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Study of the relationship between Black men, culture and prostate cancer beliefs

Mavis Machirori^{1*}, Christine Patch¹ and Alison Metcalfe¹

Abstract: Prostate cancer is the leading cancer for men worldwide, with increasing incidence in Sub-Saharan Africa. In the UK and USA, Black men of different backgrounds are at higher risk of developing prostate cancer but continue to have little involvement with related health services. Lack of knowledge and culture have been implicated as reasons for this but culture in Black ethnic groups has not been very well explored. This scoping study asks how ethnicity, as represented by culture, interacts with Black men's beliefs around prostate cancer. The objective is to understand the meaning of prostate cancer and the role of culture in Black men's beliefs about the disease. Using a symbolic interactionist approach to explore meaning-making in Black men around culture and prostate cancer reveals varied ways in which culture affects interaction with health services. A thematic analysis of 25 studies included in the final scoping study shows that there are three main themes under which cultural issues can be examined: personal, societal and structural. The study reveals that knowledge is contextual and that personal and societal beliefs and structural factors intertwine to create a system that can preclude Black men from taking part in prostate cancer-related health practices, and discusses some of the ways in which these can be addressed.

Subjects: Social Sciences; Health and Social Care; Medicine, Dentistry, Nursing & Allied Health

Keywords: ethnicity; culture; beliefs; Black men; minority; Black and Minority Ethnic (BME) prostate cancer

ABOUT THE AUTHORS

The authors include a PhD student examining how knowledge of cancer genetics is constructed by patients from ethnic minorities, working as part of a team whose research interests focus on family health and genetic risk communication. The research team undertake funded projects to understand what affects patients understanding of genetic risk and how best to facilitate the communication and sharing of genetic risk information, leading to improved care and service provision. The work includes a focus on improving health outcomes and reducing inequalities in treatments and service use.

PUBLIC INTEREST STATEMENT

Black men have some of the highest risk of developing prostate cancer compared to men from other ethnic groups. Black men make little use of health services related to prostate health and may end up being diagnosed late or with more severe forms of prostate cancer. Reasons such as culture and lack of knowledge have been given as influencing the behaviours of Black men towards cancer service use. This review questions what culture is and how it influences what men know of prostate cancer and as well as what they believe about prostate cancer. Cultural influences and prostate cancer beliefs are multi-level and centre on personal, social and wider structural factors. Knowing how these factors interact helps to create ways to encourage more interaction with prostate cancer services and ensure men are diagnosed earlier and have better health outcomes than they currently do.

1. Background

The burden of cancer and the cost of survival and living with chronic disease have increased in the last two decades, with prostate cancer as the most common cancer among men (Global Burden of Disease Cancer Collaboration, 2017). Discrepancies and inequalities in access to health systems and knowledge across the world, contribute to varying levels of health outcomes and survival among populations (Adeloye et al., 2016; Thakare & Chinegwundoh, 2015). Compared with Caucasian men, Black men are faced with an unequal disease burden—experiencing more aggressive prostate cancer with earlier onset (Aizer et al., 2014; Shenoy, Packianathan, Chen, & Vijayakumar, 2016; Thompson, 2013).

In the UK alone, men from Black ethnic backgrounds are up to 2–3 times more likely to be diagnosed with prostate cancer—a figure much higher than the national average (Jones & Chinegwundoh, 2014; Prostate Cancer UK, 2016). Ongoing research shows that despite these figures, men from Black backgrounds do not readily access health services in relation to concerns about prostate cancer (Thompson, 2013). Generally, inequalities in incidence and mortality have sometimes been linked to differences in socio-economic status, where those in lower socio-economic groups face poorer related health outcomes than those in higher socio-economic groups in some cases than those in higher economic groups for instance (Singh & Jemal, 2017; Thakare & Chinegwundoh, 2015; Thompson, 2013). Globally, lack of knowledge, fear, and cultural beliefs have been implicated in the past as contributing to men's screening behaviours. Cultural beliefs have been increasingly attached to studies of ethnicity without much explication of what they are or how they come to be held. A search of the literature suggested that many of the studies on the topic focussed mainly on assessment of knowledge around prostate cancer, with “culture” not specifically defined. Literature is also mostly concentrated on the UK and USA. This scoping study (Arksey & O'Malley, 2005; Daudt, van Mossel, & Scott, 2013; Levac, Colquhoun, & O'Brien, 2010) gathers wide-reaching research over the last decade and explores the meaning of prostate cancer in Black men, aiming to unravel the contemporary meaning of culture and what contribution it currently plays in prostate cancer beliefs.

2. Methods

This scoping study is based on methodological steps described in Arksey and O'Malley's (2005) framework, with attendance to issues raised by Levac et al. (2010), such as conducting a consultation phase. However, following Daudt et al. (2013), who suggest flexibility in how this can be done, the consultation was conducted informally both before and towards the latter stages of the review. Those consulted included individuals with extensive work in prostate cancer programmes for Black men; as well as researchers who have conducted work recruiting Black men for community health programmes. Their insights into why men did not engage in prostate cancer-related services are reflected in some of the themes discussed below. A symbolic interactionist approach (Blumer, 1986) towards understanding men's cultural beliefs was taken which enabled exploration of their individual and group creation of the meaning of prostate cancer. Symbolic interaction suggests that individuals create their social worlds and direct meaning towards objects based on their shared and personal knowledge acquired through interaction with said object and other people.

A scoping review is undertaken to rapidly map the key concepts underpinning the area of investigation and to provide an overview of the studies undertaken in a complex area where there has been little research previously (Arksey & O'Malley, 2005; Daudt et al., 2013; Levac et al., 2010). To identify relevant studies, a database search was carried out over four weeks between January and February 2017, covering a period from January 2007 until February 2017. Seven main databases were identified: Web of Science Core Collection, CINAHL, BNI, OVID, OVIDSp (Embase, Ovid Medline, Global Health, HMIC, Journals@Ovid, PsycINFO and Social Policy and Practice), King's Fund Library and OpenGrey. Weekly updates were set up to run until the second week of March to identify any new articles within the search time-frame. In line with our chosen approach and to obtain a broad overview of the relationships under study, we applied broad inclusion and exclusion, starting widely and becoming more refined according to the search results and how closely studies aligned with our research focus. Grey literature and studies from countries outside the UK and USA were included to capture the widest possible cultural meanings and influences towards prostate cancer. Key word

searching in databases, with truncations or phrases as appropriate, grey literature and free hand searching of journals, reference lists and Google and Google Scholar, identified 3478 articles in total. Duplicate studies identified by title and abstract were removed from the review.

Inclusion and exclusion criteria decided by the research team were used to identify relevant studies. Studies were included if they met the following criteria: empirical studies focusing on men, Black ethnicity and prostate cancer. Studies were excluded if they focused on mental health, quality of life, knowledge evaluation, screening behaviours only as well as surgery, biologic and tumor-related concerns.

After applying exclusions, a full-text reading was conducted of the remaining 195 articles on which further exclusions were made based on studies addressing women's views only, risk perceptions, trend data and intervention studies assessing education and service use, leaving 67 remaining studies. The final level of review ascertained information that answered the review question and led to the removal of articles that were psychosocial in nature, were quotations or results not attributable to ethnicity or men, as well as studies undertaken about health provider views. Any articles not in English and for which full-text could not be obtained, including conference proceedings and abstracts only were not included. Overall studies that only assessed knowledge, education and risk levels without giving a cultural interpretation of why this might be the case were not included. Additionally, studies that only assessed knowledge, education and risk levels without giving a cultural interpretation of why this might be the case were not included in the final review. Both qualitative and quantitative studies were included but only if they provided information about the cultural components and beliefs by Black men in relation to prostate cancer.

The final remaining 25 articles were representative of the diverse heritage of Black men, with studies based and representing men from the UK, USA, Barbados, Nigeria, Trinidad and Tobago, Uganda and Zimbabwe. The ethnicities were recorded in various ways including African-American, Black, Caribbean, Afro-Caribbean and Nigerian with participants either migrants or born in the countries in which research was conducted. Additionally, studies included study participants with no history of disease to a mixed personal and family history of prostate cancer. Finally, reported ages ranged from 15 to 100 years old.

Quality assessments are a debated issue in qualitative research and reporting (Hannes, 2011) and are an accepted method in systematic reviews. However, in this study, quality of the studies were not assessed (Levac et al., 2010) as the aim was to understand an immeasurable concept of men's meanings and beliefs which would be better answered by an inclusive approach to the question than by excluding studies based on quality criteria (Arksey & O'Malley, 2005). Therefore, all 25 studies were included to ensure the depth and the breadth of contemporary studies was captured, with any potential problems with a study carefully considered in the reporting of the findings.

To collate the results, a data extraction sheet was created and used to keep a first level record, listing all information that related to what participants spoke of in relation to their culture and prostate cancer. Using a thematic analysis approach (Braun & Clarke, 2006) the main themes emerging from the studies were identified, and the findings summarised on the data extraction sheet before grouping the shared sub-themes into over-arching themes that were shared across the studies. These overarching themes were subsequently explored in depth using a series of questions related to the focus of the review using a symbolic interactionist approach (Blumer, 1986) and answering the question, "what is this data relating to?". The findings were grouped depending on whether the men attributed the beliefs to themselves or to a wider general community, that is from individual meaning-making, a group process or from an externally noted source. This approach resulted in the creation of three linked thematic labels into which topics were grouped. Comparisons were made across the studies to identify themes that were both complementary and contrasting to avoid generalising across participants. The emergent cultural themes were self-defined and collated mostly from the qualitative work, which iteratively informed how the quantitative studies were read. As the themes emerged, the findings were discussed within the research team, a process which

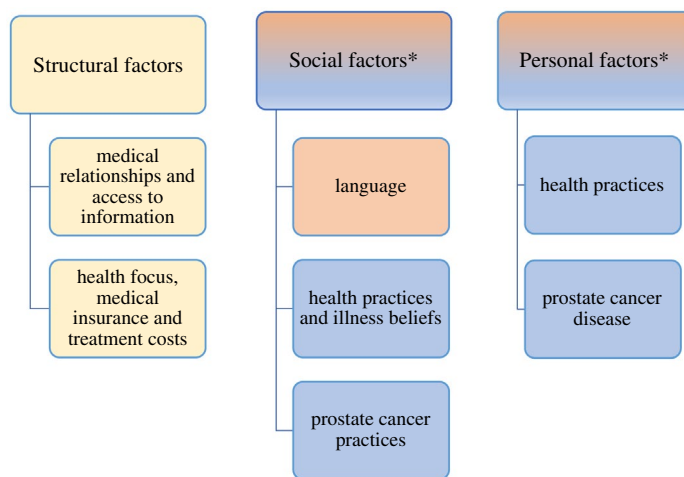
encouraged a reflexive approach and tested assumptions of the person (MM) undertaking the data extraction in how they identified and created the emergent themes. Results are reported in a descriptive manner and discussed below.

3. Results

Overall, participants mainly held beliefs that resulted from individual *and* group understanding of prostate cancer. The group understanding covered influences towards social relationships, expectations of responsibilities, as well as socially acceptable behaviours which in turn influenced some individual beliefs the men held. In addition, the men identified external factors that at times dictated their engagement in prostate health-related practices. These were factors that the men sometimes were not able to change, and emerged from input from health professionals, community advisers and government agencies to name a few. The main discourses were around health and illness beliefs and practices, and the issues that affected these. The final thematic analysis revealed that three main themes—personal, social and structural—were factors that contributed to men’s beliefs around prostate cancer, each exerting various influences at a time (Figure 1). The factors intertwined and contributed to some cultural beliefs and behaviours.

Figure 1. Culture-informed prostate cancer beliefs of Black men.

Note: *Factors in the same colour are inter-related.



Although there are three distinct themes, personal and social themes are more closely intertwined in how they influence each other while the structural factors create a more external view. In the following discussion, the personal and the social factors are grouped together to show how the cultural beliefs are closely tied together. This does not negate the fact that individuals will sometimes attempt to have agency over their own health and the beliefs they hold might not align with the wider social beliefs of those around them. The attempt at making individual decisions is nuanced but is an important distinction as it suggests that while there might be similarities between Black men, not all Black men will behave the same way. Finally, the men, in their everyday lives, are likely to experience these factors to varying degrees and so these factors should not be looked at as independent factors, rather as contributing to the culture-informed cancer beliefs, where changing various aspects of the factors might affect the beliefs Black men hold.

3.1. Personal and social factors

The beliefs that Black men hold emerge from a mix of individual meaning-making (personal factors) and interaction with others around them (social factors). The two themes are both complementary and at times conflicting since the personal views that men held could be strengthened by the socially accepted views. In other times, those individual views could result in conflict if the social view contrasted and challenged the wider social view that those around them held. Where personal views clash with wider social views, men differ in their health behaviours, justifying them by personal experience or re-evaluating certain aspects of their lives. Social factors form the collectively held

beliefs around prostate cancer and what it means to Black men but are themselves based on an individual understanding of what it is to be a Black man. The individual perception or enactment of being a Black man then influences and creates the personal factors that create personal beliefs towards prostate cancer. It is, therefore, a subtle way in which the individual creates personal beliefs out of personal factors and social factors. Collective beliefs arise out of interaction, although these are constantly negotiated as everyone balances theirs and others' belief systems. Sub-factors like language and health practices define the discourse on prostate cancer and contribute to its overall cultural meanings.

3.1.1. *Language*

Meaning-making relies on language and there appears to be a consensus that certain medical terms such as prostate and cancer are heavily implicated with negative connotations. To start, perceptions of a lack of shared language result in reduced interaction with health systems (Sanchez, Bowen, Hart, & Spigner, 2007) as taboos around its open discussion lead to use of euphemisms or other ways to describe prostate cancer. Where no local translations or everyday equivalents exist, discussion of prostate health becomes difficult as people have no words of their own comfort to use (Olapade-Olaopa et al., 2014). In some studies, in African and Caribbean communities, descriptors reference prostate cancer by its effects, for example by creating a name relating to issues with urinary flow (Nanton & Dale, 2011; Olapade-Olaopa et al., 2014). In another study (Moyo, 2017), cancer is described as an internal disease that is not easy to spot, with reference made to a plant being destroyed from the inside by a well-known local rodent. Additionally, because of the internal position of the prostate, referencing the affected organ becomes difficult (Moyo, 2017). Language, therefore, plays a crucial role in creating prostate cancer beliefs in these men, as it makes prostate cancer both invisible and mysterious.

3.1.2. *Inter-related factors: Health practices and illness beliefs*

Besides language, various other practices are important in understanding cultural beliefs in Black men.

Health practices, illness beliefs and behaviours are influenced by Black men's ideas about being macho or manly. Socially, Black men are said to take pride in the ability to have and maintain a good amount of health without needing to consult a health care practitioner (Allen et al., 2007) such that being ill threatens what it means to be a man (Harvey & Alston, 2011; Sanchez et al., 2007). These social views mean care-seeking or screening behaviours are then regarded as feminine and not something macho men do (Akpuaka, Clarke-Tasker, Nichols-English, Daniel, & Akpuaka, 2013; Mulugeta, 2014; Ng et al., 2013; Ocho & Green, 2013). The personal worries about one's health (Nakandi et al., 2013) or a diagnosis of prostate cancer (Wray et al., 2009) provide a stronger reason to change behaviours than do social views.

Engaging in asymptomatic health practices is not considered the norm (Hughes et al., 2007; Ng et al., 2013; Sanchez et al., 2007) especially when coupled with a need to maintain perception of being super men who overcome malaise (Friedman, Corwin, Dominick, & Rose, 2009; Harvey & Alston, 2011). These views and behaviours are reported as learned from parents (Oliver, 2007; Wray et al., 2009; Seymour-Smith et al., 2016), yet other suggestions are that views against asymptomatic health practices are because Black men do not like being told what to do (Owens, Jackson, Thomas, Friedman, & Hebert, 2015; Sanchez et al., 2007). However, if personal views towards prostate cancer differ from the social views, conflict arises. Men must balance concerns about their health against attempts to maintain a social meaning of being manly. Deferring to the social view stops them seeking help, expressing concern or showing any emotion towards prostate cancer concerns (Nanton & Dale, 2011).

One factor underpinning and influencing beliefs was the cultural practice about not speaking back to those in authority, which hampered raising concerns or discussions about prostate cancer if initial consultations appeared to dismiss concerns (Allen et al., 2007). This was noted mostly in African

American and Caribbean men. Interactions with health professionals are lessened even further if men believe that health is a private matter which stops them discussing prostate health altogether (Ng et al., 2013; Oliver, 2007). These cultural views are compounded if men are faced with female health practitioners as their discomfort increases (Anderson, Marshall-Lucette, & Webb 2013). There was an additional associated societal fear of medical institutions as they were regarded as places of death and disease (Allen et al., 2007; Hughes et al., 2007).

Generally, the perceptions of who was affected by disease were divergent. Socially, men did not agree on their susceptibility, with some convinced prostate cancer was a Black man's disease (Owens et al., 2015), and others believing that it was more prevalent in Caucasian men (Atulomah, Olanrewaju, Amosu, & Adedeji, 2010). Men however, reportedly held the view that prostate cancer was something they could control by regulating diet and working hard (Friedman et al., 2009; Hughes et al., 2007). Akpuaka et al. (2013) and Sanchez et al. (2007) on the other hand suggest that several Black men held the belief that those who thought about or screened for disease ended up being diagnosed with it. While some men personally believed prostate cancer and death were part of ageing and the life process, therefore not for younger men to worry about (Anderson et al., 2013; Atulomah et al., 2010; Bache et al., 2012; Nakandi et al., 2013; Nanton & Dale, 2011; Owens et al., 2015), there remained a societal underlying fear of prostate cancer and related death (Cobran, Hall, & Aiken, 2017).

A more personal belief saw prostate cancer as a punishment from God (Bache, Bhui, Dein, & Korszun, 2012), with religion necessary to enable one to cope with a diagnosis (Nanton & Dale, 2011). Faith reversed the collective and personal macho discourse and led Black men to take care of their health as they saw it as their responsibility to be role models for their children and community (Maliski, Connor, Williams, & Litwin, 2010; Maliski, Rivera, Connor, Lopez, & Litwin, 2008) and to keep the family intact and undisrupted by disease, especially if financial resources were inadequate (Friedman et al., 2009; Ng et al., 2013). Personal faith was reason to engage with health professionals to seek treatment thereby strengthening both faith in God and in medicine (Allen et al., 2007; Maliski et al., 2010).

Health practices and illness beliefs around prostate cancer also encompassed ideas related to sexual practices, religion and responsibility. The discussions provided a part insight into the health and social environments in the participants' countries which in turn influenced the views the men held towards prostate cancer. One view was the belief that prostate cancer resulted from sex-related practices that were generally frowned upon in these different communities. Some studies' participants, particularly of African backgrounds (more than African American or Caribbean), thought prostate cancer was a sexually transmitted disease (Atulomah et al., 2010). Some thought engaging in too much sex with women of loose morals led to an accumulation of dirt which they linked to prostate cancer (Friedman et al., 2009). While societal moral beliefs appeared to be that engaging in too much sex led to prostate cancer, affecting younger men more as they tended to be more sexually prolific (Moyo, 2017; Nakandi et al., 2013; Olapade-Olaopa et al., 2014), individual beliefs held by some men differed. Personal beliefs instead were that not having enough sex would lead to a build-up of sperm which eventually led to prostate cancer disease (Friedman et al., 2009).

For those who came from areas where the HIV/AIDS discourse was more prevalent, sexual morality was largely linked to protection from disease. This put prostate cancer in a less severe light that men set aside and were not necessarily interested in (Nakandi et al., 2013), confessing to being more afraid of HIV/AIDS than they were of prostate cancer. Apart from the health and illness beliefs and practices, additional centred on views towards specific practices around the disease.

3.1.3. *Prostate cancer disease and practices*

Like ideas in health practices, some men believed ignorance towards prostate cancer caused unnecessary worry and was protective from disease (Atulomah et al., 2010; Friedman et al., 2009). This enabled men to avoid being identified or labelled as "sick"—identities that impacted on their

perceptions of manhood (Wray et al., 2009). Sexual relations proved very important to Black men and prostate cancer was perceived as something that caused one to lose their ability to maintain sexual function and limited one's sexual prowess. Therefore, any screening or testing that was related to sexual function was avoided (Hughes et al., 2007; Maliski et al., 2008; Nanton & Dale, 2011).

In Akpuaka et al.'s study (2013), a third of the men surveyed held similar views on sexual dysfunction and screening avoidance. In the same survey, over 80% indicated not being afraid of cancer or its screening practices suggesting that some men could separate fear of cancer from fear of sexual dysfunction. This also suggests that their fear of sexual dysfunction impacted more negatively on their behaviours, than did their lack of fear of screening practices. In addition, inability to maintain sexual function was linked to a fear that one would lose their partner to other men (Akpuaka et al., 2013; Anderson et al., 2013). This fear elicited varied reactions to possibility of partner involvement to allay those fears. In one (Akpuaka et al., 2013) men were adamant that partners did not have to be informed or involved in prostate cancer discussions, yet in another, the men reported a preference to seek support and information from their partners (Cobran et al., 2017). However, these men reported that a lack of partner support would affect their coping mechanisms and would instead lead to avoidance behaviours towards prostate cancer screening or treatments.

For both personal and social reasons, prostate cancer practices mostly represented by the digital rectal examination (DRE) had considerable stigma attached to them. Firstly, men believed DRE increased likelihood of diagnosis and therefore preferred to avoid it, (Harvey & Alston, 2011; Nanton & Dale, 2011). DRE was primarily seen as an invasion of someone's privacy and a threat to masculinity to be avoided. It was additionally not something men wanted others to connect them with (Allen et al., 2007; Harvey & Alston, 2011; Ocho & Green, 2013; Sanchez et al., 2007). This led to much secrecy around the practice and fear of impact of one's sexuality if they underwent DRE (Harvey & Alston, 2011). DRE was linked to homosexuality in many African and Caribbean countries where it was considered illegal and religiously unacceptable (Mulugeta, 2014; Ng et al., 2013; Sanchez et al., 2007; Seymour-Smith et al., 2016), with an additional view that touching another man's genitals was unmanly (Akpuaka et al., 2013). The societal pressure to conform to these views, with fear of discrimination if one was found to have undertaken DRE or if one was gay were stronger for some men than the personal need for screening (Ocho & Green, 2013). There was social consensus that bending over or bowing are positions that some men find uncomfortable and unwelcome, which suggested a vulnerability Black men tried to avoid (Akpuaka et al., 2013; Hughes et al., 2007; Ng et al., 2013; Ocho & Green, 2013).

However, on a personal level, not all men thought the practice was bad especially if they would be provided with more information about diagnosis and treatment (Anderson et al., 2013; Hughes et al., 2007). Such a view was substantiated socially as men suggested DRE could be undertaken if one was very ill or directed by a doctor. The medical directive to undergo the practice rather than personally request it took the shame out of their hands, reducing stigma and enabling men to keep their identities (Ocho & Green, 2013; Seymour-Smith et al., 2016). Not only do all these factors lead to complex cultural beliefs, they also operate under wider structural influences.

Despite these various beliefs, there remained an interest in getting more information about prostate cancer (Oladimeji, Bidemi, Yetunde, Arulogun, & Sola, 2009; Olapade-Olaopa et al., 2014). In one study, more than 80% of men were interested in receiving more information about causes and practices of prostate cancer and undertaking regular screening with over 90% believing in the efficacy of early detection in increasing survival chances (Oladimeji et al., 2009). Not only do all these personal and social factors lead to complex cultural beliefs, they also operate under wider structural influences.

3.2. Structural factors

Structural factors provide an extra dimension to the meaning given to prostate cancer and tend to be institutional rather than personal or social. The factors, as discussed below, come together to

enable or disable prostate cancer screening and treatment practices and how Black men engage with them.

3.2.1. *Medical relationships and access to information*

Relationships between Black men and medical systems are two-pronged. In some communities, Black men do not engage in prostate cancer screening as they perceive the system views them without respect and as uneducated (Allen et al., 2007; Oliver, 2007; Wray et al., 2009). Linked to this was the belief that because of past events such as the Tuskegee Trial for African-Americans and Caribbeans, as well as negative experiences of care in general (Allen et al., 2007; Hughes et al., 2007; Oliver, 2007), the medical system was not to be trusted (Cobran et al., 2017). Health care providers or researchers who went out into the community were viewed with suspicion as some men were convinced that those levels of engagement only occurred where the former had something to gain and did not benefit Black men (Hughes et al., 2007).

Some participants in the studies were convinced that health providers, especially if white, did not tell the truth, were unsupportive or disinterested in Black men's health (Nanton & Dale, 2011; Sanchez et al., 2007) believing too that care or treatment was better for white or rich people (Cobran et al., 2017; Oliver, 2007; Owens et al., 2015). In addition, inconsistencies in the advice surrounding prostate cancer screening and management resulted in uncertainty and reduced engagement with health professionals (Sanchez et al., 2007) with many keeping any concerns away from their health providers. A lack of general screening programmes, advertisements or open discussions was also said to discourage normalisation of prostate health-related behaviours in the same way that women and breast cancer campaigns had done (Nakandi et al., 2013; Oladimeji et al., 2009).

For other men, the value of health care providers was emphasised, as their contribution was welcomed to tackle prostate cancer concerns (Anderson et al., 2013). More Black health care providers were requested for example, with the perception that this would improve access to and use of services by creating a connection between patients and doctors. It was presumed that communication styles would be more responsive to cultural preferences and language, as discussed in the first section above, (Allen et al., 2007; Hughes et al., 2007; Mulugeta, 2014; Wray et al., 2009) which would increase trust and make it easier for men to address feelings of fatalism for instance (Bache et al., 2012). Men believed if their providers and their community leaders together showed more interest or gave specific advice or access, they would undertake more screening (Nakandi et al., 2013; Wray et al., 2009) and expressed disappointment that this was not always the case (Atulomah et al., 2010; Friedman et al., 2009; Oladimeji et al., 2009).

3.2.1.1. *Health focus, medical insurance and treatment costs.* The second prong of medical systems that influence cultural beliefs are the health policies in many African and Caribbean countries. Health prevention and screening programmes have mostly targeted HIV/AIDS, diabetes and cardiovascular disease, resulting in a state-wide diversion of resources from, as well as deferred community interest in, prostate cancer. This is given as a reason for men believing prostate cancer is less important in their communities (Moyo, 2017; Nakandi et al., 2013; Ng et al., 2013; Olapade-Olaopa et al., 2014).

Outside of the UK, restrictive economic barriers such as high treatment costs, lack of insurance, sometimes coupled with little or no income, result in some men preferring to divert funds to care for their families. This means they suffer disproportionately compared to those with access to care (Allen et al., 2007; Cobran et al., 2017; Friedman et al., 2009; Oladimeji et al., 2009) which fuels beliefs of prostate cancer and related discussions as something to be avoided because of its links with suffering and death.

Viewing media discourse of prostate cancer shows that it excludes Black men as sufferers of disease (Allen et al., 2007) and is also reported to show ignorance towards their preferences of where information is advertised, such as churches, barber shops and community fairs (Hughes et al., 2007).

These lead some Black men to believe that the information in the public domain is not representative of them, therefore perpetuating the negative meaning of prostate cancer in Black men.

4. Discussion

As shown in the diagram and presentation above, the main themes converge and point to the existence of several complex beliefs held by Black men regarding prostate cancer, which lead to its cultural meaning. Cultural beliefs are created from individual and social commentary on issues of health and illness practices. They mix with ideas around identity, responsibility and sexuality and are additionally influenced by the institutional factors which define the extent to which practices and beliefs are created and legitimised. Beliefs emerge out of personal meaning, interaction with others who endorse some of the personal beliefs as well as interactions with structural objects such as institutional practices and health providers. The beliefs do not always align, but may overlap or conflict, and contextually determine one's cultural belief system. Several issues of importance are noted.

Although on the surface, Black men appear to face similar concerns regarding prostate cancer, the impact of the three main themes varies based on the specific ethnic identities and historical contexts. Across all Black ethnic groups, prostate cancer is tied in with various perspectives of sexuality, masculinity and identity. In healthy men, the discourses for masculinity and being a man is strongly linked to being sexually active and taking care of one's family. Inability to fulfil these roles threatens this idea of masculinity resulting in men staying away from anything that might suggest that loss. In the studies conducted in Africa and specifically on men from African backgrounds, there was a real fear that men would lose their partners to others if they failed to keep up their sexual relations. Threats of discrimination and fear of stigma are also discussed, particularly around practices of DRE, as for most men, implications of homosexuality are illegal. The conflict arises when social recriminations stop individuals voicing health concerns. Although these ideas of masculinity appear fixed, they are mediated by diagnosis, one's faith and paying attention to medical directives to engage in health practices. Responsibility to one's family and community become the new discourses that can help men to maintain their identities of masculinity while attending to health concerns.

The different studies suggest that cultural factors are not limited to individuals only. Most knowledge appears to either be taken for granted or learned through behaviours and interactions with community or family members as well as interactions with health care institutions. A factor that stands out in the results, is trust in the healthcare system as well as the call for doctors of similar ethnicities. It appears linked to the experiences of health services that Black men in the UK and USA have encountered and leads to creation of cultural beliefs based on mistrust of the medical system. The calls for compassion and matched ethnicities do not appear as profound in African countries where, as the majority, Black men tend to be exposed to health providers of like ethnicity. There seems to be more trust towards doctors in these countries although the men face other barriers such as high medical costs or reduced treatment options with related low incomes. Health relationships, therefore, exert diverse influences on cultural meanings.

The discussions around sexual activities are more prevalent in men of African descent than in their African-American counterparts, while media representations of prostate cancer in the UK and USA, rather than a focus on sexual activities, produced a different perspective towards the disease. The focus on different health programmes such as HIV/AIDS in Africa and cardiovascular disease and diabetes in Caribbean countries has diverted interest from prostate cancer. Influences of health practitioners, media and community impact differently on men from these diverse Black backgrounds, as they draw on historical engagement with health and are shown to contribute to the cultural meaning of prostate cancer.

5. Implications

While ethnicity and culture tend to be spoken of in similar breaths, neither are fixed (Hunt & Bhopal, 2004). Culture can be more closely used to explain a substantial amount of Black men's behaviours than ethnicity alone would, with Geertz saying cultural behaviours make sense when placed in the

context around them rather than compared to other cultures (Geertz, 1973). Black men's cultural prostate cancer beliefs form around different contexts as presented above. The reviewed studies show that while some beliefs are collective, there are ways in which individuals hold differing opinions and create their own divergent beliefs.

Being able to address issues of masculinity and fear in relation to prostate cancer, for example, will enable men to better cope with diagnosis and decisions to visit one's doctor (Campbell, Keefe, McKee, Waters, & Moul, 2012; Hale, Grogan, & Willott Sarah, 2007) Tied in with masculinity were ideas around the practice of DRE, which continue to feature highly in men's knowledge and practices of screening (Gilbert, 2016; Pedersen, Armes, & Ream, 2012). Encouraging men to undergo DRE needs to consider ways in which men might not feel emasculated, for example changing positions from bending over to lying on the side (Romero, Romero, Tambara Filho, Brenny Filho, & Oliveira Júnior, 2011) with the least handling of one's genitals possible.

Tackling some institutional beliefs and systems can be multi-faceted. Community-based prostate cancer initiatives that target Black men away from the confines of a GP clinic or hospital setting, can address communication preferences. An example of understanding community needs is shown in a study using photo-voice by Gilbert (2016), showcasing some of the ways in which some community interventions can make use cultural knowledge to enhance information sharing. For men who are religious or for whom faith is important, an approach that might be suitable is by using local faith groups to address prostate cancer beliefs and find ways for men in those settings to become more engaged in prostate cancer screening behaviours (Wilson, 2014). Regarding language, where the terms "prostate" or "cancer" are not part of everyday speak, there is a need to identify local variations of the same terms or the nearest possible phrases, that will enable men to start having discussions in ways that are familiar to them and in which they feel comfortable. Examples of initiatives in the UK targeting both local settings and language include flexible information, recruitment and outreach strategies in London (Ream, Finnegan-John, & Pedersen, 2012; Wheelwright, 2016) as well as "Check Things Out" campaigns in Nottingham (BME Cancer Communities, 2016; The Voice, 2016). In the USA, several studies suggest that external settings and more community-based approaches to discussions around prostate cancer are more likely to reach and engage more Black men than expectations to go to see one's physician of their own accord would (Allen et al., 2007; Luque et al., 2011; Wray et al., 2009).

An essay by Livingston (2013) for example, explores some of these different social and structural reasons that lead to reduced participation in prostate cancer-related services in Sub-Saharan Africa while a recent meta-analysis highlights the need to tackle institutional contexts of cancer in African countries. It calls for a different approach to prostate cancer priorities (Adeloye et al., 2016) and reports that the burden of cancer in Black men suggests that there is urgent need to explore all issues contributing to health (International Agency for Research on Cancer & Cancer Research UK, 2014).

Structural barriers and calls for more ethnic matched health providers are discussed as influencing the experiences Black men have and the ways in which cultural meanings of prostate cancer can be addressed in response. They show the diversity of men's interactions with health services, notwithstanding the multiple barriers they might face; and point to the need to individually assess communities instead of assuming similarities across Black ethnic groups (Bache et al., 2012; Cuevas, O'Brien, & Saha, 2016; Stefan, 2015).

It is important that the link between beliefs and prostate cancer be separated from lack of education but also made clearer, taking into consideration all the factors raised in this scoping study. Considering the multiple beliefs Black men hold, education about prostate cancer is important but alone is inadequate to address reasons that men do not make use of health services.

6. Strengths and limitations

The growing burden of cancer globally suggests that policy should not limit itself to categorising men from Black backgrounds, as there are nuanced differences in how they view their culture and the concerns they have regarding prostate cancer. One strength of the scoping study is the iterative way it was conducted, allowing the researcher to incorporate and refine the study question and criteria to answer the question. In addition, merging wide literature sources proved useful as it is from these home countries that some men created their beliefs and something that had been lacking in the wider literature. This study goes some way to show how these different beliefs are articulated by the different sub-categories of “Black” men. Studies, although wide-reaching, should not be used to generalise across all Black men as migration patterns, access to information, acculturation and global communication have not been considered in this study.

A possible weak point of the study might be the lack of quality assessments and inclusion of grey literature; however, the study is a scoping study of an acutely under-researched area that has significant implications in health inequality. Balance is necessary between assessing the information provided in the studies and the extent to which their methods are described. Usually, where no assessments are made, a close reading of any study methods and results allows one to assess the utility of the findings and studies in question. It is the same approach used in this scoping study, where the reader is invited to assess the study’s rigour based on the description of the methodological decisions made. Results should be taken with the understanding that study settings differed widely from rural to urban areas, which in themselves came with varied levels of education, medical access and health status.

Despite these caveats, the results remain important. Black men’s cultural reasons for what they believe about prostate cancer are varied, and their beliefs are a mesh of personal, social as well as structural factors. Understanding how these come together to create meaning for prostate cancer is important in tackling intervening factors that contribute to Black men’s cultural beliefs and behaviours. Targeting only low knowledge without understanding why people hold the beliefs they do will only continue to create a gap between knowledge and practice. Multiple approaches are needed to address the various beliefs that men hold, with generalising across Black ethnic backgrounds likely to be unsuccessful. More individualised and targeted cultural rather than ethnic group focus might produce different results, where it is not about education only, but using the views different people hold to inform interventions. Scoping studies can bring in nuanced information from already existing studies, and provide a better understanding of what culture is and how it can be used to explain the views of men towards prostate cancer. In this study, fully exploring concepts is useful in creating more meaningful understanding of beliefs and ways to interpret these into service and health policy changes.

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References

- Adeloye, D., David, R. A., Aderemi, A. V., Iseolorunkanmi, A., Oyedokun, A., Iweala, E. E. J., ... Ayo, C. K. (2016). An estimate of the incidence of prostate cancer in Africa: A systematic review and meta-analysis. *PLoS One*, 11(4). doi:10.1371/journal.pone.0153496
- Aizer, A. A., Wilhite, T. J., Chen, M.-H. H., Graham, P. L., Choueiri, T. K., Hoffman, K. E., ... Nguyen, P. L. (2014). Lack of reduction in racial disparities in cancer-specific mortality over a 20-year period. *Cancer*, 120(10), 1532–1539. doi:10.1002/cncr.28617
- Akpuaka, S. O., Clarke-Tasker, V. A., Nichols-English, G. J., Daniel, M. G., & Akpuaka, A. I. (2013). Knowledge and perceptions of prostate cancer among Nigerian male immigrants. *ABNF-Association Of Black Nursing Faculty Journal*, 24(1), 23–27.

- Allen, J. D., Kennedy, M., Wilson-Glover, A., & Gilligan, T. D. (2007). African-American men's perceptions about prostate cancer: Implications for designing educational interventions. *Social Science & Medicine*, 64(11), 2189–2200. doi:10.1016/j.socscimed.2007.01.007
- Anderson, B., Marshall-Lucette, S., & Webb, P. (2013). African and Afro-Caribbean men's experiences of prostate cancer. *British Journal of Nursing*, 22(22), 1296–1307. <https://doi.org/10.12968/bjon.2013.22.22.1296>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. doi:10.1080/1364557032000119616
- Atulomah, N. O., Olanrewaju, M. F., Amosu, A. M., & Adedeji, O. (2010). Level of awareness, perception and screening behavior regarding prostate cancer among men in a rural community of ikenne local government area, Nigeria. *Primary Prevention Insights*, 2, 11–20. doi:10.4137/PPRI.S5955
- Bache, R. A., Bhui, K. S., Dein, S., & Korszun, A. (2012). African and Black Caribbean origin cancer survivors: A qualitative study of the narratives of causes, coping and care experiences. *Ethnicity & Health*, 17(1–2), 187–201. doi:10.1080/13557858.2011.635785
- Blumer, H. (1986). *Symbolic interactionism: Perspective and method*. Berkeley: University of California Press.
- BME Cancer Communities. (2016). Prostate cancer risk assessment. In *Check tings out*. Retrieved from <http://www.tings.org.uk/>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. doi:10.1191/1478088706qp063oa
- Campbell, L. C., Keefe, F. J., McKee, D. C., Waters, S. J., & Moul, J. W. (2012). Masculinity beliefs predict psychosocial functioning in African American prostate cancer survivors. *American Journal of Men's Health*, 6(5), 400–408. doi:10.1177/1557988312450185
- Cobran, E. K., Hall, J. N., & Aiken, W. D. (2017, January). African-American and Caribbean-born men's perceptions of prostate cancer fear and facilitators for screening behavior: A pilot study. *Journal of Cancer Education*, 1–9. doi:10.1007/s13187-017-1167-x
- Cuevas, A. G., O'Brien, K., & Saha, S. (2016). African American experiences in healthcare: "I always feel like I'm getting skipped over". *Health Psychology*, 35(9), 987–995. Retrieved from <http://ovidsp.ovid.com/ovidweb.cgi?T=JS&PAGE=reference&D=psyc13&NEWS=N&AN=2016-23417-001> <https://doi.org/10.1037/hea0000368>
- Daudt, H. M. L., van Mossel, C., & Scott, S. J. (2013). Enhancing the scoping study methodology: A large, inter-professional team's experience with Arksey and O'Malley's framework. *BMC Medical Research Methodology*, 13(1), 19. doi:10.1186/1471-2288-13-48
- Friedman, D. B., Corwin, S. J., Dominick, G. M., & Rose, I. D. (2009). African American Men's Understanding and perceptions about prostate cancer: Why multiple dimensions of health literacy are important in cancer communication. *Journal of Community Health*, 34(5), 449–460. doi:10.1007/s10900-009-9167-3
- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York, NY: Basic Books.
- Gilbert, L. R. (2016). Photovoice: A link between research and practice for prostate cancer advocacy in black communities. *Journal of Racial and Ethnic Health Disparities*, 4, 364. doi:10.1007/s40615-016-0237-9
- Global Burden of Disease Cancer Collaboration. (2017). Global, Regional, and National Cancer Incidence, Mortality, Years of Life Lost, Years Lived With Disability, and Disability-Adjusted Life-years for 32 Cancer Groups, 1990 to 2015: A Systematic Analysis for the Global Burden of Disease Study. *JAMA Oncology*, 3(4), 524–548. doi:10.1001/jamaoncol.2016.5688
- Hale, S., Grogan, S., & Willott, S. (2007). Patterns of self-referral in men with symptoms of prostate disease. *British Journal of Health Psychology*, 12(3), 403–419. doi:10.1348/135910706X118413
- Hannes, K. (2011). Critical appraisal of qualitative research. In J. Noyes, A. Booth, K. Hannes, A. Harden, J. Harris, S. Lewin, & C. Lockwood (Eds.), *Supplementary guidance for inclusion of qualitative research in cochrane systematic reviews of interventions* (Vol. 1, pp. 1–14). Retrieved from <http://cqrmg.cochrane.org/supplemental-handbook-guidance>
- Harvey, I. S., & Alston, R. J. (2011). Understanding preventive behaviors among mid-Western African-American men: A pilot qualitative study of prostate screening. *Journal of Men's Health*, 8(2), 140–151. doi:10.1016/j.jomh.2011.03.005
- Hughes, G. D., Sellers, D. B., Fraser, L., Teague, R., & Bern'Nadette Knight, M. S. P. H. (2007). Prostate cancer community collaboration and partnership: Education, awareness, recruitment, and outreach to southern African-American males. *Journal of Cultural Diversity*, 14(2), 68–73.
- Hunt, S. M., & Bhopal, R. (2004). Self report in clinical and epidemiological studies with non-English speakers: The challenge of language and culture. *Journal of Epidemiology & Community Health*, 58(7), 618–622. doi:10.1136/jech.2003.010074
- International Agency for Research on Cancer and Cancer Research UK. (2014). World cancer factsheet. In Cancer Research UK (Eds.), *World Health Organization*. London. doi:10.1002/ijc.27711
- Jones, A. L. C., & Chingwundoh, F. (2014). Update on prostate cancer in Black Men within the UK. *Ecancelmedicalscience. Cancer Intelligence*, 8. doi:10.3332/ecancer.2014.455
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5(1), 1386. doi:10.1186/1748-5908-5-69
- Livingston, J. (2013). Cancer in the Shadow of the AIDS Epidemic in Southern Africa. *The Oncologist*, 18(7), 783–786. doi:10.1634/theoncologist.2013-0215
- Luque, J. S., Rivers, B. M., Gwede, C. K., Kambon, M.a, Lee Green, B., & Meade, C. D. (2011). Barbershop communications on prostate cancer screening using barber health advisers. *American Journal of Men's Health*, 5(2), 129–139. doi:10.1177/1557988310365167
- Maliski, S. L., Connor, S. E., Williams, L., & Litwin, M. S. (2010). Faith among low-income, African American/Black men treated for prostate cancer. *Cancer Nursing*, 33(6), 470–478. doi:10.1097/NCC.0b013e3181e1f7ff
- Maliski, S. L., Rivera, S., Connor, S., Lopez, G., & Litwin, M. S. (2008). Renegotiating masculine identity after prostate cancer treatment. *Qualitative Health Research*, 18(12), 1609–1620. doi:10.1177/1049732308326813
- Moyo, S. (2017). Men's knowledge about prostate cancer: A case study of rural Mhondoro-Ngezi, Kadoma District, Zimbabwe. *European Journal of Cancer Care*, 26, e12493. doi:10.1111/ecc.12493
- Mulugeta, B. (2014). *The influence of culture on the views of black African/African- Caribbean men living in the UK towards cancer* (PhD diss.). University of Lanakshire.
- Nakandi, H., Kirabo, M., Semugabo, C., Kittengo, A., Kitayimbwa, P., Kalungi, S., & Maena, J. (2013). Knowledge, attitudes and practices of Ugandan men regarding prostate cancer. *African Journal of Urology*, 19(4), 165–170. doi:10.1016/j.afju.2013.08.001
- Nanton, V., & Dale, J. (2011). 'It don't make sense to worry too much': The experience of prostate cancer in African-Caribbean men in the UK. *European Journal of Cancer Care*, 20(1), 62–71. doi:10.1111/j.1365-2354.2009.01155.x

- Ng, P., Schoenfeld, E. R., Hennis, A., Suh-Yuh, W., Leske, M., & Nemesure, B. (2013). Factors influencing prostate cancer healthcare practices in Barbados, West Indies. *Journal of Immigrant and Minority Health*, 15(3), 653–660. doi:10.1007/s10903-012-9654-y
- Ocho, O. N., & Green, J. (2013). Perception of prostate screening services among men in Trinidad and Tobago. *Sexuality Research and Social Policy*, 10(3), 186–192. doi:10.1007/s13178-013-0118-5
- Oladimeji, O., Bidemi, Y. O., Yetunde, J.-A., Arulogun, O., & Sola, O. (2009). Prostate cancer awareness, knowledge, and screening practices among older men in Oyo State, Nigeria. *International Quarterly of Community Health Education*, 30(3), 271–286. doi:10.2190/IQ.30.3.g
- Olapade-Olaopa, E. O., Owoaje, E. T., Kola, L., Ladipo, M. M., Adebuseye, L., & Adediji, T. G. (2014). Knowledge and perception of Nigerian men 40 years and above regarding prostate cancer. *Journal of the West African College of Surgeons*, 4(1), 1–16. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/26587514>
- Oliver, J. S. (2007). Attitudes and beliefs about prostate cancer and screening among rural African American men. *Journal of Cultural Diversity* 14 (2): 74–80. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19175247>
- Owens, O. L., Jackson, D. D., Thomas, T. L., Friedman, D. B., & Hebert, J. R. (2015). Prostate cancer knowledge and decision making among african-american men and women in the Southeastern United States. *International Journal of Men's Health*, 14(1), 55–70.
- Pedersen, V. H., Armes, J., & Ream, E. (2012). Perceptions of prostate cancer in Black African and Black Caribbean men: A systematic review of the literature. *Psycho-Oncology*, 21(5), 457–468. doi:10.1002/pon.2043
- Prostate Cancer UK. (2016). A Black man's risk of prostate cancer | Prostate Cancer UK. Retrieved May 13, 2017, from <https://prostatecanceruk.org/get-involved/black-men-and-prostate-cancer/prostate-cancer-and-your-risk/a-black-mans-risk-of-prostate-cancer>
- Ream, E., Finnegan-John, J., & Pedersen, V. H. (2012, September). *Evaluation of a community-based prostate health clinic in London*. London: King's College.
- Romero, F. R., Romero, A. W., Tambara Filho, R. T., Brenny Filho, T. B., & Oliveira Júnior, F. C. d. (2011). Patient positioning during digital rectal examination of the prostate: Preferences, tolerability, and results. *International Brazilian Journal of Urology*, 37(3), 371–379. doi:10.1590/S1677-55382011000300011
- Sanchez, M. A., Bowen, D. J., Hart Jr., A., & Spigner, C. (2007). Factors influencing prostate cancer screening decisions among African American men. *Ethnicity & Disease*, 17(2), 374–380.
- Seymour-Smith, S., Brown, D., Cosma, G., Shopland, N., Battersby, S., & Burton, A. (2016). “Our people has got to come to terms with that”: Changing perceptions of the digital rectal examination as a barrier to prostate cancer diagnosis in African-Caribbean men. *Psycho-Oncology*, 25(10), 1183–1190. doi:10.1002/pon.4219
- Shenoy, D., Packianathan, S., Chen, A. M., & Vijayakumar, S. (2016). Do African-American men need separate prostate cancer screening guidelines? *BMC Urology*, 16(1), 19. doi:10.1186/s12894-016-0137-7
- Singh, G., & Jemal, A. (2017). Socioeconomic and racial/ethnic disparities in cancer mortality, incidence, and survival in the United States, 1950–2014: Over six decades of changing patterns and widening inequalities. *Journal of Environmental and Public Health*, 2017, 1–19. doi:10.1155/2017/2819372
- Stefan, D. C. (2015). Cancer care in Africa: An overview of resources. *Journal of Global Oncology*, 1(1), 30–36. doi:10.1200/JGO.2015.000406
- Thakare, N., & Chingwundoh, F. (2015). Prostate cancer in the African-Caribbean community. *Trends in Urology and Men's Health*, 6(4), 32–35. doi:10.1002/tre.472
- The Voice. (2016). Nottingham city launches first BME prostate cancer project. *The Voice Online*, 20 May. Retrieved May 1, 2017, from <http://www.voice-online.co.uk/article/nottingham-city-launches-first-bme-prostate-cancer-project>
- Thompson, R. (2013, February). Hear me now : The uncomfortable reality of prostate cancer in Black African-Caribbean Men. *BME Cancer Communities*.
- Wheelwright, R. (2016). Developing and implementing a community-based prostate cancer awareness and early detection campaign for hard to reach men. *European Journal of Surgical Oncology (EJSO)*, 42(11), S224–S225. doi:10.1016/j.ejso.2016.07.042
- Wilson, S. M. (2014). Prostate cancer support groups in a local faith community. *Journal of Christian Nursing*, 31(4), E8–11. doi:10.1097/CNJ.0000000000000115
- Wray, R. J., McClure, S., Vijaykumar, S., Smith, C., Ivy, A., Jupka, K., & Hess, R. (2009). Changing the conversation about prostate cancer among African Americans: Results of formative research. *Ethnicity & Health*, 14(1), 27–43. doi:10.1080/13557850802056448



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