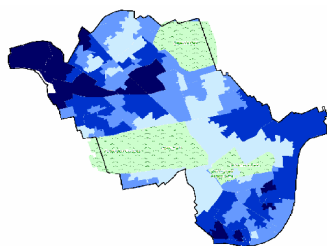


Westminster's
Joint Strategic Needs Assessment

**Barriers preventing early detection of
prostate cancer in Black
African/Caribbean men living in
Westminster**

Alison Roberts
September 2010



Westminster City Partnership

This document contributes to Westminster's JSNA

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ABBREVIATIONS

APPGC	All Party Parliamentary Group on Cancer
BME	Black and minority ethnic
CDSR	Cochrane Database of Systematic Reviews
CINAHL	Cumulative Index to Nursing and Allied Health Literature
DARE	Database of Abstracts of Reviews of Effects
DoPHER	Database of Promoting Health Effectiveness Reviews
DRE	Digital Rectal Examination
EGPP	Ethnic Group Population Projection
EMBASE	Excerpta Medica Database
EPPI	Evidence for Policy and Practice Information and co-ordinating centre
ERSPC	European Randomised study of Screening for Prostate Cancer
GLA	Greater London Authority
HMIC	Health Management Information Consortium
MORI	Market & Opinion Research International
NCIN	National Cancer Intelligence Network
NIH	National Institutes of Health
PLCO	Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial
PROCESS	PROstate Cancer in Ethnic SubgroupS
PSA	Prostate Specific Antigen
PsycINFO	Psychological Information Database
SUS	Secondary User Service
TRUS	Trans-Rectal Ultrasound Scan
UKACR	United Kingdom Association of Cancer Registries

ABSTRACT

Background

Black men have three times higher risk of developing prostate cancer than white men. In the City of Westminster, incidence of prostate cancer is higher than for any other cancer in men. An estimated 5.2% of the population of Westminster are black African/ Caribbean men aged 65 years and over and therefore at high risk of prostate cancer. Survival depends on the stage at which prostate cancer is diagnosed. Research carried out in Westminster suggests that there may be barriers to black men seeking an early diagnosis of prostate cancer.

Aims

To undertake a review of current literature, to identify what barriers black African/Caribbean men experience which may prevent early detection of prostate cancer in the City of Westminster and to determine what interventions would help to ameliorate these barriers.

Methods

Extensive electronic database and internet searches were conducted along with hand searching, citation searching and contacting key organisations. All randomised and non-randomised intervention and non-intervention studies published in English from the year 2000 were eligible for this literature review. Studies were assessed for quality and data extracted. A descriptive 'meta-synthesis' of intervention and non-intervention studies together was constructed laying out each of the barriers identified by black African/Caribbean men, alongside descriptions of interventions.

Results

Twenty six non-intervention studies, describing barriers were included. Eighteen barriers were mentioned of which the most common were poor knowledge of prostate cancer, lack of health insurance coverage, mistrust of the physician/health system, fear of cancer diagnosis and that it may lead to death and fear of testing procedures. Nine intervention studies were identified all of which focussed on information provision. The meta-synthesis showed that eleven of the identified barriers were addressed by interventions. The majority of these barriers were specific to prostate cancer.

Conclusions

This literature review has identified that African American men experience barriers which affect their ability or willingness to seek an early diagnosis of prostate cancer. A few successful interventions have been implemented to ameliorate some of these barriers. To be able to determine to what extent these barriers are being experienced by the black African/Caribbean male population of Westminster and if they are experiencing inequalities, more local research is required.

CHAPTER 1

INTRODUCTION

1.1 Background to research

1.11 Prostate cancer

Prostate cancer is the most common cancer in men in the UK. In 2007, 36,101 men were diagnosed with prostate cancer. It is the second most common cause of cancer death in the UK after lung cancer. Age standardised incidence rates in the UK in 2007 were 97.3 per 100,000. (1) In England, the age standardised average death rate from prostate cancer in 2007 was 26.6 per 100,000 people. (2) The Department of Health estimates that hospital costs for treating prostate cancer will rise from £60.7 million in 2006 to £82.7 million in 2021, an increase of 36%. (3)

Prostate cancer is usually slow growing and many men are unaware of it and are symptom free throughout their lifetime. In other men however, prostate cancer can be fast growing and need treatment to prevent or delay spread outside of the gland. The main symptoms of prostate cancer are a weak or reduced urine flow; needing to urinate more often especially at night; the feeling that the bladder has not emptied properly; difficulty starting to pass urine; incontinence and urgency. (4) Men experiencing these symptoms may not seek a physician consultation, considering the symptoms to be part of the natural ageing process. (5, 6)

To assess the risk of prostate cancer, the GP routinely conducts a prostate specific antigen (PSA) blood test, which measures the total amount of PSA in the blood and also performs a digital rectal examination (DRE) whereby the prostate is felt through the wall of the rectum. If the prostate feels hard and irregular in shape, this may be indicative of prostate cancer. PSA is a protein produced by some of the cells in the prostate. The PSA blood test is viewed as the most acceptable option for a patient however there are limitations to this test. Raised PSA levels are not always indicative of cancer, as they may be raised due to obesity or because of the presence of benign prostate hypertrophy for example, this gives the test a low specificity. (1) The test also has a low sensitivity, 15% of men with a normal PSA level will have prostate

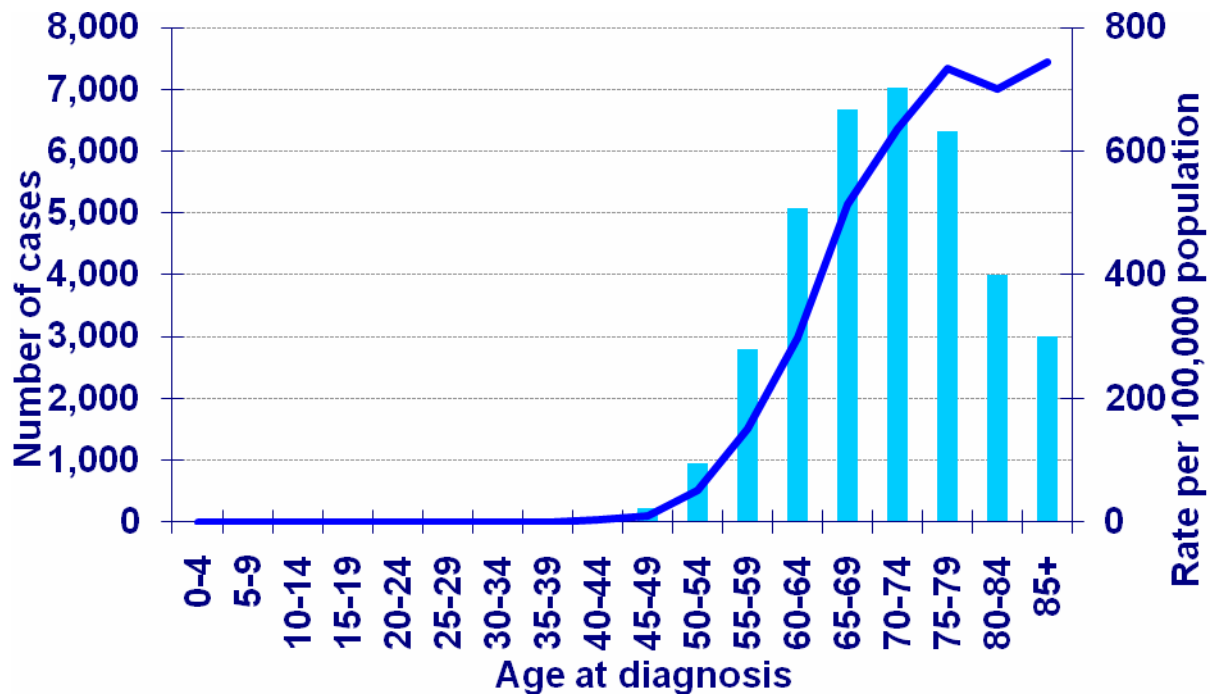
cancer. (7) If felt necessary, the GP may refer a patient for further tests at the Urology clinic where a trans-rectal ultrasound (TRUS) guided prostate needle biopsy may be performed which involves using a needle to take small pieces of the prostate through the wall of the rectum. This is the most accurate way of detecting prostate cancer.(4)

The most common treatments for prostate cancer are active surveillance where the state of the cancer is closely observed and treatment started only when or if necessary; external beam radiotherapy where radiation is used to kill the cancer cells; surgery, where the prostate is removed; brachytherapy, where radioactive seeds are implanted into the prostate and high dose rate brachytherapy where temporary sources of radiation are targeted at the prostate.(4)

The short term side effects of treatment can include proctitis (inflammation of the lining of the rectum and anus), radiation cystitis, tiredness, skin irritation, hair loss and painful ejaculation. The longer term side effects can include bowel or bladder incontinence, urethral stricture, erectile dysfunction and infertility.(4)

The exact cause and natural history of prostate cancer is still relatively unknown. The strongest risk factors for prostate cancer are age; men having at least one first degree relative diagnosed with prostate cancer and being a black African or black Caribbean male. In the UK, approximately three quarters of cases are diagnosed in men over 65 years. Very few cases are registered in men under 50 years of age. (1) Figure 1 shows the number of new cases and age specific incidence rates of prostate cancer in the UK in 2007.(1)

Figure 1. Number of new cases and age specific incidence rates of prostate cancer in the UK in 2007.



Source: Cancer Research UK (1)

There are also life style risk factors such as diet, multi-vitamin intake, sunlight exposure, job related chemical exposure, smoking and physical activity. Socio-economic class may also influence the probability of developing prostate cancer or of being diagnosed with it, due to differences in access to healthcare. Sexual activity and sexually transmitted infections may also be possible risk factors.(1)

1.12 Prostate cancer in black men

Black African men have three times greater risk of being diagnosed with prostate cancer than white men in the UK. (8) In England, age standardised incidence rates for 2002-2006 were significantly higher in the black rather than in the white ethnic group for all ages ranging from 120.8 to 247.9 per 100,000. (9) Black African men also present at an earlier age than white men at first diagnosis, on average 67.9 years compared to 73.3 years. (8) Both genetic and non genetic factors are thought to contribute significantly to prostate cancer disparities in black men. (10) In a recent

UK study, 64% of white men had heard of prostate cancer compared to only 37% of black men. (11) In 2008, The Prostate Cancer Charity conducted research which showed that 58% of African Caribbean men correctly identified prostate cancer as the most common form of cancer in men compared with 69% of the general population in the UK. (12) Only 15% of African Caribbean men knew they were at increased risk of developing prostate cancer.(12) This suggests an inequality in levels of awareness in this group of men.

In a recent UK study, comparing white and black men of the same age, black men were more likely to have been referred for diagnosis by a hospital based team. (8) It is unclear why this is but one possible reason is that these men could be experiencing barriers to access to primary care. The study also showed that PSA levels were higher in Black Caribbean men at diagnosis than in white men implying black men present later than white men. (8)

There is evidence from the US, that prostate cancer in African American men tends to be diagnosed at later stages of the disease. The five year survival rates for these men were shown to be lower than for white men. In fact some studies suggest their rates of survival are among the lowest in the world. (13-16) In contrast a recent UK study suggests that black men do not have a worse prognosis than white men even with higher average PSA levels at diagnosis. However, the evidence in the UK on this issue is currently based solely on the PROCESS study.(8) Further UK studies need to be conducted to examine whether this is the case and therefore whether patients would benefit from the earlier detection of prostate cancer. Whilst this debate is being settled it is still important from a Public Health perspective to understand what the potential barriers are to the early detection of prostate cancer in black men due to their apparent increased risk.

1.13 Importance of early detection of prostate cancer

Survival from prostate cancer depends strongly on the stage at which it is diagnosed. If the cancer is confined to the prostate only, five year relative survival in England in 1990-2002 was reported to be 90% or more. However if the cancer has metastasised at presentation, five year relative survival is lower than 30%. This

supports the case for early detection, however studies have conflicting views as to whether early detection actually reduces mortality rate.(17)

A recent European trial (ERSPC) demonstrated that there was benefit in the early detection and treatment of prostate cancer. The rate ratio for death from prostate cancer in the screening group, compared to the control group which did not receive screening, was 0.80 (95% confidence interval [CI], 0.65 to 0.98; adjusted p=0.04). (18) Conversely, evidence from a recent US trial (PLCO) showed conflicting results which demonstrated no statistically significant difference in death rates between screened and control groups. (19)

In 2008, the Prostate Cancer Charter for Action launched its latest set of actions for UK Government – the Countdown to Equality. One of the priorities highlighted, was to encourage earlier presentation of prostate cancer with fewer men being diagnosed with prostate cancer which had spread.(2)

1.14 UK national prostate cancer screening policy

In the UK, there is currently no mass screening programme for prostate cancer. Mass screening programmes for example in the US rely on detection of PSA levels in the blood and this is one of the reasons why a decision has been taken in the UK not to screen. The problem with the PSA test is that it has poor specificity. Raised PSA levels are associated with an increased probability of prostate cancer but many men with raised levels do not have prostate cancer. Secondly there is no way of knowing currently, whether a correctly identified cancer will progress or whether it will be one which is indolent and may be safely watched. This is important to know as treatments can have severe adverse effects which will have a significant impact on the quality of life of the patient. (20)

Although there is limited definitive evidence about the value of screening; there is a higher potential for cure in those with early diagnosed prostate cancer. (21)

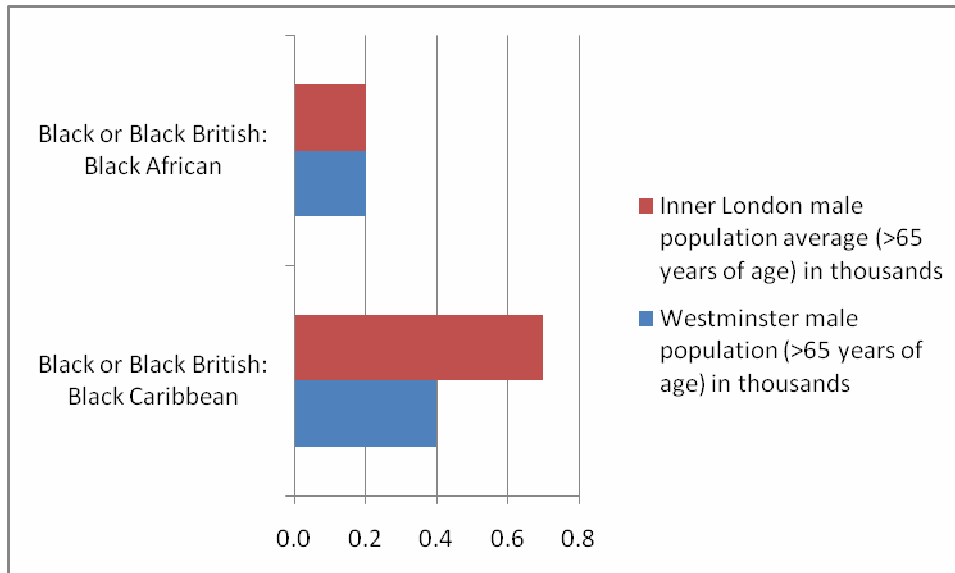
1.15 Demographics of the City of Westminster

The City of Westminster is located in the centre of London and it is estimated that between 217,000 and 251,000 people live in the area. There is a significant level of population turnover (defined as the sum of inflow and outflow) of 313 per thousand population, the highest of any London borough. This has to be taken into account when conducting interventions in the City of Westminster. (22)

Westminster includes some of the most deprived areas in the country, as well as some of the most affluent. The Index of Multiple Deprivation 2007 (23) ranks Westminster as the 72nd most deprived local authority out of 354 local authorities in England.

The population of Westminster is ethnically diverse. It is estimated that 51% of the population were born outside of the UK, the highest percentage in the country; and that only 65% have British nationality, the lowest proportion in London. It is home to an internationally mobile population, as well as settled communities drawn from many different racial, cultural, linguistic, religious and geographic backgrounds. Subsequently a large number of languages are spoken by Westminster residents. (24) The most recent estimates of the ethnic make-up of the Westminster population are the GLA 2007 Round Ethnic Group Population Projection (EGPP) figures, estimates which are derived from the 2001 census, the most detailed source of information on ethnicity. 8% of the Westminster population are categorised as being black. (22) The estimated black African and black Caribbean population of Westminster and the inner London average are shown in Figure 2.

Figure 2: Estimated black African and black Caribbean resident male population, >65 years of age. Figures for Westminster and the inner London average mid 2007. (25)



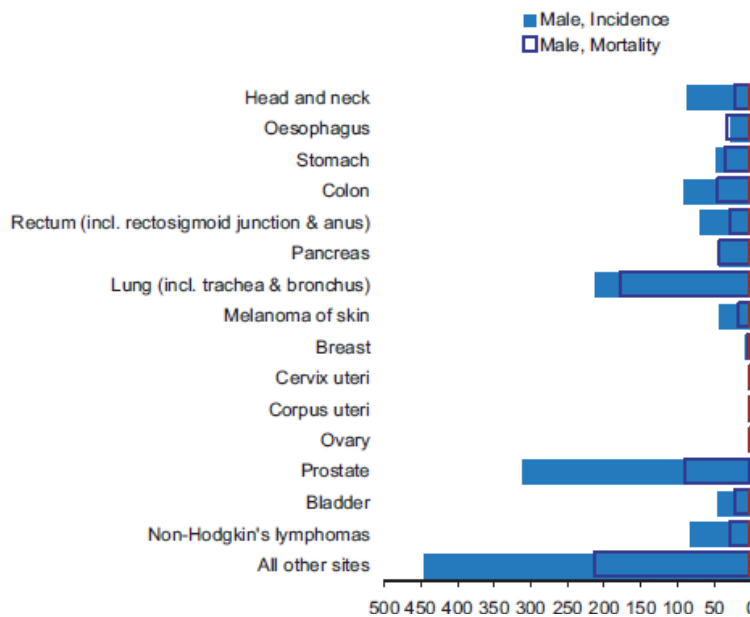
Source: UK National Statistics

In summary, Westminster is an inner city area with a diverse population in terms of socioeconomic status, ethnicity and culture. One of the priorities of NHS Westminster is to reduce inequalities in life expectancy and mortality across the city. To be able to achieve this, a clear assessment of the reasons for certain inequalities needs to be undertaken.

1.16 Prostate cancer in Westminster

The 2002-2006 overall annual cancer incidence and mortality in Westminster for men is shown in Figure 3. The highest incidence was seen for prostate cancer which contributed to the second highest level of mortality. (22)

Figure 3: Cancer incidence and mortality in men in Westminster, 2003-2006 (22)



Source: Westminster Public Health Annual Report 2006/7

In 2007, prostate cancer was the cause of 4% of deaths amongst men in Westminster. (24) In 2007, The City of London and Westminster age standardised death rate from prostate cancer was 18 per 100,000 people. This was quite modest compared to the average for England - 26.6 per 100,000 people. (2)

Between 2002/03 and 2006/07 Secondary User Service (SUS) data for the City of Westminster revealed that 22.2% of hospital admissions for prostate cancer were for black men.(22) This is a much higher proportion than represented by the Westminster population of black African/Caribbean men aged >65 years which was 5.2% in 2007. (25) Black men however, are more predisposed to prostate cancer. This therefore needs to be taken into account. In the US it is believed that by ethnicity alone, African American men have twice the risk of White American men of developing prostate cancer. (13) If the same increased risk were to be seen in Westminster this would still not account for the observed increase in hospital admissions. Although an admission to hospital for cancer is required for treatment, the higher rates may be an indication that this group are experiencing inequalities in healthcare.

In 2010, Ipsos MORI conducted a cancer survey in the City of Westminster to gain an understanding of cancer awareness and potential barriers to healthcare within the population. (26) Black African residents were more likely than residents overall to be concerned about wasting the doctor's time, to be too scared to see the doctor, to find it too difficult to make an appointment with the doctor and to have little confidence in talking about their symptoms with the doctor. (26)

In terms of awareness, the Ipsos MORI survey found that 30% of black Caribbean men and 32% of black African men mentioned prostate cancer as the most common cancer in men. This was lower than in male Westminster residents in general, 37% of whom mentioned prostate cancer as the most common cancer in men. In contrast, 53% of Caribbean women and 42% of African female residents mentioned prostate cancer as the most common cancer in men. Overall 46% of Westminster female residents believed this to be the case; therefore awareness was on average slightly higher in Caribbean females and lower in African females. (26)

The UK Prostate Cancer Charity conducted a survey in 2008 to gain an understanding of the levels of awareness of prostate cancer among African Caribbean men compared to white men and showed that African Caribbean men had lower levels of awareness and only 15% knew they were at increased risk. (4)

In September 2009, NHS Nottingham conducted a survey which showed that 36% of ethnic minorities were uncertain of the signs and symptoms of prostate cancer. NHS Nottingham then went on to sponsor a project designed to raise awareness of prostate cancer in 120 black Caribbean men. The specific aims were to increase awareness of signs and symptoms, to increase early presentation to primary care, to identify barriers to earlier presentation, to address concerns and dispel myths about prostate cancer. 92% of men fed back at the end of the project that they had learnt something new, and 100% of men commented that they would take some action. (27)

This demonstrates that there is a need to conduct research into understanding specific barriers to seeking an early diagnosis of prostate cancer. This will enable

successful interventions to be developed ameliorate these barriers and reduce inequality.

1.17 Barriers to access to health services experienced by black and minority ethnic (BME) populations

Compared with the overall population, BME groups have worse health. Evidence suggests that the main factor influencing this is a poorer socio-economic position. (28) BME Groups are concentrated in urban areas, particularly in deprived areas. Many BME groups have higher rates of poverty than that of the White British, in terms of income, lacking basic necessities and area deprivation. (29) However other factors affect ethnic health including racism and discrimination, differences in lifestyle and culture, biological susceptibility and poor delivery and take up of healthcare.

In London, some of the barriers to access of health services which are known to exist for black and minority ethnic groups are as follows: (30)

- 'Newness' or User understanding
 - unfamiliarity with the NHS
 - poor knowledge of the potential services available
 - lack of familial or friend network sources of expert advice on the possible sources of support (linked to support of elders)
 - poor awareness or knowledge of specific diseases such as asthma, cancer

- Language and literacy
 - Interpreting facilities required firstly to take an adequate history and for accurate diagnosis and secondly to give advice and explain the treatment plan
 - Appropriate information about hospital discharge processes and the need for culturally competent advice on treatment and the reoccurrence of symptoms. Furthermore as people age they lose acquired language skills

- Literacy issue, even if reminder letters are sent out, correctly translated, however they still cannot be read
- Visual literacy i.e. an absence of pictorial reference to ethnic groups, cultures for example in posters and other health and social care marketing materials
- Cultural differences
 - *Religion* may affect compliance or even access. For example if events are held at prayer time or during religious holidays or conflict with religious duties.
 - *Gender* of physicians. Male patients may not go to the doctor if they can only see a female doctor and vice versa
 - *Work patterns* – therefore cannot easily take time off for themselves or attend to support partners
 - *Attitude* to discussing personal health problems
 - *Differential presentation* – problem of somatisation of symptoms and the use of somatic metaphor e.g. my heart is moving/sinking , this could either indicate palpitations or depression
- Staff training needs
 - Staff with strong stereotypical views, lack of cultural awareness and ability, or who generally manage patients from diverse backgrounds in unsuitable manners
 - Clinical training issues may also exist such as the ability to recognise key symptoms (Mongolian Blue Spot, Sickle Cell Crisis etc)
- Differential needs
 - Relative rarity of certain diseases in populations of non-European origin e.g. Cystic Fibrosis, therefore some cases can be missed.
 - An absence of certain services such as haematological screening may exist because they are not needed by the majority White population, although necessary for particular BME groups

- Location
 - As suburbanisation of ethnic groups occurs there may be a lag in providing the appropriate resources and services in the changing locations

Therefore an important issue for investigation is whether there is adequate service provision. There are currently no ongoing prostate cancer interventions in Westminster. Despite this, it appears there are inequalities in the risk of black African/Caribbean men acquiring prostate cancer in Westminster. There are also known barriers which this community faces in accessing health. In order to be able to develop interventions to address this need, it is useful to understand what is already known about potential barriers that this group may be experiencing and what interventions have been used elsewhere to overcome these. This thesis will help identify these barriers and make recommendations on suitable interventions.

1.2 Research question

The purpose of this dissertation is to undertake a review of current literature, to identify what barriers black African/Caribbean men experience which may prevent early detection of prostate cancer in the City of Westminster and to determine what interventions would help to ameliorate these barriers.

1.3 Research objectives

- To identify barriers preventing the early detection of prostate cancer in black African/Caribbean men.
- To identify existing intervention studies which have helped to ameliorate the barriers to early detection of prostate cancer in black African/Caribbean men.
- To make recommendations for Westminster on what type of interventions could help to reduce the impact of these barriers

CHAPTER 2

LITERATURE REVIEW - METHODOLOGY

2.1 Overall research design

This literature review aims to provide knowledge support to the commissioners at NHS Westminster to help generate policy and inform the development of new interventions. It therefore summarises and synthesises research evidence.

The purpose of undertaking this literature review was to collate all of the evidence that would help to understand what the barriers are preventing early detection of prostate cancer in Black African/Caribbean men in Westminster. The second purpose of the review was to identify interventions which had been used to ameliorate such barriers.

The comprehensive EPPI (Evidence for Policy and Practice Information and co-ordinating centre) systematic review approach was used as it enabled both questions to be answered.(31)

This approach utilises standard procedures for a literature review including:

- Identifying literature according to a clearly defined search strategy
- Selecting literature according to inclusion and exclusion criteria
- Evaluating literature against consistent methodological standards

Data from the intervention studies were combined with data from studies describing the barriers experienced by black African/Caribbean men. The purpose of this was to enable ascertainment of not just what the interventions were but whether they addressed the important barriers which black African/Caribbean men face.

2.2 Data sources

Studies were located by:

- searching electronic databases
- visually scanning reference lists from relevant studies
- hand searching key journals and conference proceedings
- contacting key organisations and professionals
- citation searching

By locating studies in this way, the aim was to minimise publication bias, through identification of unpublished as well as published literature.

Electronic databases

An initial search was conducted to see if a literature review had already been conducted on the subject. The following databases were searched:

DARE, CDSR, NIHR, EPPI- DoPHER, NGC, UKACR

No results were identified from conducting this search.

The following databases were then searched using the Ovid interface:

MEDLINE, EMBASE, HMIC and PsycINFO utilising the search terms documented in the next section.

The CINAHL database was searched using the NHS Athens interface.

The Cochrane library prostate register was also searched.

Scanning reference lists from relevant studies

Further studies were identified from browsing through the reference lists of papers identified by the database searches.

Hand searching key journals and conference proceedings

This technique was used to identify very recent publications which were not yet indexed by the electronic databases.

Contacting key organisations and professionals

The Kings Fund and Prostate Cancer UK were contacted and references ascertained.

Citation searching

Reference lists from captured articles were scanned for new material.

2.3 Search strategy

The research question was broken down into the following 3 concepts:

1st concept	2nd concept	3rd concept
Black African/Caribbean	Prostate cancer	Early detection

Initially a 4th concept - 'barriers' was included in the search. This however was too limiting and relevant literature would have been omitted.

This search was therefore confined to just the 3 concepts above and the identified literature reviewed. A list of synonyms, abbreviations and spelling variants was produced for each of the 3 concepts. The search strategy comprised of both indexing terms, used to describe the subject content of journal articles e.g. thesaurus terms and 'free text' terms and synonyms to enable as many relevant papers to be retrieved as possible. Relevant subject headings, describing the topic in the search databases were then identified. The database searches are shown in Appendix 1.

A wide range of keyword terms were searched, including some or all of the following:

For 'Black African/Caribbean'	try black, Afro-American, Afro-Caribbean, African American, negro, African Continental Ancestry Group
For 'Prostate cancer'	try prostate carcinoma, prostate neoplasm, prostate malignancy, prostate tumour, prostatic intraepithelial neoplasia
For 'Early detection'	try early diagnosis, diagnostic test, diagnostic procedure, mass screening, screen, physical examination, diagnosis, detect, and test

2.4 Study selection

The search was not limited by study design. All randomised and non-randomised studies were eligible for this literature review as long as they adhered to the following inclusion criteria.

Source: relevant literature from non UK and UK sources was included.

Language: only English language sources were included

Intervention studies had to:

- report pre and post intervention data and if a non randomised trial report pre-intervention outcome variables
- aim to make a change at the community level
- measure behavioural outcomes

Non intervention studies had to:

- identify Black African/Caribbean men's opinions, beliefs, feelings, attitudes, understanding and experiences which influenced their decision as to whether to seek health professional attention

Exclusion criteria

Date of publication: Due to the volume of studies available, studies published prior to 2000 were excluded. Studies published prior to 2000 were felt to be unrepresentative of current healthcare provision, knowledge and education.

Titles and abstracts were read and studies were categorised as follows:

Possibly relevant – those studies meeting the inclusion criteria and those for which it was not possible to determine whether they met the criteria from their title or abstract. A full text article was then obtained to determine whether they met the inclusion criteria.

Excluded – those not meeting the inclusion criteria

Full text studies were obtained. Two different methods were used to assess the methodological quality of the non-intervention studies and intervention studies to better fit the designs of the studies in each of these groups.

The methodological quality of the non-intervention studies was judged using the Mays checklist. (32) This enabled an assessment of validity, reliability and generalisability within non-probability sampling studies.

The methodological quality of the intervention studies was judged using the Downs and Black checklist which allows analysis of randomised and non-randomised studies. (33)

The checklist consists of 26 items in the following categories:

- 1) Reporting (9 items)
- 2) External validity (3 items)
- 3) Bias (7 items)
- 4) Confounding (6 items)
- 5) Power (1 item)

The complete check lists are shown in Appendix 2

2.5 Data extraction

Where possible the literature obtained through the database search was exported into EndNote bibliographic software (version X4). Duplicate references were removed in EndNote, to restrict the search to unique records. In addition, references were reviewed carefully to prevent overlap.

For each piece of literature the following data were recorded.

- Author, year of publication and country of origin
- Study design
- Participants including demographic characteristics and criteria for inclusion
- Number in study groups
- Outcomes reported
- Conclusions

2.6 Data synthesis

Utilising the EPPI approach to data synthesis, the following analyses were performed:

- A narrative synthesis of intervention studies

- A narrative synthesis of the non-intervention studies identifying barriers
- A 'meta-synthesis' of intervention and non-intervention studies together.

For the 'meta-synthesis' of intervention and non-intervention studies, a table was constructed laying out each of the barriers identified by black African/Caribbean men, alongside which descriptions of interventions were inserted. This approach did not involve pooling or integration of synthesis findings since they were from very different types of studies. Rather, it involved building an overall picture from the different pieces of evidence

From this table it was easy to see:

- where an intervention had been implemented to ameliorate one or more of the barriers
- where new interventions are needed to ameliorate the barriers

CHAPTER 3

RESULTS

The numbers of studies included at the various stages of this review are shown in Figure 4. 2,414 citations were initially identified on searching the databases. All citations/abstracts were read and from these, 116 complete papers were selected and reviewed. A subset of 26 non-intervention studies and 9 intervention studies met the inclusion criteria.

Figure 4: Mapping and Quality screening exercise

Systematic and exhaustive searches to identify citations identified 2414 citations
Retrieval, screening and classification of 116 full papers

Non-intervention' studies
Studies identifying the barriers
99 studies

'Intervention' studies
17 studies

**In depth review
conducted within each study type**

Non-intervention studies identifying barriers

Application of inclusion criteria resulted in 26 studies being identified (73 were excluded)

Data was extracted from studies to describe the study characteristics and findings and to assess methodological quality

Findings were then synthesised to answer the question: "What are the barriers preventing early detection of prostate cancer in Black African/Caribbean men?"

Intervention studies

Application of inclusion criteria resulted in 9 studies being identified (8 were excluded)

Data was extracted from studies to describe the study characteristics and findings and to assess methodological quality

Findings were then synthesised to answer the question: "What interventions have been conducted to ameliorate these barriers?"

3.1 Description of studies

3.11 Non- intervention studies describing barriers to early detection

Following detailed data extraction and critical appraisal, twenty-six studies were included. The results of the critical appraisal are shown in Appendix 3, Table 2. The non-intervention studies were assessed for validity, reliability and generalisability. A score of one was allocated to a 'yes' answer and a zero to a 'no' answer. A high score indicated good methodological quality of the study. Overall the study scores ranged from five to ten out of twelve. Scores for validity ranged from two to three out of three. Generalisability scores ranged from zero to one out of one and scores for reliability ranged from one to seven out of eight.

The key characteristics of the twenty-six studies identifying barriers to the early detection of prostate cancer in Black men are described in Appendix 3, Table 3. All of these studies were qualitative and conducted in the United States.

Barriers were determined using a variety of methods, ten studies conducted focus groups with African American participants, seven requested participants to complete a questionnaire, seven conducted either face to face interviews or telephone interviews and two studies utilised questionnaire, interview and focus group methods to ascertain barriers. The majority of the study participants were African American men although four of the focus groups also included women. Socioeconomic status of study participants was mixed apart from in two studies where participants had a low socioeconomic status and a further two studies in which status could not be identified.

The barriers reported by African American men and the numbers of mentions of each across the studies are shown in Table 1.

Table 1: Barriers reported in the non-intervention studies and the number of mentions of each barrier across studies

Barriers	No. of mentions
Poor knowledge	11
Lack of health insurance coverage	10
Mistrust of the physician/health system	8
Fear of cancer diagnosis and that it may lead to death	7
Fear of testing procedures	7
DRE threatens male sexuality	5
Poor relationships with medical providers	3
Not seeing the same physician	3
Lack of culturally appropriate information	3
Inadequate access to services	2
Threat to black manhood because of fear of impotence	2
Low level of literacy	2
Visiting the doctor is not seen as a manly thing to do	1
Limited family communication about prostate cancer	1
Reluctance to talk about sex related health problems	1
Complacency about the possibility of having the disease	1
Belief that prostate cancer is related to sexual behaviour	1
Stigma/shame of having prostate cancer	1

Lack of knowledge

Studies suggest that African American men have a very low level of actual knowledge about prostate cancer (34-40), including their increased risk of developing it, (36, 38, 41, 42) perceived severity, (36) the risk factors, (38, 43) symptoms (38), treatment, (38, 39) and the function of the prostate gland.(38-40) Some studies suggest that this low level of knowledge is associated with low levels of education. (40, 43, 44)

Lack of health insurance coverage

Studies found that lack of health insurance had an important impact on an African American man's decision to visit their doctor for a diagnosis. (34, 45-50) This barrier

however will not be discussed further in this dissertation as it is not relevant to Westminster due to the NHS offering free access to healthcare.

Mistrust of the physician/health system

Mistrust of the physician particularly if the physician is 'white' is a barrier to some African American men. (35, 39) Men felt as if they received inferior care possibly because physicians thought African American men had a lower level of education. (51) Men in some of the studies felt that their best interests were not considered by these doctors and subsequently did not believe the physician's medical advice (39, 43, 46, 48, 50-52) The Tuskegee Syphilis Study controversy, mentioned in a couple of studies seemed to reinforce this view.(43, 51) There was a feeling that doctors were not willing to help men and their partners understand prostate cancer.(43)

Fear of cancer diagnosis and that it may lead to death

Fear of a cancer was another identified barrier to seeking an early diagnosis. (35, 38, 40, 43, 47, 48, 53). Men expressed a view that they would rather not know. (38, 40, 43, 48, 53) The fear of a prostate cancer diagnosis was also associated with consequences other than death including impotence, the loss of masculine appeal, a negative reaction from a partner, embarrassment, debilitating illness, loss of employment and suffering. (38)

Fear of testing procedures

Fear of testing procedures was a recurrent theme (38, 45, 48, 54-56) the fear was associated particularly with the digital rectal examination.(54-56) There is a belief that the procedure is painful, uncomfortable and embarrassing. (38, 43, 55)

DRE threatens male sexuality

African American men expressed sensitivity to the digital rectal examination as it would lead them to consider their sexuality and masculinity. (38, 39, 48) Participants in some of the studies viewed the DRE to be a violation of manhood. (51, 55)

Poor relationships with medical providers

Negative experiences and interactions with healthcare professionals were reported as a barrier.(48) Some men in the studies mentioned problems in receiving healthcare, that medical providers were poor communicators who did not communicate in a culturally sensitive manner, were disrespectful and insincere. (42, 48, 51) This was demonstrated by inconsistent treatment, lack of responsiveness and lack of humanism from healthcare professionals. (48, 51)

Not seeing the same physician

Patients without access to the same physician were in some studies much less likely to visit the doctor for examination.(46, 50, 57) Communication, collaboration and trust had to be repeatedly negotiated, rather than accumulate over time. (50)

Lack of culturally appropriate information

Three studies highlighted this as a barrier. African American men in these studies felt that the lack of culturally sensitive verbal and non verbal communication messages with regards to prostate cancer was discouraging them in speaking to their doctor.(42, 52, 53) The lack of targeted prostate cancer messages for black men sent the message that there was no need to be concerned about prostate cancer prevention. (42)

Inadequate access to services (other than due to lack of health insurance)

African American men in one study had difficulties in accessing the health system due to structural obstacles such as difficulties making an appointment and arranging transportation. (58)

Threat to black manhood because of fear of impotence

A couple of studies mentioned fear of becoming impotent as a barrier to prostate cancer prevention. Men were afraid that if prostate cancer surgery was required then they would not be able to perform sexually and that this would affect their sexuality, something which is particularly important to black men.(42, 43)

Low level of literacy

Low level literacy skills in African American men were identified in some studies as a barrier to early detection. (53, 59) These men may often have less knowledge of prostate cancer, preventive behaviours and services and therefore may be less likely to access these services. (53, 59)

Visiting the doctor is not seen as a manly thing to do

One study mentioned that African American men do not seek a diagnosis from physicians because traditionally an African American man does not visit the doctor. Advice is not sought until it's too late because it is not seen as a masculine thing to do. (47)

Limited family communication about prostate cancer

One study found cancer is commonly not discussed within black families. This may also be a barrier to early diagnosis. (53) This is thought to be down to tradition where cancer is a 'taboo' word within families or that expressing concern is seen as a sign of weakness. (53)

Reluctance to talk about sex related health problems, complacency about the possibility of having the disease and prostate cancer is related to sexual behaviour

African American men in one study mentioned that there was reluctance to talk about sex related health problems and that by having negative beliefs this would contribute to the prevalence of prostate cancer. There was complacency about the

possibility of having the disease. It was viewed as an inevitable consequence of advanced age. The African American men also believed that prostate cancer is related to sexual behaviour but did not elucidate further.(35)

Stigma/shame of having prostate cancer

In one study, African American men claimed there was a stigma associated with having prostate cancer and therefore refused to seek help.(43)

3.12 Intervention studies

Following detailed critical appraisal and data extraction, nine intervention studies were included. The results of the critical appraisal are shown in Appendix 3, Table 4. The key characteristics of the nine intervention studies are described in Appendix 3, Table 5. All of these studies were conducted in the United States.

Four of the studies were randomised controlled studies, four were quasi-experimental and one was a community trial. All of the study participants were African American men except for the community trial in which African American women were also included. Participants in all studies had mixed socioeconomic status and lived in urban areas. Three studies were based in a church setting, two within a primary care setting and four in the community.

The main focus of the studies was to evaluate interventions with the purpose of ameliorating barriers to early detection of prostate cancer. All nine interventions involved information provision. One used a computer based decision aid, three a video, two involved participants reading prostate cancer literature, two discussion seminars took place and one used either a video or a piece of literature on prostate cancer. A description of the studies is shown in Appendix 3, Table 5.

The methodological analysis included scoring of reporting, external validity, bias, confounding and power. Overall intervention studies scored between seven and sixteen out of twenty-eight. Reporting quality varied across the studies. Scores ranged from five to nine out of a possible eleven, indicating that none of the studies

had sufficient information to allow the reader to make an unbiased assessment of the findings. All of the studies scored zero out of three for external validity, therefore the results could not be generalised to the population from which the study subjects were derived. Scores for internal validity – bias, ranged from two to five out of seven. Therefore all interventions had a degree of bias in terms of measurement of the intervention and outcome. Internal validity scores for confounding ranged from zero to three out of six, indicating bias in the selection of study subjects. The Downs and Black approach to calculating power was modified from a scale of zero to five to a scale of zero to one. A score of one was given if a power calculation or sample size calculation was present. A score of zero was given if there was no power or sample size calculation. This made calculations easier. Power scores ranged from zero to one. In two studies, findings could have been due to chance.

3.2 Meta-synthesis

Table 5 shows the synthesis matrix which juxtaposes barriers alongside results of intervention studies. In terms of barriers associated specifically with prostate cancer eight out of ten appear to have been addressed by the interventions identified. Participant knowledge around the subject of prostate cancer was improved by all interventions. Fear of testing procedures was reduced in two interventions using a culturally sensitive video which openly discussed fears and literature to encourage testing, (60) and a primary care based educational video. (61) Fear of a cancer diagnosis and that it might lead to death was reduced by two interventions, a community based survivor led educational discussion, (62) and a church based small group interactive educational intervention using a 'road map'. (63) The three barriers - limited family communication about prostate cancer, reluctance to talk about sex related health problems and stigma/shame of having prostate cancer were shown to improve by using the community based survivor led educational discussion. (62) The two barriers - complacency about the possibility of having the disease and belief that prostate cancer is related to sexual behaviour were addressed by church based small group interactive educational intervention using a 'road map' (63) and the community based survivor led educational discussion. (62) The church based educational video and discussion intervention, (64) also tackled the complacency about the possibility of having the disease. However, two of the barriers related to

prostate cancer were not addressed. These were threat to black manhood because of fear of impotence and the belief that DRE threatens male sexuality. It is not clear why these barriers have not been addressed by interventions, perhaps because it requires too large a shift in cultural beliefs about manhood.

Seven barriers (excluding lack of health insurance coverage) were not specific to prostate cancer. The identified interventions addressed three of these barriers. Mistrust of the physician was overcome using the computer tailored decision to promote informed decision making for prostate cancer testing. (51) The Low level of literacy was handled using the primary care based physician designed, culturally sensitive, low literacy educational materials (65) and an educational video intervention. (66) The Lack of culturally appropriate information was addressed by four interventions, a culturally sensitive video and literature to encourage testing, (60) primary care based, physician designed, culturally sensitive low literacy educational materials, (65) and a community based survivor lead educational discussion. (62)

The four barriers which were not specific to prostate cancer and not addressed by any of the interventions were:

- Inadequate access to services (other than due to lack of insurance coverage)
- Poor relationships with medical providers
- Not seeing the same physician
- Visiting the doctor not being seen as a manly thing to do

Interventions may exist which address these barriers. However, none were identified using the search criteria in this literature review. A search which is non-specific to prostate cancer would be likely to identify interventions which help to ameliorate these barriers. This would be a useful extension to this literature review.

CHAPTER 4

DISCUSSION

4.1 Statement of principal findings

This literature review has identified some of the barriers to the early detection of prostate cancer in African American men and has demonstrated to what extent these have been addressed by interventions. All of the studies were conducted in the United States, and the majority of participants were African American men. Four non-intervention studies and one of the intervention studies however also included African American women.

Eighteen barriers to the early detection of prostate cancer were identified from the twenty-six non-intervention studies. The five barriers most often cited in order of frequency mentioned were, poor knowledge, lack of health insurance coverage, mistrust of the physician/health system, fear of a cancer diagnosis, and that it may lead to death and fear of testing procedures. Other barriers cited were poor relationships with medical providers, DRE threatens male sexuality, not seeing the same physician, lack of culturally appropriate information, inadequate access to services, threat to black manhood because of fear of impotence, low level of literacy, visiting the doctor is seen as not a manly thing to do, limited family communication about prostate cancer, reluctance to talk about sex related health problems, complacency about the possibility of having the disease, belief that prostate cancer is related to sexual behaviour and stigma/shame of having prostate cancer.

Four of the non-intervention studies included women. Three of these studies concluded that female family members were very important in motivating men to seek advice. Therefore educating women about prostate cancer and the importance of early diagnosis appears to be equally important. (43, 45, 55)

Eight of the intervention studies also included Caucasian men. From reviewing these studies it is clear that not all of the barriers are specific to African American men. Low literacy skills in both African American and Caucasian men have been shown to lead to a later diagnosis of prostate cancer. (59) One study concluded that men's

knowledge and misconceptions of prostate cancer were due to education and not race. (40) Another study showed white men to have greater access to service difficulties than African American men. (58) However, in other comparative studies, African American men were more likely than Caucasian men to have mistrust in their physician and to not see the same physician. (46, 50) African American men were also shown to have poorer knowledge of prostate cancer, (44, 56) and to have more fear of prostate diagnostic procedures. (56) Furthermore, some of the identified barriers may not be specific to men or prostate cancer, for example low literacy.

The nine intervention studies identified focused on information provision. Improvements were shown in terms of knowledge of prostate cancer and increased prostate cancer prevention activities. No intervention studies were found to specifically deal with inadequate access to services (other than due to lack of insurance coverage), poor relationships with medical providers, not seeing the same physician, mistrust of the physician and visiting the doctor not being seen as a manly thing to do.

As the literature search only identified nine interventions, it would be useful to conduct another search including interventions for other types of cancer, for example colorectal cancer where barriers to early detection are likely to be similar. These interventions are likely to be relevant to those with prostate cancer and may also address those barriers not covered by interventions in this literature review.

4.2 Strengths and limitations of the review

4.21 Strengths

Extensive attempts were made to obtain both published and unpublished studies, and to include a range of study designs, to avoid overlooking evidence from weaker studies. The studies focused on participants from inner cities, largely with mixed socioeconomic status, which is reflective of the situation in the City of Westminster.

Juxtaposing barriers alongside intervention studies allowed examination of the extent to which the needs of black African men had been adequately addressed by the evaluated interventions. By identifying successful interventions, this will give useful ideas to NHS Westminster on possible ways of dealing with barriers to the early detection of prostate cancer in black men. Furthermore the synthesis adopted in this thesis allowed identification of particular barriers which had been overlooked in terms of interventions.

The non-intervention study writing styles varied. However, the data extraction method adopted for this thesis allowed studies to be reconstructed in a standard format, to facilitate comparisons between them.

Different quality assessment tools were used for the different study types; non-intervention and intervention. This was because no single tool would have been appropriate to both.

4.22 Limitations

There are undoubted limitations in the evidence base. The studies included in both arms of this thesis had considerable heterogeneity in study design, appropriateness of that design and study quality. Therefore results may be subject to considerable bias as discussed below.

Quality assessment revealed that the non-intervention studies describing barriers to early detection of prostate cancer fell short of basic methodological standards. None of the studies met all criteria (see Appendix 3, table 2).

In the absence of quantitative analysis of results, it has not been possible to assess the robustness of data synthesised in this review. Furthermore it is possible that not all relevant studies were identified given that some may not have been formally evaluated or reported.

This literature review only identified studies from the United States where there is a very different healthcare system. At the time when these studies were published the

majority of patients in the US needed to pay for healthcare through health insurance. This is unlike in the United Kingdom where the National Health Service is publicly funded, with the ethos of healthcare equity. At least 15% of the US population are uninsured and a significantly further proportion (approx 35%) underinsured.(67, 68) This therefore is a significant limitation of this review as certain barriers experienced by African American men for example, access to healthcare due to being uninsured will not be relevant in the UK. However other barriers which these studies identified are likely to be relevant in the UK and reflect the general views of black men, therefore they are important to include.

This thesis is interested in the barriers to the early detection of prostate cancer in black African and black Caribbean men who live in Westminster. The study participants identified in this literature review were African American men and women. Most African Americans are direct descendents from captive Africans or are descendants of immigrants from African, Caribbean, Central American or South American nations.(69) While there may be similar genetic characteristics across this broad population, behaviour and lifestyles may differ significantly. Therefore their views on health matters and healthcare services may vary. There are however likely to be some commonalities with British black African and black Caribbean men who are largely first-generation migrants. By reviewing studies on African American men, in the absence of UK studies, this will give some insight into the barriers which black men living in the City of Westminster may be experiencing.

Other studies, not meeting the inclusion criteria for this literature review may have provided some useful insights. For example, studies for other types of cancer and chronic conditions reviewing barriers to prevention.

Some of the studies included within this literature review were designed to examine barriers to the uptake of screening. However, there is no mass screening programme in the UK. These studies were included because they provided valuable insights into why black men may not seek an early diagnosis. It is possible however, that some of the barriers may have arisen because of views about mass screening and therefore would not be relevant to black men residing in the City of Westminster.

4.3 Strengths and weaknesses of the available evidence

4.31 Strengths of the non-intervention studies

These studies identified the barriers African American men were experiencing through primary research. They also highlighted the need for interventions to ameliorate the barriers experienced by African American men. The focus group and interview method to data collection used in the majority of studies (n=19), provided an opportunity for African American men to openly discuss and share feelings, perceptions and experiences. These provided valuable insight which may not have been so easy to elicit from a standard questionnaire method of data collection.

4.32 Limitations of the non-intervention studies

Generalisability was a limitation of all of the studies identifying the barriers to early detection. The studies were generally small non-random samples and used non-probability sampling. Participants within the majority of studies were self-selecting which compromised the generalisability of the results. Most of the studies were not sufficiently powered to test the statistical significance of the barriers influencing black African men's preventive behaviours. Furthermore across studies, the rigor of protocols and procedures varied, therefore in person and group interviews may have contained participant and researcher bias. The coding of concepts by researchers was often subjective which may have led to interpretation bias. (34-59)

4.33 Strengths of the intervention studies

These studies tested interventions to help remove some of the barriers experienced by African American men. Five out of nine of the intervention studies reported statistically significant improvements in prostate cancer knowledge in the intervention groups. (51, 60, 61, 63, 64) Although not statistically significant, improvements in prostate cancer knowledge was reported in a further three studies.(62, 66, 70) One study reported statistically significant increases in prostate cancer discussions in the intervention group. (65) Significant reductions in uncertainty about the decision

to go for prostate cancer screening was reported in two studies.(51, 60). Two studies reported statistically significant improvements in self-efficacy (ability to participate in decision making about prostate cancer and screening). (51, 63) Participants perceived threat of getting prostate cancer significantly increased in another study.(64)

4.34 Limitations of the intervention studies

There were several limitations to the five quasi-experimental designed intervention studies. The first limitation was that a convenience sampling strategy was employed which limited external validity, this method of sampling could have introduced selection bias. Furthermore results could not be generalised to the study population. The five studies also relied on self-reporting. Therefore, recall bias and socially desirable responding could not be ruled out. (51, 62-64, 66) Four out of the five quasi-experimental interventions had short follow up periods, which limited their ability to be able to determine effects in the interventions in the long-term. This is an important limitation as improvements in areas such as knowledge are likely to fade with time.

The results from the four randomised controlled studies also could not be generalised to the study population. (60, 61, 65, 70) This was because investigations were conducted at a single site and in one sample the study was a relatively homogenous group of African American men in terms of education and screening history. (60) Two out of the four randomised controlled studies had short follow up periods, therefore conclusions on the longer term impact of these interventions could not be made.

4.4 Problems encountered

Staging data for prostate cancer at first diagnosis by ethnicity over the last 3 years, for the City of Westminster was requested from the Thames Cancer Registry (TCR). The TCR however were unable to supply these data. These data would have been particularly useful to see if black African/Caribbean men were being diagnosed with more advanced prostate cancer at first consultation. This would have enabled further

determination of the importance of identifying possible barriers to access and interventions to help ameliorate the barriers.

Prostate cancer mortality data by ethnicity for the past 3 years was also requested from the TCR, but again these data were unavailable. This would have been useful to examine if a higher proportion of black African and black Caribbean men are actually dying from prostate cancer in the city of Westminster compared to white men.

CHAPTER 5

RECOMMENDATIONS AND CONCLUSION

Recommendations

This study identified barriers to the early detection of prostate cancer in black men. It also identified successful interventions designed to remove these barriers. However, the study participants are all African American. Studies conducted in the UK are required to be able to confirm whether UK black men are also experiencing similar or different barriers and to identify what they are. These studies need to investigate knowledge and perceptions of prostate cancer in UK black men living in urban areas, including an understanding of risk, prevention and treatment. Ideally these studies would include black men living in the City of Westminster and include men with different socioeconomic and educational status.

These interventions should include a longer term follow up period, so effects of the interventions on long-term behaviours can be recorded. Furthermore studies are needed to evaluate interventions aimed at ameliorating those barriers identified to enable cases of prostate cancer to be detected earlier.

The authors of the June 2009 UK Prostate Cancer Charter for Action recommended to the All Party Parliamentary Group on Cancer's inquiry into cancer inequalities (APPGC), that those PCTs with large populations of African men should prioritise activity to raise awareness of prostate health issues.(2)

More UK research needs to be carried out to assess the stage at which prostate cancer is diagnosed across different ethnic groups.

Whilst waiting for larger UK studies to be carried out, the recommendations for NHS Westminster from conducting this literature review is as follows:

- 1) Further research to build on the Ipsos MORI 2010 cancer awareness measures conducted within the black African/Caribbean community (men and women) of Westminster to gain an understanding of awareness of signs and symptoms, risk factors, and treatments for prostate cancer

- 2) Outreach work to identify the different local cultural and social patterns, in which need to engage to be able to get maximum results from any interventions

- 3) To conduct focus groups within local community centres and churches run by black African/Caribbean male researchers (so culturally sensitive), to gain additional understanding of black African/Caribbean men's knowledge of prostate cancer and the barriers which exist to seeking advice

- 4) Assuming similar barriers will be identified as found in this literature review, the following interventions designed to get the messages out to as many black African/Caribbean men and women as possible would be recommended. The majority of these interventions are based on those identified in the meta-synthesis discussed earlier. Women would be included, as this review identified female family members as key motivators to men seeking advice. Therefore by informing female family members about prostate cancer risk this should help to increase the number of men being diagnosed earlier.

Intervention	Objective
Spiritually based educational DVD and open discussion with a local physician and prostate cancer survivor in local churches for men and women	<ul style="list-style-type: none"> • To increase knowledge around prostate cancer in the community • To increase trust and interaction with healthcare professionals • To encourage discussion of prostate cancer within families at home
Training and information for black African barbers	<ul style="list-style-type: none"> • To encourage open discussions with black African men when they attend the barbers, to reduce the stigma of prostate cancer. • To increase knowledge of prostate cancer
Culturally sensitive prostate cancer basic information leaflets handed out to men and women at African/Caribbean community centres. These leaflets would include contact details of a local prostate cancer awareness educator	<ul style="list-style-type: none"> • To increase knowledge about prostate cancer in those black African men who find it difficult to openly discuss the topic • These information leaflets would be suitable for those with low literacy
Fun community centre based 'Below the belt' activity days. The following events would be held on these days: <ul style="list-style-type: none"> • Prostate cancer quiz • 'Below the belt' domino tournament • Q&A session with a black prostate cancer survivor and a local physician • 'Below the belt' comedy club These days would be open to adults only	<ul style="list-style-type: none"> • To increase knowledge of prostate cancer. • To breakdown the stigma and embarrassment associated with discussing prostate cancer • To improve relationships with local physicians
Culturally sensitive 'accessing healthcare' leaflet	<ul style="list-style-type: none"> • To overcome practical barriers in getting to see the doctor for example, getting appointments, seeing the same doctor and transportation

- 5) To analyse ongoing NHS Westminster interventions, to see whether there is any overlap in terms of the interventions described above or if it is possible to build onto existing interventions as opposed to initiating them

This literature review is based on data from the United States, where there is mass screening programme for prostate cancer, unlike in the UK. Many of the non-intervention studies described barriers to the uptake of this screening programme and some of the interventions were designed to enhance uptake. Despite this, screening of the high risk black African/Caribbean male population of the City of Westminster is not a recommendation. More UK studies are required to support this approach. Interventions should rather focus on raising awareness of prostate cancer.

Conclusion

This literature review was designed to inform policy makers at Westminster of the possible barriers facing the black African/Caribbean men of Westminster, in terms of early detection of prostate cancer and the types of interventions which have been successful in ameliorating these barriers. This study has identified barriers experienced by inner city African Americans of mixed socioeconomic status to the early detection of prostate cancer, some of which may be relevant to the black African/Caribbean men of Westminster. It has also identified interventions designed to ameliorate some of the barriers which could be implemented in Westminster. To be able to test this hypothesis, research at a UK and local Westminster level needs to be conducted within this high risk population.

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