging from providing social support and education to reasoning, nagging, modeling, and changing the home environment.

Interdependence theory^{50,65,66} highlights how dyadic relationships, such as marriage, can affect behaviors and outcomes. Men's decisions about health behaviors, whether well thought out or involving little conscious reflection, are influenced by their consideration of how their choices may affect their partners and their relationship.⁵⁰ This theoretical model is particularly relevant for examining how wives influence their husbands' prostate cancer treatment behaviors due to the interdependent nature of their lives and men's fears that issues like erectile dysfunction will not only adversely affect them but also affect their marital relationship. Carrying over the principles of this theory, as well as social support theory, to inform the feasibility of incorporating women into future programs and interventions focusing on prostate cancer screening and treatment may prove beneficial to the men involved. Interdependence theory would suggest men's motivation to pursue screening and treatment to make informed decisions may depend in part on how they see the impact on the women in their lives. Social support theory would suggest the type of role men and women may be interested in or able and willing to fulfill in context of screening and treatment of prostate cancer.

Consistent with the coordinator role, men often appreciate and expect their wives' involvement in managing their health.⁶⁷ Wives' efforts to protect and improve their husbands' health have been described as expressions of nurturing and caring.⁶⁸⁻⁷⁰ In the context of families, women take on a leadership role to improve and support the health of their spouse and family as an expression of traditionally feminine ideals of nurturing and caring for her husband and family⁶⁸⁻⁷⁰ or as a means of exerting power and control within the marital or family context.⁷¹ This division of roles along gendered

lines in African American households has been found to be associated with greater marital satisfaction and stability for African American couples.^{72,73}

Women, particularly spouses who are key actors in men's daily lives, have unique perspectives on men's health, and they are especially critical in helping men to negotiate and deal with health issues that threaten their identity, such as prostate cancer. Men simultaneously seek to fulfill norms and expectations of masculinity while reinforcing the interdependent, gendered division of roles and responsibilities within their relationships with spouses, girlfriends, and other key women in their daily lives.⁷⁴

Consistent with other literature, women are often important confidants to whom men express their struggles, fears, and concerns, particularly those related to health.¹¹ Within the confidant role, which aligns with notions of appraisal support, when men face these challenges, women have been especially critical in helping to maintain their self-esteem, sense of self, and avoid mental health issues like depression.^{75,76} When men are diagnosed with chronic illnesses, men's gender identity and overall sense of self can be adversely affected, and feelings of embarrassment or shame, not only about receiving a prostate cancer diagnosis, but specifically related to perceptions regarding prostate cancer treatment and impotence, often prevent men from discussing prostate cancer.¹⁵ The reduced ability to perform sexually as an adverse effect of prostate problems and prostate cancer treatment can adversely affect men's sense of identity and decrease their self-confidence and self-esteem.⁶³ During these times, men seek women in their lives to be confidants who can provide the emotional support they need to deal with physical (eg, fatigue, hair loss, weight gain, hair loss, and erectile dysfunction)^{56,59,63} and emotional changes (eg, feelings of shame, embarrassment, and depression)⁵⁶ that occur while navigating issues related to prostate cancer.

4.1 | Limitations

In this systematic review, we were limited by the data available in published studies, and no additional data were available for extraction. Consequently, the length of the included journal articles limited the depth of and volume of results data available to explain women's roles. Some of the included articles reported the role of women as a supplemental finding and not as an independent research question, which limited our ability to fully ascertain the roles women played in African American men's lives. Future research should explore women's roles in men's prostate cancer decision making rather than extracting data from studies where it was not the primary research question. Also, some included articles did not separate out the findings based on the type of relationship between the man and woman (wife, significant other, mother, sister, etc). Knowing more information about how the role of women changes based on their type of relationship with the man undergoing screening or treatment for prostate cancer could be of interest to better understand the benefit of social support within this realm. Additionally, authors of articles may have had data available for this review that was not included in the published paper and therefore was unable to be included in this review.

4.2 | Future directions and clinical implications

Men often appreciate their wives' involvement in managing their health, and more research is needed to explore the novelty and importance of the role women play on men's health. Spouses and other close women are attuned to, and help men to pay attention to, men's health issues and often assume responsibility for their husbands' health.^{2,50,77} Future studies should also explore women's roles in prostate cancer screening and treatment decisions of other racial and ethnic groups of men. Moreover, given that we found no articles with a similar focus on colorectal cancer screening and treatment, and the effectiveness of screening and treatment differ by site, future research should explore how women can facilitate health promotion among African American and other group of men regarding this and other cancers as the support role may differ depending on the effectiveness of cancer diagnosis and treatment. This may mean developing interventions that specifically aim to elicit the help of women as sources of support for men during the screening and treatment process may need to be tailored to the psychosocial and physiological implications that vary by cancer diagnosis.

Women are more likely than men to be both support providers and recipients and, in general, to be more involved in all forms of help giving than men.³⁹ Gender differences in sensitivity to relationships, role behaviors, meaning and use of social supports, and illness behaviors are expected to occur throughout the life cycle, creating gender-linked vulnerabilities that predispose women to experiences of greater distress. When the gender socialization hypothesis is applied to caregivers, wives can be expected to report higher levels of caregiving strain as a result of accumulated gender differences in personality, socialization, and role preparedness.⁷⁸ While it is not the goal of this work to suggest that women continue to assume the added burden of caring for their own health and that of the men in their lives, it is critical to recognize that for some dyads, women's roles are essential not only for screening and treatment decisions but also for mental and physical outcomes of treatment. This review encourages this field of research to push forward with social support studies and recommends that future interventions explore how it might be possible to maximize—without adding burden to—the role women play as sources of support for men in promoting prostate cancer outcomes of African American men.

ACKNOWLEDGEMENTS

We wish to thank Philip D. Walker, Reference and Instruction Librarian at Jean and Alexander Heard Library, Vanderbilt University. This research was supported in part by the National Institute of Diabetes and Digestive and Kidney Diseases (grant/award number: 7R21DK095257-02), National Center for Advancing Translational Sciences (grant/award number: 2UL1TR000445-08), Aetna Foundation (grant/award number: 15-0046), and American Cancer Society (grant/award number: RSG-15-223-01-CPPB) and the National Cancer Institute of the National Institutes of Health (5U54CA163066).

ORCID

Derek M. Griffith  <http://orcid.org/0000-0003-0018-9176>

REFERENCES

1. Markey CN, Gomel JN, Markey PM. Romantic relationships and eating regulation: an investigation of partners' attempts to control each others' eating behaviors. *J Health Psychol*. 2008;13(3):422-432.
2. Umberson D. Gender, marital status and the social control of health behavior. *Soc Sci Med*. 1992;34(8):907-917.
3. Berg CA, Upchurch R. A developmental-contextual model of couples coping with chronic illness across the adult life span. *Psychol Bull*. 2007;133(6):920
4. Kamen C, Mustian KM, Heckler C, et al. The association between partner support and psychological distress among prostate cancer survivors in a nationwide study. *J Cancer Surviv*. 2015;9(3):492-499.
5. Moyer VA. Screening for prostate cancer: US Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2012;157(2):120-134.
6. Cancer Facts & Figures 2016. American Cancer Society Website. Published 2016. Accessed November 16, 2016. Available from: <http://www.cancer.org/acs/groups/content/@research/documents/document/acspc-047079.pdf>.
7. SEER Stat Fact Sheets: Prostate Cancer. National Cancer Institute Website. Published 2016. Accessed November 16, 2016. Available from: <https://seer.cancer.gov/statfacts/html/prost.html>.
8. DeSantis C, Naishadham D, Jemal A. Cancer statistics for African Americans, 2013. *CA Cancer J Clin*. 2013;63(3):151-166.
9. Friedman DB, Corwin SJ, Rose ID, Dominick GM. Prostate cancer communication strategies recommended by older African-American men in South Carolina: a qualitative analysis. *J Canc Ed*. 2009;24(3):204-209.
10. Arrington MI, Grant CH, Vanderford ML. Man to man and side by side, they cope with prostate cancer: self-help and social support. *J Psychosoc Oncol*. 2006;23(4):81-102.
11. Helgeson VS, Novak SA, Lepore SJ, Eton DT. Spouse social control efforts: relations to health behavior and well-being among men with prostate cancer. *J Soc Pers Relat*. 2004;21(1):53-68.
12. Lewis MA, Butterfield RM, Darbes LA, Johnston-Brooks C. The conceptualization and assessment of health-related social control. *J Soc Pers Relat*. 2004;21(5):669-687.
13. Heyman E, Rosner T. Prostate cancer: an intimate view from patients and wives. *Urol Nurs*. 1996;16(2):37
14. Maliski SL. Mastery of postprostatectomy incontinence and impotence: his work, her work, our work. Paper presented at: Oncology Nursing Forum 2001.
15. Friedman DB, Thomas TL, Owens OL, Hebert JR. It takes two to talk about prostate cancer: a qualitative assessment of African American men's and women's cancer communication practices and recommendations. *Am J Mens Health*. 2012;6(6):472-484.
16. Friedman DBC, Corwin SJ, Rose ID, Dominick GM. Prostate cancer communication strategies recommended by older African-American men in South Carolina: a qualitative analysis. *J Cancer Educ*. 2009;24(3):204-209. 206p
17. Barry MJ. Screening for prostate cancer—the controversy that refuses to die. *New Engl J Med*. 2009;360(13):1351-1354.
18. Smith RA, Manassaram-Baptiste D, Brooks D, et al. Cancer screening in the United States, 2015: a review of current American Cancer Society guidelines and current issues in cancer screening. *CA Cancer J Clin*. 2015;65(1):30-54.
19. Carter HB. American Urological Association (AUA) guideline on prostate cancer detection: process and rationale. *BJU Int*. 2013;112(5):543-547.
20. Reynolds D. Prostate cancer screening in African American men: barriers and methods for improvement. *Am J Mens Health*. 2008;2(2):172-177.
21. Williams RM, Zincke NL, Turner RO, et al. Prostate cancer screening and shared decision-making preferences among African-American

- members of the Prince Hall Masons. *Psychooncology*. 2008;17(10):1006-1013.
22. Yang T-C, Matthews SA, Anderson RT. Prostate cancer screening and health care system distrust in Philadelphia. *J Aging Health*. 2013;25(5):737-757.
 23. Drake BF, Shelton R, Gilligan T, Allen JD. A church-based intervention to promote informed decision-making for prostate cancer screening among African-American men. *J Natl Med Assoc*. 2010;102(3):164
 24. Sanchez MA, Bowen DJ, Hart A, Spigner C. Factors influencing prostate cancer screening decisions among African American men. *Ethn Dis*. 2007;17(2):374
 25. Ford ME, Vernon SW, Havstad SL, Thomas SA, Davis SD. Factors influencing behavioral intention regarding prostate cancer screening among older African-American men. *J Natl Med Assoc*. 2006;98(4):505
 26. Wray RJ, McClure S, Vijaykumar S, et al. Changing the conversation about prostate cancer among African Americans: results of formative research. *Ethn Health*. 2009;14(1):27-43.
 27. Griffith DM, Allen JO, Gunter K. Social and cultural factors influence African American men's medical help seeking. *Res Soc Work Pract*. 2010; 21(3):337-347.
 28. Addis ME, Mahalik JR. Men, masculinity, and the contexts of help seeking. *Am Psychol*. 2003;58(1):5
 29. Wilt TJ, Brawer MK, Jones KM, et al. Radical prostatectomy versus observation for localized prostate cancer. *New Engl J Med*. 2012;367(3):203-213.
 30. News Releases: Panel endorses active monitoring and delay of treatment for low-risk prostate cancer, urges further research to clarify management strategies. National Institutes of Health website. Published 2011. Accessed November 16, 2016. Available from: <https://www.cancer.gov/news-events/press-releases/2011/ProstateSurveillanceStateScience>.
 31. Bloch S, Love A, Macvean M, Duchesne G, Couper J, Kissane D. Psychological adjustment of men with prostate cancer: a review of the literature. *BioPsychoSocial Med*. 2007;1(1):1
 32. O'Shaughnessy KP, Laws T. Australian men's long term experiences following prostatectomy: a qualitative descriptive study. *Contemp Nurse*. 2010;34(1):98-109.
 33. De Sousa A, Sonavane S, Mehta J. Psychological aspects of prostate cancer: a clinical review. *Prostate Cancer Prostatic Dis*. 2012;15(2):120-127.
 34. Chapple A, Ziebland S. Prostate cancer: embodied experience and perceptions of masculinity. *Sociol Health Illn*. 2002;24(6):820-841.
 35. Jackson T. Relationships between perceived close social support and health practices within community samples of American women and men. *J Psychol*. 2006;140(3):229-246.
 36. Sorensen G, Barbeau E, Stoddard AM, Hunt MK, Kaphingst K, Wallace L. Promoting behavior change among working-class, multiethnic workers: results of the healthy directions—small business study. *Am J Public Health*. 2005;95(8):1389
 37. Banthia R, Malcarne VL, Varni JW, Ko CM, Sadler GR, Greenbergs HL. The effects of dyadic strength and coping styles on psychological distress in couples faced with prostate cancer. *J Behav Med*. 2003;26(1):31-52.
 38. Berg CA, Wiebe DJ, Butner J, et al. Collaborative coping and daily mood in couples dealing with prostate cancer. *Psychol Aging*. 2008;23(3):505
 39. Shumaker SA, Hill DR. Gender differences in social support and physical health. *Health Psychol*. 1991;10(2):102
 40. Ammerman AS, Lindquist CH, Lohr KN, Hersey J. The efficacy of behavioral interventions to modify dietary fat and fruit and vegetable intake: a review of the evidence. *Prev Med*. 2002;35(1):25-41.
 41. Israel BA, McLeroy KR. Social networks and social support: implications for health education. *Introduction Health Educ Q*. 1985;12(1):1-4.
 42. House JS. *Work Stress and Social Support*. Reading, MA: Addison-Wesley Educational Publishers, Inc.; 1981.
 43. Wills TA, Ainette MG. 20 social networks and social support. *Handbook Health Psychol*. 2012;465:
 44. Tong A, Flemming K, McInnes E, Oliver S, Craig J. Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Med Res Methodol*. 2012;12(1):1
 45. Mays P. Qualitative research in health care: assessing quality in qualitative research. *BMJ*. 2008;320:50
 46. Creswell J. *Qualitative Inquiry and Research Design*. Thousand Oaks, CA: Sage Publications; 1998.
 47. Watkins DC, Walker RL, Griffith DM. A meta-study of Black male mental health and well-being. *J Black Psychol*. 2009;
 48. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77-101.
 49. Miles MB, Huberman AM. *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage Publications; 1994.
 50. Allen JO, Griffith DM, Gaines HC. "She looks out for the meals, period": African American men's perceptions of how their wives influence their eating behavior and dietary health. *Health Psychol*. 2013;32(4):447-455.
 51. Cornish EK, McKissic S, Dean D, Griffith DM. Lessons learned about motivation from a pilot physical activity intervention for African American men. *Health Promot Pract*. 2017;18(1):102-109.
 52. Ellis KR, Griffith DM, Allen JO, Thorpe RJ Jr, Bruce MA. "If you do nothing about stress, the next thing you know, you're shattered": perspectives on African American men's stress, coping and health from African American men and key women in their lives. *Soc Sci Med*. 2015;139:107-114.
 53. Griffith DM, Brinkley-Rubinstein L, Thorpe RJ Jr, Bruce MA, Metz JM. The interdependence of African American men's definitions of manhood and health. *Fam Community Health*. 2015;38(4):284-296.
 54. Shea BJ, Grimshaw JM, Wells GA, et al. Development of AMSTAR: a measurement tool to assess the methodological quality of systematic reviews. *BMC Med Res Methodol*. 2007;7(1):10
 55. Blocker DE, Romocki LS, Thomas KB, et al. Knowledge, beliefs and barriers associated with prostate cancer prevention and screening behaviors among African-American men. *J Natl Med Assoc*. 2006;98(8):1286
 56. Boehmer U, Clark JA. Communication about prostate cancer between men and their wives. *J Fam Pract*. 2001;50(3):226-231.
 57. Hamilton JB, Sandelowski M. Types of social support in African Americans with cancer. *Oncol Nurs Forum*. 2004;31(4):792-800.
 58. Hunter JC, Vines AI, Carlisle V. African Americans' perceptions of prostate-specific antigen prostate cancer screening. *Health Educ Behav*. 2015;42(4):539-544.
 59. Jones RA, Taylor AG, Bourguignon C, et al. Family interactions among African American prostate cancer survivors. *Fam Community Health*. 2008;31(3):213
 60. Jones RA, Steeves R, Williams I. How African American men decide whether or not to get prostate cancer screening. *Cancer Nurs*. 2009;32(2):166
 61. Jones RA, Wenzel J, Hinton I, et al. Exploring cancer support needs for older African-American men with prostate cancer. *Support Care Cancer*. 2011;19(9):1411-1419.
 62. Owens OL, Jackson DD, Thomas TL, Friedman DB, Hébert JR. Prostate cancer knowledge and decision making among African-American men and women in the southeastern United States. *Int J Mens Health*. 2015;14(1):55
 63. Rivers BM, August EM, Gwede CK, et al. Psychosocial issues related to sexual functioning among African-American prostate cancer survivors and their spouses. *Psycho Oncol*. 2011;20(1):106-110.
 64. Woods VD, Montgomery SB, Herring RP, Gardner RW, Stokols D. Social ecological predictors of prostate-specific antigen blood test

- and digital rectal examination in black American men. *J Natl Med Assoc.* 2006;98(4):492-504.
65. Rusbult CE, Van Lange PA. Why we need interdependence theory. *Soc Personal Psychol Compass.* 2008;2(5):2049-2070.
66. Lewis MA, McBride CM, Pollak KI, Puleo E, Butterfield RM, Emmons KM. Understanding health behavior change among couples: an interdependence and communal coping approach. *Soc Sci Med.* 2006;62(6):1369-1380.
67. Rook KS, August KJ, Stephens MAP, Franks MM. When does spousal social control provoke negative reactions in the context of chronic illness? The pivotal role of patients' expectations. *J Soc Pers Relat.* 2011;28(6):772-789.
68. Charles N, Kerr M. *Women, Food and Families.* Manchester, UK: Manchester University Press; 1988.
69. DeVault ML. *Feeding the Family: The Social Organization of Caring as Gendered Work.* Chicago, IL: University of Chicago Press; 1994.
70. Lupton D. Where's me dinner?: food preparation arrangements in rural Australian families. *J Sociol.* 2000;36(2):172
71. Fürst ELO. Cooking and femininity. *Women's Stud Int Forum.* 1997;20(3):441-449.
72. Haynes FE. Gender and family ideals. *J Fam Issues.* 2000;21(7):811-837.
73. Tucker BM, Mitchell-Kernan C. Marital behavior and expectations: ethnic comparison of attitudinal and structural correlates. In: Tucker BM, Mitchell-Kernan C, eds. *The Decline in Marriage among African Americans: Causes, Consequences and Policy Implications.* New York: Russell Sage; 1995.
74. Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. *Soc Sci Med.* 2000;50(10):1385-1401.
75. Charmaz K. Identity dilemmas of chronically ill men. *Sociol Q.* 1994;35(2):269-288.
76. Liburd LC, Namageyo-Funa A, Jack L, Gregg E. Views from within and beyond: illness narratives of African-American men with type 2 diabetes. *Diabetes Spectr.* 2004;17(4):219
77. Lyons AC, Willott S. From suet pudding to superhero: representations of men's health for women. *Health.* 1999;3(3):283-302.
78. Miller B. Gender differences in spouse caregiver strain: socialization and role explanations. *J Marriage Fam.* 1990;311-321.

SUPPORTING INFORMATION

Additional Supporting Information may be found online in the supporting information tab for this article.

How to cite this article: Bergner EM, Cornish EK, Horne K, Griffith DM. A qualitative meta-synthesis examining the role of women in African American men's prostate cancer screening and treatment decision making. *Psycho-Oncology.* 2017;1-10 <https://doi.org/10.1002/pon.4572>