

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

European Journal of Oncology Nursing

journal homepage: www.elsevier.com/locate/ejon

Black men's experiences of support following treatment for prostate cancer in England: A qualitative study

Obrey Alexis^{a,*}, Aaron James Worsley^b

^a Oxford Brookes University, Joel Joffe Building, Delta 900 Office Park, Swindon Campus, SN5 7XQ, UK

^b Oxford Brookes University, John Henry Brookes Building, Headington Campus, Oxford, OX3 0BP, UK

ARTICLE INFO

Keywords:

Prostate cancer
Male
Ethnic

ABSTRACT

Purpose: Prostate cancer is a leading cause of death in black men in the United Kingdom (UK). Evidence suggests that unmet supportive care needs are prevalent in contemporary healthcare, particularly for men with advanced prostate cancer, whilst less has been written specifically about the supportive care needs of black men. Therefore this study will examine black men's experiences of support following prostate cancer treatment in England.

Method: A qualitative research design was employed. Twenty black African and black Caribbean men were interviewed on a face-to-face basis to obtain insightful information about their experiences of prostate cancer. Interviews were recorded and transcribed. Data were analysed using thematic analysis which allowed for emergent themes.

Results: In this study there were six emergent themes. These were: dealing with the treatment effect, support from loved ones, individuals and organisations, healthcare support, spirituality, and positivity. Black men used different coping strategies to deal with the side effects of treatment.

Conclusion: Black men experienced a range of supportive care needs. Some men felt that their individual needs as black men were not met by healthcare professionals, although no specific reasons were forthcoming as to why they felt this way. Healthcare professionals should be aware of the support mechanisms that black men have used throughout the prostate cancer journey and to consider these approaches when treating and caring for black men.

1. Introduction

According to [Prostate Cancer UK \(2019\)](#), prostate cancer is the most commonly diagnosed cancer in the UK, affecting all men including Black, Asian, and Minority Ethnic men, cisgendered men, transgendered women, non-binary individuals, and intersex individuals. In 2018, 1.3 million new cases of prostate cancer were reported worldwide, making prostate cancer the second most commonly occurring cancer in men ([Global Cancer Observatory, 2018](#)).

In England, statistics have shown that prostate cancer was the most diagnosed cancer for adult males, aged 45 and above, in 2018 ([Public Health England, 2020](#); [ONS 2019](#)). [Prostate Cancer UK \(2019\)](#) expects 1 in 8 men will be diagnosed with prostate cancer in their lifetime in the UK. Between 2016 and 2018, there were 52,300 new cases of prostate cancer in the UK ([Cancer Research UK, 2022](#)). On average, 12,000 men in the UK die from prostate cancer every year ([Cancer Research UK, 2022](#)). Not just in the UK, but on a global scale, prostate cancer has become a major public health concern ([Harvard Medical School, 2018](#)).

Studies have reported that men of African and Caribbean heritage have higher prevalence, incidence, and mortality rates of prostate cancer ([Patrick et al., 2015](#)) when compared to other ethnicities. In the UK, 1 in 4 black men will get prostate cancer in their lifetime, and are also two to three times more likely to be receive a diagnosis of prostate cancer than white men ([Ben-Shlomo et al., 2008](#); [Nanton and Dale, 2011](#); [Prostate Cancer UK, 2016](#)) whilst also having poorer outcomes than UK Caucasian men ([Evans et al., 2008](#)). Furthermore, data from the UK has underlined that black men of African and Caribbean heritage were more likely to be diagnosed with prostate cancer at an earlier age than white men, averaging 67.9 years for black men compared to 73.3 years for Caucasian men ([Ben-Shlomo et al., 2008](#); [Prostate Cancer UK, 2017](#)).

In the UK, a qualitative study by [Nanton and Dale \(2011\)](#) examined 16 African and Caribbean men who had been treated for prostate cancer. The participants criticised health professionals for what they felt was a lack of information concerning the side effects of treatment, and for feeling uninformed in the decision-making process regarding treatment ([Nanton and Dale, 2011](#)). Other studies have indicated that education

* Corresponding author.

E-mail addresses: oaalexis@brookes.ac.uk (O. Alexis), aworsley@brookes.ac.uk (A.J. Worsley).

<https://doi.org/10.1016/j.ejon.2022.102232>

Received 24 June 2022; Received in revised form 10 October 2022; Accepted 25 October 2022

Available online 1 November 2022

1462-3889/Crown Copyright © 2022 Published by Elsevier Ltd.

<http://creativecommons.org/licenses/by-nc-nd/4.0/>.

This is an open access article under the CC BY-NC-ND license

and information pertaining to prostate cancer from healthcare professionals were largely absent and prevented black men from better understanding the disease and the side effects of treatment (Anderson et al., 2013; Pederson et al. 2012), leading to misconceptions about screening procedures and mortality rates (Ahigba et al., 2017). However, Cremin (2015) discerned that by delivering inclusive and culturally diverse training to healthcare professionals, and by adopting a proactive approach to disseminating relevant information, black African and black Caribbean men were able to respond and engage with the literature, and were ultimately able to cope with prostate cancer treatment.

Employing coping strategies to deal with stress are experiences faced by all individuals regardless of culture, race, or ethnic backgrounds. However, research has found that individuals from different cultural backgrounds might consider and respond to stress in a different way and might develop unique strategies (Lam and Zane, 2004). Proponents such as Hobfoll (2001) have criticised the literature on stress and coping by stating that it is embedded in a mono-cultural viewpoint based on North American values. It has been further postulated that stress and coping are not context-specific and therefore authors such as Lazarus and Folkman (1984) have failed to acknowledge that culture plays an important aspect in coping strategies (Chun et al., 2006).

Studies exploring the needs of men throughout all stages of prostate cancer highlighted their unmet physical and psychosocial needs (Bryant-Lukosius et al., 2010; O'Brien et al. 2011). Similarly, Arrington et al. (2006) reported that men need support to help cope with a diagnosis of prostate cancer. Although the study recognised support as a necessity, the supportive needs of black men are not explored further, and therefore limits the applicability to this genus of men. Further studies reported that men were unable to perform day-to-day activities, such as work, due to treatment side-effects, and thus saw a decline in their psychosocial wellbeing and their quality of life (Gavin et al., 2015; McCaughan et al., 2015; McCaughan et al., 2013; Bamidele et al., 2018).

There is evidence to suggest that unmet supportive care needs are prevalent in contemporary healthcare, particularly for men with advanced prostate cancer (Paterson et al., 2015). However, this study's focus was on white men, limiting the applicability to the population of black men. A literature review conducted by Cremin (2015) found that supportive care for black men was lacking. Paterson et al. (2015) defined supportive care needs as requirements for assisting prostate cancer survivors to manage their symptoms and the side effects following treatment for prostate cancer, and to enable them to cope and adapt throughout the prostate cancer journey and beyond. Other studies have investigated black men's experiences of prostate cancer (Anderson et al., 2013; Alexis, 2020; Wagland et al., 2020) and the impact the disease may have on their sense of masculinity (Alexis and Worsley, 2018) however less has been written specifically about the supportive care needs of black men. Given the limited empirical studies examining black men's experiences of support following treatment for prostate cancer, this qualitative study will therefore seek to address this unexplored area.

2. Aim of the study

This study will undertake a qualitative methodological approach consisting of face-to-face interviews to examine black African and black Caribbean men's experiences of support following treatment for prostate cancer in England.

3. Methods

For this study, black men were recruited through two methods. The first method was via a voluntary African and Caribbean organisation in London. The researcher approached and explained the aims of the study to the manager of the organisation, obtaining support for the project. The researcher left information sheets and consent forms with the manager for distribution to prospective participants. Individuals then made contact with the researcher to express interest in the study.

Following a full explanation about the study's aims and the requirements of prospective participants, agreement was sought to participate and a mutually convenient time and place was arranged for the purposes of interviewing participants. Written informed consent was obtained from all participants before interviews commenced.

Secondly, participants were also recruited through snowball sampling. Participants from the first process verbally informed other African and Caribbean prostate cancer survivors of the study. An information sheet was disseminated to interested individuals. Once aware, contact was made with the researcher who provided a full explanation about the study. If a participant was willing to be involved, arrangements were made to interview in a mutually convenient place and time. Participants were recruited in London and throughout England. The interviews were semi-structured. This study used the consolidated criteria for reporting qualitative research (COREQ) checklist (Tong et al., 2007).

Following a review of the literature, Nelson's (2016) conceptual depth approach was adopted. This approach is designed to achieve in-depth understanding of the phenomenon under investigation. The data analysis process applied this criteria. Lincoln and Guba (1985) stated that sample size determination should be guided by the criterion of informational redundancy, meaning that sampling can be terminated when no new information is elicited. For this study, information redundancy was achieved by using twenty participants, which contributed to the in-depth information of the phenomenon under investigation (Nelson, 2016).

Black men were included if they were of African or Caribbean heritage, were aged 45 or over and had been diagnosed with and had been treated for prostate cancer, and spoke English. Black men who had been in the terminal phase of the illness were also included. Black men who had not received a diagnosis of prostate cancer, were not of African or Caribbean heritage, and did not reside permanently within the UK were excluded from this study. Altogether, twenty men fit the inclusion criteria and agreed to be interviewed.

All face-to-face interviews were conducted by the researcher and lasted approximately an hour. Interviews were recorded using the voice recording software, Audacity, and were subsequently transcribed verbatim by an external transcriber. Braun and Clarke's (2006) thematic framework was selected in order to analyze the data. The verbatim transcripts were imported into QSR NVivo 12 package (QSR International, 2016) and reread, allowing the researcher to generate codes and then, by applying Nelson's (2016) framework, clustering the codes into themes.

Ethical approval was sought through a local university in the UK. Participants were informed that they could withdraw at any point during the research process. Additionally, the participants were offered support through either their General Practitioner (GP) or the Prostate Cancer Charity in the UK if they became upset during the interview.

Data were anonymised and both physical and electronic data, including consent forms, were stored in a locked cabinet. Audacity audio recordings were stored on the researcher's password-protected Google Drive. All data collection storage and processes complied with the principles of the Data Protection Act (2018) and the EU directive 95/46 on data protection. Participants involved in this study were informed that data generated by the study would be retained for a period of ten years in accordance with the University's policy. Participants were assured that their anonymity would be maintained in any research outputs.

4. Results

Twenty black men took part in the study. The sample consisted of 3 black men born in Africa but currently living in the UK, and the remainder, 17 black men, were either born in the Caribbean or their parents originated from the Caribbean. Of the black African men, 2 were Nigerian and 1 was from Guinea Bissau. Of the black Caribbean men, 12 were Jamaican, 3 were Grenadian, 1 was Antiguan, and 1 was Anguillian.

Moreover, of the sample of 20 black men, 16 participants were between the ages of 48–57 and 4 were aged 58 or above. The different types of treatment that these black men had included, robotic therapy, radiotherapy, radical prostatectomy, hormonal therapy, active surveillance and brachytherapy. To protect the identity of all participants, the researcher chose to report the sample in this way.

Analysis of the data revealed the following themes namely, dealing with the treatment effects, support from loved ones, support from other individuals and organisations, healthcare support, spirituality and their positive outlook on life.

4.1. Dealing with the treatment effects

For many black men, they highlighted how they dealt with the effects of treatment for prostate cancer. Some found the experience to be challenging, whilst others did not.

I knew I wouldn't have semen, I don't think to have something that is so manly since you were what, fourteen, fifteen or sixteen, when you first started, first start ejaculating, you think, OK, you've got semen. To have something then taken away from you, that is like life itself. And then to not have it, that itself is something that mucks with your head anyway, to be honest with you, And I probably, I'm about a six and a half, seven on depression, out of ten, I'm about there. I just handle it differently and I've immersed myself in doing other little bits, so there are other projects that I'm doing. (Interview Male 11, Jamaican).

Another reported that:

I just take one battle at a time, you know, there's no point worrying about being impotent if you're still incontinent. So just do them one at a time. When I had the surgery, the doctor came to see me afterwards and he told me he'd saved both sets of nerves. So, you know, that's why I'm so, I'm so, I wouldn't say I'm bothered, that's why I'm just so OK about it because I know that it's just a matter of time. There's nothing I can do other than wait, (Interview Male 4, Jamaican).

On the other hand, one black man stated that he was coping well with the treatment effects of prostate cancer:

Oh, I am coping very, very well. Very, very well. I hardly think about it, [Interview Male 10, Jamaican].

4.2. Support from loved ones

Many black men shed light on the support they received from their wives, partners, family members and loved ones. They stated that this was pivotal and felt that this was crucial in helping them to recover:

A lot of people forget that you need the support of everybody around you, and particularly your partner, to be able to get through this battle. Listen, the best support that I've had is from my wife, family and friends. That's the best support that I've had. I didn't think I needed any other level of support. But my strength in how I'm dealing with it at the moment is from my wife and my family, (Interview Male 6, Jamaican).

Similarly, another black man reported that:

She's been great and she's been my pillar through the whole four years, (Interview Male 8, Anguillian).

A further black man stated that:

With regards to my partner, she's fully supportive. One of her most comforting statements was that we'll fight this together, which, it's only when you look back with hindsight, that you realise just how significant that is. That you've got somebody who is obviously, a major part of your life. That they're going to share some of your journey and help you where they can. Now whether that's through emotional support or, you know,

psychological support or whatever, and that's really encouraging to know, (Interview Male 9, Jamaican).

4.3. Support from other individuals and organisations

In addition to receiving support from family members and loved ones some black men received support from other black men and organisations. This support helped them to cope with the after effects of prostate cancer treatment:

I've talked to, there's another guy, who was one of my main support, who's had it. And when I talked to him, he's on the other scale. So the last time me and him sat down and we talked. So he's one of the ones that I can really talk to about everything, kind of thing. So we have that one to one talk and we talk about everything, (Interview Male 11, Jamaican).

Another black man reported that:

There are a few other men that have undergone the removal of the prostate, that we talk, you know, and how are things with you? And, you know, some of them found that their relationship has fallen away because of the treatment and the inability to, you know, to have an active sex life. So there are a few men that I'm able to talk to which helps, it helps, you know, (Interview Male 13, Jamaican).

Similarly, meeting other black men at this organisation and sharing of experiences helped with some black men enabled them to cope with the treatment effects of prostate cancer:

No, apart from meetings that we are having. The meetings that we have, prostate meetings. I used to have meetings with this organisation. And we will talk about, we people that have prostate cancer, we sit down every time, you know, we come together, we talk about it, just like information sharing. Yes, sharing information and talking about individual problems, (Interview Male 14, Nigerian).

4.4. Healthcare support

For most black men they indicated that they received healthcare professional support but for a small minority the support was either not upfront or not offered.

Yes, the literature that I've read and all the telephone numbers I've been given, you know, if I want to discuss anything regarding my health, if I'm struggling financially or stress, anxiety, the level of support is there. I didn't take it, I didn't sort of utilise it because I feel that I'm not at that stage, where I feel that, you know, I can cope with, you know, the everyday issues that I face, as long as, providing that I'm able to work and, you know, help pay my mortgage and other things, then, you know, I don't, there's no need for me to take on board what they're offering. But it's there and it's nice to know that it's there, that in the event of anything occurring, then, you know, that help is there, (Interview Male 13, Jamaican).

Similarly, another black man spoke of the support he received from the Macmillan nurse:

Macmillan, Macmillan nurse, they are very supportive. Macmillan nurses are very supportive, the organisation, they are very supportive. Yes, information was given to me in the hospital and they came to my aid, like advice and what I am entitled to, this, that, de, de, de, so they are very supportive, (Interview Male 14, Nigerian).

However, for a minority of black men the support was not upfront or provided, as alluded to in the below extracts:

So I think this must have been the fourth time I went back. I think she said that once you go back in May, they're supposed to be signing you off. So if you haven't had anything since May and your PSA has kept low, then they're signing you off. So when I went back in November, that's the first

time that they asked me about, they offered me, well if you want to talk to like the counselling people here, prostate, I didn't know they had prostate counsellors, to be honest with you. I don't remember being given that as an option up front, to say, you know what I mean, (Interview Male 11, Jamaican).

People give up because they don't understand what's going on. And the doctors and nurses do not give the right support to the black community. Because when I started to seek advice and support, I couldn't find none, I couldn't find nothing. I want to speak to a man, this is how I met XQ because I was speaking in hospital, saying, 'right, OK, I've had the operation, I'm doing OK but what happens now? I want aftercare, after support. Who do I speak to as a man?' 'Oh we've got de, de, de.' 'But I want to speak to a black man.' 'Err, err, OK.' I said, 'what do you mean, OK? I'm a black man, right, I'm in a room that's got twenty beds and there's nineteen white men and one black man, which is me. I want to speak to a black guy who's gone through the same journey as me,' (Interview Male 20, Jamaican).

4.5. Spirituality

Many black men spoke of their connection with, and faith in God. They perceived that through this relationship with God healing would occur. For others, they felt that God kept them alive to raise awareness of prostate cancer in the black community.

I believe in him, in God. I believe, I believe I'm OK and God is with me, I'm a child of God, I'm a subject of God, God is with me, so I know I'm OK. I believe it's only God that can heal it, he's the one that can heal, and when you are a child of God, you leave everything to him. When you are a child of God, you leave everything to God. And you do your part and let God do his part, you leave it, you do your part and you leave the rest to God to do his own part, that's it.

Q: And do you think praying will cure cancer?

I believe that, I believe it. That's why I said, I have to do my own part and God will do his own part because God heals it. He's the one that can heal me. You can do anything, you can, the doctor will do their part, you will do your part, but it is God that sanctions it, that's my belief, (Interview Male 14, Nigerian).

Another stated that:

Being religious, yes, it's helped me because praying to him, I say, 'oh god, please, let it be OK. Try not to get it into, make it get into me too much. That will not affect me too deeply,' (Interview Male 5, Nigerian).

The below two extracts illustrated that black men had faith in God and perceived that their lives were saved. In view of this they were prepared to raise awareness of prostate cancer in the black community:

You know, there's a certain amount of spiritual elements in this as well, so I've been fine about it. I believe in God. And I said to God, you get me through this and I will, I'll become the biggest headache for prostate cancer, and I will talk about it to everybody and I'll be the biggest headache that this thing has had, (Interview Male 4, Jamaican).

I kept saying to my wife, 'look, I consider myself to be very lucky with this illness,' because I went into the doctors by accident, I didn't even know what I was about to get myself involved in, but it seems, for me, it seems as if God kept me alive for a reason. Because I ask myself, that God kept me alive for a reason and it has to be this reason. So my belief, my faith and my belief, is what helps me to get through this. I said I believe that God kept me alive for that reason, to go and get this message out, (Interview Male 6, Jamaican).

4.6. Positivity

Being positive was another way that some black men coped with the treatment effects of prostate cancer. Their stories capture their individual experiences and how they dealt with the diagnosis through to surviving prostate cancer.

Every day I wake up I see the sky and the ground, so I'm happy and I'm positive in myself. During the early stages it's almost like a body, where you think, wow, I've got a battle to deal with. But very early on, OK, and I tell people this, I treated it as a battle, it's my work up. So you have to go into this with the right mental attitude. Because I'm a great believer, OK, your mind is important, and it's like it's your big game. And if you go into your big game shoulders dropped, downhearted, you're going to lose. And my approach was going in with a positive frame of mind, (Interview Male 2, Grenadian).

Similarly, a few black men reported that:

And I said, yes, I got diagnosed with prostate and I explained to them what happened to me. I explained to them the choices I made, and they couldn't believe it. They were saying, S, doesn't it affect you? Yes, of course it affects me, but it can't affect me for too long. It's got to be a short effect and then I've got to get myself moving again. I got to be positive, (Interview Male 7, Antiguan).

So my perspective on things is a bit more balanced, you know, a bit more balanced. Not so much negative, a bit more positive, (Interview Male 19, Grenadian).

I told myself that I'm going to beat it. And I think that is, because I've always had a strong attitude towards a lot of things I do that, I just said to myself, yes, OK, you know what, I will beat this, (Interview Male 20, Jamaican).

For this particular black man, he highlighted how lucky he was and because of this he began raising awareness of prostate cancer:

Oh my confidence has grown, in numerous years for different reasons, but since this, and I feel because the realisations of being extremely lucky, buzzing. I'm like a buzz soul now. I speak to different people about prostate cancer and, hopefully, we'll get on this escalator now, where we can spread the word around to black men, (Interview Male 8, Anguillian).

5. Discussion

Treatment for prostate cancer and its side effects were challenging for some black men, however for others this was not the case. In coping with the psychological and the physical effects, some black men spoke of the challenges that they faced as a consequence of their inability to produce semen and being rendered impotent. It is interesting to note that changes in their physical condition led to mental and emotional pain which black men had to adapt and cope with. The loss of sexual function and semen likened to the loss of their manhood and Potts (2000) confirmed this by asserting that the loss of a man's ability to have penetrative sex appeared to have threatened black men's sense of masculinity. Evidence has found that men can suffer a crisis of masculinity following treatment for prostate cancer by being unable to adhere to hegemonic masculine norms and questioning their self-worth as men (Olliffe, 2005; O'Shaughnessy and Laws, 2009; Thomas et al., 2013; Alexis and Worsley, 2018). Given that some black men experienced such challenges to their masculine identity, others indicated that they were coping well by not thinking about the ill-effects of prostate cancer treatment and its impact on their masculine identity. Individuals generally employ coping strategies in one of two ways: by either problem-focused coping or emotion-focused coping (Lazarus, 1999). Problem-focused coping involves actively or behaviourally altering the external person-environment relationship. On the other hand, emotion

focused coping involves positive reappraisal and this process of cognitively reframing difficult thoughts in a positive manner may have been used by some black men to cope (Lazarus, 1999) with the treatment side effects.

Another finding in this research was how some black men had positive mental attitudes. These helped them to cope with the treatment effects of prostate cancer. Given that some studies (Paterson et al., 2015) paint a bleak picture of black men's experiences of prostate cancer treatment, this study found that some men were positive in their outlook of prostate cancer. This is a novel finding as no other research has reported on black men's positive outlook, whilst also including the experiences of 3 black gay men. Therefore the theme of 'positivity' adds to the body of knowledge in this particular and unexplored area.

Black men of African and Caribbean backgrounds reported that a large part of their support came from wives, partners, family members and loved ones. Family members were pivotal and assisted them throughout the prostate cancer trajectory. Drawing on research from the United States of America, a study by Jones et al. (2011) echoed similar findings to this research by stating that family members and wives were crucial in supporting black men during the prostate cancer journey – from diagnosis to post treatment. Spousal support has been found to be important for the decision making process (Ahigba et al., 2017). It is interesting to note that family members', including wives' and partners', role in supporting black men is under-researched and therefore there is a need for more research into this particular area to determine the types of support that black men may receive from families, partners and wives. It has been argued (Jones et al., 2011) that it is crucial to realize the emotional, physical and social support that family members give to black men. As a consequence of this, partners and family may enhance the psycho-social wellbeing of black men.

Moreover, support came from other individuals and organisations. Support through these mechanisms helped black men to cope with and to share information regarding prostate cancer. Many proponents have posited that organisations and friends have helped to support men, including black men, throughout the prostate cancer journey (Rivers et al., 2012; Bamidele et al., 2018). It was also crucial for some to have a faith in God, which was an essential part of their coping strategy [Bache et al., 2012; Gray et al., 2005; Bamidele et al., 2018]. It was revealed that African American men reported significantly higher levels of religiosity compared to European American men (Halbert et al., 2007; Rivas et al., 2016). Spirituality is defined as having a personal relationship with a higher power and faith may be a process used to find meaning in one's life, while religion is defined as a set of practices and beliefs that are shared by a community or group (Keonig, 2012). Religion can be thought of as behavioural manifestations of one's spirituality. Religion and spirituality are important components of African American and Black African and Caribbean culture that translate into high rates of church attendance, frequent use of prayer to cope with cancer diagnosis, and reliance on faith to cope with stress and health issues (Halbert et al., 2007; Jones et al., 2007; Bamidele et al., 2018). Moreover, black churches played key roles in supporting black African and black Caribbean men with prostate cancer in terms of allowing them to share their experiences which black men felt was of immense value in helping them to cope with prostate cancer and its side effects (Akhazemea, 2015; Baruth et al., 2013).

In this study, the support that some black men received by healthcare professionals was mixed. Some stated that they received support, but a minority felt that more could have been done to make the experience a bit better for them, feeling they were overlooked. It was difficult to determine why this was the case. What this study found though was that such practices affected some black men's experiences during the prostate cancer journey in hospital (Chambers et al., 2011; McCaughan et al., 2013). It is important to note that men's experiences of prostate cancer treatment are largely influenced by how much information, professional and family support they receive along the journey (Hagen et al., 2007) and therefore this may have been the case in this present study.

Although the support was mixed, some black men reported that they required no support from healthcare professionals because of the availability of familial and friends' support.

5.1. Limitations of the study

This was a qualitative study involving 20 participants. As a result, the findings cannot be generalizable but may be transferable to other contexts in the UK, though not necessarily worldwide. This study focuses only on black men of African and Caribbean backgrounds in certain settings in England and should data be drawn from different parts of England they may have yielded different findings and views of participants' experiences. Despite these limitations the data did present some interesting findings about black men experiences of support following treatment for prostate cancer.

6. Conclusion

Black men in this study received external support to help them overcome the difficulties following prostate cancer treatment, but also employed their own individual coping mechanisms to help alleviate the side effects of treatment. Participants maintained a positive outlook on life and tried not to think about the cancer. They cited support from their families and friends, support from organisations, and their faith as crucial elements to their wellbeing. Some men felt that their individual needs as black men were not met by healthcare professionals, although no specific reasons were forthcoming as to why they felt this way. It is important for healthcare professionals to consider and determine the most appropriate way to contribute to or enhance the support for black men.

CRediT authorship contribution statement

Obrey Alexis: Conceptualization, Methodology, Software, Validation, Formal analysis, Investigation, Resources, Data curation, Writing – original draft, Writing – review & editing, Visualization, Supervision, Project administration, Funding acquisition. **Aaron James Worsley:** Conceptualization, Resources, Writing – original draft, Writing – review & editing, Visualization.

Declaration of competing interest

None declared.

Acknowledgment

This article was funded by the Mary Seacole Award.

References

- Ahigba, P., Alexis, O., Worsley, A.J., 2017. Factors influencing black men and their partners' knowledge of prostate cancer screening: a literature review. *Br. J. Nurs.* 26, S14–S21.
- Akhazemea, D., 2015. The Reshaping of Religious and Social Landscape of Britain: the Influence of Black Majority Churches. Spring. https://www.biblesociety.org.uk/uploads/content/bible_in_transmission/files/2015_spring/Bit_Spring_2015_Akha_zemea.pdf. (Accessed 17 June 2022).
- Alexis, O., Worsley, A., 2018. A meta-synthesis of qualitative studies exploring men's sense of masculinity post prostate cancer treatment. *Cancer Nurs.* 41, 298–310.
- Alexis, O., 2020. Black African and black Caribbean men's understanding and experiences of prostate cancer post-treatment in England. A qualitative study. *Cancer Nurs. Pract.* 19, 31–36.
- Anderson, B., Marshall-Lucette, S., Webb, P., 2013. African and Afro-Caribbean men's experiences of prostate cancer. *Br. J. Nurs.* 22, 1296–1307.
- Arrington, M.L., Grant, C.H., Vanderford, M.L., 2006. Man to man and side by side. They cope with prostate cancer. *J. Psychosoc. Oncol.* 23, 81–102. https://doi.org/10.1300/J077v23n04_05.
- 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. *Ethn. Health* 17, 187–201.

- Baruth, M., Wilcox, S., Saunders, R.P., Hooker, S.P., Hussey, J.R., Blair, S.N., 2013. Perceived environmental church support and physical activity among black church members. *Health Educ. Behav.* 40, 712–720.
- Bamidele, O., McGarvey, H., Lagan, B.M., Ali, N., Chinegwundoh, F., Parahoo, K., McCaughan, E., 2018. Life after prostate cancer: a systematic literature review and thematic synthesis of post-treatment experiences of Black African and Black Caribbean men. *Eur. J. Cancer Care* 27, 1–14 e12784.
- Ben-Shlomo, Y., Evans, S., Ibrahim, F., Patel, B., Anson, K., Chinegwundoh, F., Corbishley, C., et al., 2008. The risk of prostate cancer amongst black men in the United Kingdom: the PROCESS cohort study. *Eur. Urol.* 53, 99–105.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. *Qual. Res. Psychol.* 3, 77–101.
- Bryant-Lukosius, D., Browne, G., DiCenso, A., Whelan, T., Gafni, A., Neville, A., Sathya, J., 2010. Evaluating health related quality of life and priority health problems in patients with prostate cancer: a strategy for defining the role of advanced practice nurse. *Can. Oncol. Nurs. J.* 20, 5–14.
- Cancer Research UK, 2022. Prostate Cancer Statistics. <https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/prostate-cancer#heading-One>. (Accessed 23 August 2022). accessed.
- Chambers, S.K., Pinnock, C., Lepore, S.J., Hughes, S., O'Connell, D.L., 2011. A systematic review of psychosocial interventions for men with prostate cancer and their partners. *Patient Educ. Counsel.* 85, e75–e88.
- Chun, C.A., Moos, R.H., Cronkite, R.C., 2006. Culture: a fundamental context for the stress and coping paradigm. In: Wong, P.T.P., Wong, L.C.J. (Eds.), *Handbook of Multicultural Perspectives on Stress and Coping*. Springer, New York, pp. 29–53.
- Cremin, M., 2015. Meeting the unmet support needs of BME men with prostate cancer. *Br. J. Nurs.* 24, 1010–1014.
- Evans, S., Metcalfe, C., Ibrahim, F., Persad, R., Ben-Shlomo, Y., 2008. Investigating black-white differences in prostate cancer prognosis: a systematic review and meta-analysis. *Int. J. Cancer* 23, 430–435.
- Gavin, A.T., Drummond, F.J., Donnelly, C., O'Leary, E., Sharp, L., Kinnear, H.R., 2015. Patient reported ever had and current long-term physical symptoms after prostate cancer treatments. *BJU Int.* 116, 397–406.
- Global Cancer Observatory, 2018. GLOBOCAN Prostate Cancer Fact Sheet. gco.iarc.fr/today/data/factsheets/cancers/27-Prostate-fact-sheet.pdf. (Accessed 17 June 2022).
- Gray, R.E., Fergus, K.D., Fitch, M.I., 2005. Two black men with prostate cancer: a narrative approach. *Br. J. Health Psychol.* 10, 71–84.
- Hagen, B., Grantkalischuk, R., Sanders, J., 2007. Disappearing floors and second chances: men's journeys of prostate cancer. *Int. J. Men's Health* 6, 201–223.
- Halbert, C.H., Barg, F.K., Weathers, B., Delmoor, E., Coyne, J., Wileyto, P.E., Arocho, J., et al., 2007. Differences in cultural beliefs and values among African American and European American men with prostate cancer. *Cancer Control* 14, 277–284.
- Harvard Medical School, 2018. 2018 Annual Report on Prostate Diseases. Harvard Health Publishing, Boston MA.
- Hobfoll, S.E., 2001. The influence of culture, community, & the nest-self in the stress process: advancing conservation of resources theory. *Appl. Psychol.* 50, 337–421.
- Jones, R.A., Taylor, A.G., Bourguignon, C., Steeves, R., Fraser, G., Marguerite, L., Theodorescu, D., et al., 2007. Complementary and alternative medicine modality use and beliefs among African American prostate cancer survivors. *Oncol. Nurs. Forum* 34, 359–364.
- Jones, R.A., Wenzel, J., Hinton, I., Cary, M., Jones, N.R., Krumm, S., Ford, J.G., 2011. Exploring cancer support needs for older African-American men with prostate cancer. *Support. Care Cancer* 19, 1411–1419.
- Keonig, H.G., 2012. Religion, spirituality and health. The research and clinical implications. *ISRN Psychiatry* 2012, 278730.
- Lam, A.G., Zane, N.W., 2004. Ethnic differences in coping with interpersonal stressors: a test of self-construals as cultural mediators. *J. Cross Cult. Psychol.* 35, 446–459.
- Lazarus, R.S., 1999. *Stress and Emotion: A New Synthesis*. Springer, New York.
- Lazarus, R.S., Folkman, S., 1984. *Stress, Appraisal, and Coping*. Springer, New York.
- Lincoln, Y.S., Guba, E.G., 1985. *Naturalistic Inquiry*. Sage, London.
- McCaughan, E., McKenna, S., McSorley, O., Parahoo, K., 2015. The experience and perceptions of men with prostate cancer and their partners of the CONNECT psychosocial intervention: a qualitative exploration. *J. Adv. Nurs.* 71, 1871–1882.
- McCaughan, E., Prue, G.S., McSorley, O., Northouse, L., Schafenacker, A., Parahoo, K., 2013. A randomised controlled trial of a self-management psychosocial intervention for men with prostate cancer and their partners: a study protocol. *J. Adv. Nurs.* 69, 2572–2583.
- 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. *Eur. J. Cancer Care* 20, 62–71.
- Nelson, J., 2016. Using conceptual depth criteria: addressing the challenge of reaching saturation in qualitative research. *Qual. Res.* 17, 554–570.
- O'Shaughnessy, P., Laws, T.A., 2009. Australian men's long term experiences following prostatectomy: a qualitative descriptive study. *Contemp. Nurse* 34, 98–109.
- Office for National Statistics, 2019. Cancer registration statistics. England: 2017. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/bulletins/cancerregistrationstatisticsengland/2017>. (Accessed 17 June 2022).
- Oliffe, J., 2005. Constructions of masculinity following prostatectomy-induced impotence. *Soc. Sci. Med.* 60, 2249–2259.
- Paterson, C., Robertson, A., Smith, A., Nabi, G., 2015. Identifying the unmet supportive care needs of men living with and beyond prostate cancer: a systematic review. *Eur. J. Oncol. Nurs.* 19, 405–418.
- Patrick, A.L., Bunker, C.H., Nelson, J.B., Dhir, R., Wheeler, V.W., Zmuda, J.M., Richard, J.-R., et al., 2015. Argument for prostate cancer screening in populations of African-Caribbean origin. *BJU Int.* 116, 507–508.
- Potts, A., 2000. The essence of the hard on - hegemonic masculinity and the cultural construction of erectile dysfunction. *Men Masculinities* 3, 85–103.
- Prostate Cancer UK, 2017. Prostate Cancer. Prostate Cancer UK, London.
- Prostate Cancer UK, 2019. About Prostate Cancer. <https://prostatecanceruk.org/prostate-information/about-prostate-cancer>. (Accessed 17 June 2022). accessed.
- Prostate Cancer UK, 2016. Black Men and Prostate Cancer. <https://prostatecanceruk.org/prostate-information/are-you-at-risk/black-men-and-prostate-cancer>. (Accessed 17 June 2022). accessed.
- Public Health England, 2020. Cancer Registration Statistics. first release, England, 2018. <https://www.gov.uk/government/publications/cancer-registration-statistics-england-2018/cancer-registration-statistics-england-first-release-2018>. (Accessed 17 June 2022). accessed.
- Qsr International, 2016. NVivo 12. QSR International, Warrington.
- Rivers, B.M., August, E.M., Quinn, G.P., Gwede, C.K., Pow-Sang, J.M., Green, B.L., Jacobsen, P.B., 2012. Understanding the psychosocial issues of African American couples surviving prostate cancer. *J. Cancer Educ.* 27, 546–558.
- Rivas, C., Matheson, L., Nayoan, J., Glaser, A., Gavin, A., Wright, P., Watson, E., et al., 2016. Ethnicity and the prostate cancer experience: a qualitative metasynthesis. *Psycho Oncol.* 25, 1147–1156.
- Thomas, C., Wootten, A., Robinson, P., 2013. The experiences of gay and bisexual men diagnosed with prostate cancer: results from an online focus group. *Eur. J. Cancer Care* 22, 522–529.
- Tong, A., Sanisbury, P., Craig, P., 2007. Consolidated criteria for reporting qualitative research [COREQ]: a 32 item checklist for interviews and focus group. *Int. J. Qual. Health Care* 19, 349–357.
- Wagland, R., Collaco, N., Rivas, C., Matheson, L., Nayoan, J., Alexis, O., Gavin, A., et al., 2020. Adjustment strategies amongst black African and black Caribbean men following treatment for prostate cancer: findings from the Life after Prostate Cancer Diagnosis (LAPCD) study. *Eur. J. Cancer Care* 29, 1–9.