Community approaches to addressing high blood pressure in black African and African Caribbean men project

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Contents

Acknowledgement

Our thank to all the men who participated the pilot programmes

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The health care practitioners who assisted in each pilot programme session

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Community African Network

The Shoreditch Trust

HCT bus depot

First Class barbers

Jowas barbers

Exodus barbers

Mane Culture

Slidercuts barbers

RCCG Lighthouse Assembly Church

Executive summary

Research has highlighted black African and African Caribbean men's poor engagement with primary care services, as well as a failure of public health messaging to engage this population group (Robertson and Baker, 2017; James et al., 2017; Mulugeta et al., 2017; Liu et al., 2017). This combination of poorer engagement and limited awareness of some health conditions place African and African Caribbean men at risk of poor health outcomes. However, improved health messaging leading to better engagement to improve awareness can impact on help seeking behaviour. Sharing messages through traditional (such as black-led churches and mosques serving African communities) as well as non-traditional channels (such as barber shops), has helped health messages better reach men from this population group (African Community Network, 2019; Ronald et al., 2018; Anderson et al., 2014)

The project aimed to pilot a community approach to address health inequalities in high blood pressure for black African and African Caribbean men. We developed a community-based blood pressure programme to raise awareness of high blood pressure and undertake pilot blood pressure testing in community settings.

The project was led by Race Equality Foundation and delivered in partnership with Men's Health Forum, Clinks and Faith Action. The project was supported by a co-production group which included men with lived experience of high blood pressure and/or other long term conditions.

Main findings

The implementation of the pilot programmes took place at the time that the spread of Covid-19 had increased and this affected whether the project could proceed. 13 sessions were scheduled to take place and eight were completed before the remaining five sessions had to be cancelled following Public Health England guidance about Covid-19.

87 black African and African Caribbean men participated in the pilot programme across three local authority areas. The community setting were barbershops, a black majority church and a bus depot. Overall:

Most participants had some knowledge of high blood pressure and that it was affected by too much salt, drinking alcohol, or not doing enough exercise. However, very few understood how your blood pressure worked and that high blood pressure produces no or few obvious symptoms. There was confusion as to what measuring your blood pressure actually meant for some men.

17 men across all the settings had a blood pressure reading that was higher than the recommend level of 140/90 (NICE, 2019). This accounted for at least one man in each of the settings with a raised blood pressure reading.

Getting the 'buy in' from both the clinical commissioning group and public health department was essential. Especially the clinical commissioning group who provided the practical support for the blood pressure sessions.

The healthcare practitioners' confidence in working in different community settings was found to be an important attribute for the effective delivery of the programme.

Fear was noted as a possible reason that prevented some men from participating in the programme. Recognising that such fears can be a barrier to participation and determining ways to mitigate this, would be beneficial for any future community blood pressure programmes.

Community blood pressure sessions need to have the right communication support in place to ensure people can participate and key messages about high blood pressure are understood fully.

Stakeholder participation and encouragement helped some of the men to take part in the pilot sessions.

Importantly, sufficient time must be set aside to build the relationships in the different community settings and gain trust and understanding for the effective delivery of the programme. This was especially important for the sessions held in the barbershops.

Conclusions

The community blood pressure programme was welcomed in all community settings. The pilots engaged a considerable number of men in an accessible environment that they were comfortable in. There was a willingness from community stakeholders for the programme to be implemented over a longer period of time, and healthcare providers may wish to consider the practicalities of delivering blood pressure testing in similar settings for specific target groups.

Introduction

Whilst high blood pressure can occur at a younger age, blood pressure generally increases with age and the risk of developing high blood pressure begins to climb from the age of 40 upwards. High blood pressure affects more than one in four adults in England, and is the second biggest risk factor for premature death and disability (Public Health England, 2014). These risks have been even more underlined by their role in fatalities as a result of covid19 (WHO, 2020; WebMD (accessed March, 2020)). The British Heart Foundation states that around 5 million adults in the UK have undiagnosed high blood pressure (undated, accessed March, 2020) and Public Health England figures show that for every 10 people diagnosed with high blood pressure there are a further seven where it is not diagnosed and managed (Public Health England, 2017). Men tend to have higher rates of high blood pressure than women, and the condition disproportionately affects some ethnic groups including black African and African Caribbean populations (Public Health England, 2017). Men also tend to have poorer engagement with healthcare services (Robertson et al., 2017; Clinks u.d; Men's Health Forum, 2011). At the same time, there is a move towards increasing access to blood pressure testing within community settings (Public Health England, February 2019). The project aimed to raise awareness of high blood pressure and offer blood pressure testing within a community setting to access black African and African Caribbean men who are of high risk of developing the disease.

Addressing high blood pressure

There is much concern about undiagnosed high blood pressure and the risk factors for other cardiovascular diseases if it is left unmanaged. People from the most deprived areas are 30% more likely than the least deprived to have high blood pressure (Pharmacy Voice, 2017), and those of black African Caribbean and African descent are also more likely to develop high blood pressure (British Heart Foundation, 2018). Work that is focused on better prevention, detection and management of health, has the potential to address health inequalities and variation in outcomes.

Public Health England's (2014) whole system approach working across local government, the health sector and voluntary and community organisations to prevent and reduce high blood pressure includes:

- Pro-active provision of testing for high-risk and deprived groups of all ages: Outreach testing beyond general practice, particularly through pharmacy (in order to access those groups least likely to otherwise present, such as younger men, low income households and those in deprived areas).
- A responsibility of local governments to ensure those in more deprived communities and those less regularly accessing healthcare services take up blood pressure testing. This could be via commissioning specifications and scrutiny reviews to ensure follow-up is provided and accessed.
- Improving take-up of the NHS Health Check providing a systematic offer of blood pressure testing and cardiovascular risk assessment, particular for those at highest risk.

(Public Health England, 2014)

Current priorities

The current 10 year cardiovascular disease ambitions for England is aiming to reduce health inequalities which includes addressing the prevalence of cardiovascular disease (CVD) conditions. It will see an increase in the number of people with high blood pressure diagnosed and treated for it by 2029. *Currently, just over half (57%) of those with high blood pressure have been detected (6.8 million people) – the ambition is to increase this to 4 in 5 people (80%)* (Public Health England, 2019a). This will happen through routine checks in the community or a healthcare settings. The use of the NHS free health check for those aged 40-74 is one way of detecting and providing support to reduce CVD risk.

Addressing high blood pressure will help achieve the aims of the NHS Long Term Plan to prevent 150,000 heart attacks, strokes and dementia cases in the next 10 years (Public Health England, 2019b). However, one of the challenges is raising awareness of high blood pressure given that there are rarely any symptoms. Whilst high blood pressure is more common in men, men's engagement with health services will impact on whether and how high blood pressure can be detected and managed for them.

Guidance

NICE guidelines (2019) state that adult clinical blood pressure should be 140/90mmHg or lower. If an adult's blood pressure measurement is over this, they are considered to have high blood pressure (medically known as hypertension). For readings above 140/90mmHg (unless the measurement is critically high) the adult should be offered ambulatory blood pressure monitoring (24 hour monitoring) or home blood pressure monitoring (where blood pressure is monitored for seven days).

If hypertension is not diagnosed then blood pressure should be measured every five years.

If hypertension is diagnosed the cardiovascular disease risk should be assessed for the individual and consider how their hypertension can be managed. Blood pressure should then be reviewed annually.

Management of hypertension includes:

- looking at lifestyle interventions
- antihypertensive drugs treatment
- blood pressure targets
- patient education

Treatment steps:

- under 55 years of age – a low cost angiotensin II receptor blocker
- over 55 years of age, and black or African/African Caribbean family origin of hypertension – calcium channel blocker

- monitor and review annually

However, these steps will only work for those who engage with primary care services.

NHS Health Check

The health check is offered to adults aged 40-74 and is one opportunity to have your blood pressure measured. The recently released 2012-2018 experimental data from the NHS Health Check gives an indication of who has taken up this offer. Data is drawn from 90% of GP surgeries in England, and suggests that 54% of patients attending an NHS Health Check were female (NHS Digital, 2019). Whilst the data is tabled by ethnicity and gender, analysis can only be made according to either clinical commissioning group (CCG) or local authority area. The categories themselves are problematic as they record ethnicity and nationality for some groups but not others, and group significant ethnic groups as one broad category, e.g. Black or African or African Caribbean or Black British is one group. In the way the data is presented, it is difficult to assess the uptake amongst black African and African Caribbean men. However, it is clear for specific CCG or local authority areas in this project that work needs to be done to increase the numbers of the 'black or African or African Caribbean or Black British' taking up the NHS Health Check as a means to detect high blood pressure and other cardiovascular diseases.

Encouraging African and African Caribbean men to take up the NHS health check when offered, would ensure their blood pressure is tested and measures taken to manage high blood pressure are put in place.

The Project

The project aimed to design and develop a community-centred pilot programme to offer blood pressure testing and raise awareness for black African and African Caribbean males in two local areas.

The programme was co-designed with members of project co-production group consisting of Health and Wellbeing Alliance partners, black and minority ethnic voluntary organisations working on men's health issues, and black African and African Caribbean men with lived experience of high blood pressure or an associated long term condition.

The University of Bedfordshire carried out an evaluation of the process and implementation of the project, including feedback related to participants views about the targeted blood pressure awareness and testing community-centred programme; and stakeholder views about delivering targeted blood pressure awareness and testing.

The project ran from 1 September 2019 until 31 March 2020 funded under the Health and Wellbeing Alliance.

Undertaking the project

To deliver the project it was necessary to examine the evidence, identify the local areas for the programme, develop the pilot programme and resources, and determining the community settings to work with. All of which were contained in the two main parts to the project; laying the foundation and implementation of the pilot programme.

Laying the foundation

Review of evidence

We looked at research literature and projects between 2008-2019. The evidence review focused on how men in general engaged with health; any specific evidence on African and African Caribbean men's health engagement; or evidence referring to black and minority ethnic communities generally. It outlined evidence about health screening programmes and targeted health interventions to promote screening for African and African Caribbean men. Finally, the review identified what works when engaging African and African Caribbean men in health interventions.

The evidence suggests men generally have poor engagement with health services and reasons for this include: restrictive opening times of health services compared to men's working hours; a lack of awareness of the health services available; as well as a belief that health interventions are not for them due to concepts of masculinity and health. The issue of masculinity is prominent in studies and how the perception impacts on men's views of illness and engagement with health services; and a belief that that men can or should cope with any health issues themselves (Stein, 2018; Robertson et al., 2017; The Open University, 2017).

The evidence on African and African Caribbean men's health is limited and primarily focused on mental health experiences.

We found evidence of some awareness of health issues amongst African and African Caribbean men and the need for screening on some conditions such as prostate cancer (Dharni et al., 2017; BME Cancer Communities, 2013). There was some projects that successfully engaged African and African Caribbean men about prostate cancer and bowel cancer to raise awareness about the need for screening (Community African Network, 2019; Orchid Cancer UK, accessed 2019; Public Health England, 2016). However, lack of knowledge, fear and cultural beliefs, the influence of faith, and myths about treatments were contributory factors in African and African Caribbean men's understanding of certain health conditions, and knowledge about national screening programmes (Anderson et al., 2014)

Some studies have raised that ethnicity needs to be addressed to better adapt health promotion interventions for African and African Caribbean men (Robertson et al (2017; Fleming et al., 2014). Additionally, that the concept of ethnicity is important to understand engagement with health and inform behaviour change (Liu et al., 2012).

We also explored how the 2017 British Heart Foundation funded community based projects looking at high blood pressure had engaged participants (British Heart Foundation, u.d). Many of which used a variety of methods including community pharmacies and working with voluntary and community sector organisations, outreach via employers, sport settings, faith and community settings; in order to reach those of high risk, and people with undetected high blood pressure. Some of the projects targeted black and minority ethnic communities, though not specifically African or African Caribbean men.

Overall, we found few specific campaigns to raise awareness of and manage high blood pressure targeting the African and African Caribbean communities. One educational project addressed obesity and high blood pressure with African Caribbean people over 65 (Hackney CVS, 2018). Whereas another explored the acceptability preference of different methods of blood pressure monitoring for people of different ethnic groups (Wood et al., 2016).

Perceived barriers to blood pressure testing

Evidence about the barriers to men undertaking blood pressure testing and the management of high blood pressure related to wider issues about health and certain health conditions. This included concepts of masculinity, health and wellness; the impact of high blood pressure on work; erectile dysfunction and blood pressure medication. It is suggested that healthy men hold a masculine discourse that associates 'being a man' with being sexually active and taking care of one's family (Machirori et al., 2018). Furthermore, that self-sufficiency and wellness are aspects of black men's masculine identity which informs behaviour about health. Health and wellness was also found to be associated with faith (Machirori et al., 2018; James et al., 2017). Petty et al., (2016) found that African American males reported using prayer and religion as a way of lowering blood pressure, suggesting that males were more likely to view God as a healer compared to African American women.

There is anecdotal suggestion of a fear of a high blood pressure diagnosis because this might have an impact on men's work. Black and minority people tend to be concentrated certain forms of employment. Some *'18% of Black workers were employed in 'caring, leisure and other services' jobs, the highest percentage out of all ethnic groups in this type of occupation'* (ONS, 2018). Guidance and medical tests for health conditions ensure health conditions do not have an impact on individuals work. Therefore it is unlikely that high blood pressure would impact on employment unless you are taking medication and they are causing side effects. For example, that the medication interferes with your ability to drive if that is your form of employment (Gov.uk accessed October 2019). Yet, this fear is likely to remain and was raised as an issue by some men who took part in the project (see willingness to take part section).

There is a perceived association between erectile dysfunction and high blood pressure but it is suggested that erectile dysfunction can also be a symptom of an underlying condition such as diabetes or high blood pressure (Kessler, 2019). Conversely it is also suggested that medications that are used for heart related conditions, can cause erectile dysfunction (British Heart Foundation accessed October 2019). As erectile dysfunction impacts on sexual satisfaction and quality of

life, it is not surprising that some men will be reluctant to adhere to their medication regime where they see this impacts on their quality of life. However, there is little consensus as to whether erectile dysfunction is the result of hypertension, anti-hypertensive medication or other causes (Kessler et al, 2019; Joseph et al, 2018).

Antihypertensive medication is one way to manage high blood pressure depending on how raised the pressure is (NICE, 2019). The fear of needing to take medication and possible perceived side effects, such as erectile dysfunction, are issues that might influence men taking necessary medication (Kessler et al, 2019; Joseph et al, 2018). Disruptive sleep (Lor et al, 2019), and perceptions of wellness and self-healing (Machirori et al., 2018; Petty et al., 2016) are other factors that will influence anti-hypertension medication adherence.

What works to engage African and African Caribbean men in health interventions

Examples of 'what works' tend to focus on engaging African and African Caribbean men through community based approaches and using knowledge of the population to help adapt health interventions for targeted black and minority ethnic groups (African Community Network, 2019; Liu et al., 2012). Health professionals were also noted as important to facilitate engagement with the relevant community group for a health intervention (Liu et al., 2012).

This means implementing targeted interventions; at an appropriate time, venue, and use of relevant materials. More specifically:

- Recruit African and African Caribbean men to develop and participate in health prevention programmes (Nyashanu et al., 2017).
- Information and resources should be appropriate to encourage the men to read and digest them, i.e. targeted at African and African Caribbean men in the language used, images and structure (Mulugeta et al, 2017)
- Resources should counter any misbeliefs, such as believing that having no symptoms means you do not have high blood pressure.
- Health programmes need to consider the timing of the intervention and focus on tangible results (BMECC, 2017)
- When adapting health interventions for African and African Caribbean men it is essential to convey key messages to raise awareness through a medium used by black men (BME Cancer Communities, 2017); this can include black media/radio; venues or services such as barbers
- The evidence suggest community based approaches work well to engage men with health issues particularly if it is with through a trusted medium. These venues can also offer an element of peer support to the men.

Barbershops were found to be effective to engage black men with community health interventions (Off the Record, 2018; Cole et al., 2017); and black men themselves have highlighted this as a good outlet for health promotion such as on prostate cancer for example:

> *'Barber shops would be a good place to promote health education and health promotion about the taboos and also churches. In talking to men in barber*

shops, you would be surprised at how much they know (Anderson et al*.,* 2014)

A random controlled trial to test a high blood pressure health promotion intervention found African American men's blood pressure was greatly reduced in the intervention group compared to the control group (Ronald et al., 2018). The convenience of the intervention in the barbershop that was tailored for African American men and endorsed by trusted people (barbers) were found to be instrumental factors.

All of the above helped to inform the approach taken in the development of the community based blood pressure pilot programme and the resources that were developed.

The pilot areas

We wanted to ensure that there was good participation from both black African and African Caribbean men. The areas were chosen using local knowledge and ONS data. A profile was built up of the initial two areas: Hackney and Southwark which included ethnic profile; hypertension challenges for each borough; the local health structure; areas of high concentration of one or both of these ethnic groups and information on participation by ethnicity and gender for the NHS Health Check.

Contact was made with the health manager in each area for agreement to work on the programme. Within the CCG this was the Commissioner for Long Term Conditions, GP Hypertension lead or Director of Primary Care Networks. As well as relevant colleagues within the Public Health Departments. Discussions took place in each area and we were allocated key practitioners to liaise with. For example, City and Hackney CCG discussed the project at a Long Term Conditions Board meeting where participation and support was agreed with the suggestion of the involvement of the Community African Network because of their local knowledge and health work. A meeting was initially held with members from public health department, CCG, and pharmacists. We were also invited to attend a public event on high blood pressure. There were several discussions and meetings with Southwark CCG ensuring the right practitioners were involved before a decision to participate was made.

The London borough of Brent was the third area added to the project due to interest from a local barbershop that was already involved in other health campaigns to raise awareness amongst their clients and the wider black community. Mane Culture worked with other local barbers on awareness raising of health issues and wanted to support the community blood pressure project.

Meetings were held and agreement of the possible venues for the pilot programme as well as the assistance of a healthcare practitioner to undertake the blood pressure measurements.

It should be noted that it took a period of time to arrange and attend meetings with the relevant people in each local authority area, and get the final agreement to work

with us on the project. Whilst their involvement was necessary, this impacted on the available time to implement the pilot programmes.

Developing the community blood pressure programme and referral pathway

Information from the evidence review and current NICE guidelines helped inform to the development of the pilot programme. Additionally, the community blood pressure testing referral pathway into primary care was developed and agreed with the GP hypertension lead. The referral pathway was important as it was the template that the nurses and other health practitioners would use to ensure the practice within the community adhered to NICE guidance on hypertension.

A pilot programme, including the referral pathway, was produced for each local area with high blood pressure information relevant to that local area. The programme also included issues for consideration including:

Implementation and resources
Timing of sessions including time spent with each participant
Recruitment
Data sharing protocols if needed for GP/CCG
Evaluation
Health care practitioner assistance
Access to a portable blood pressure monitor

Developing resources

The key messages from evidence on engaging men in health interventions and those specifically focused on African and African Caribbean men, as well as issues related to high blood pressure, were instrumental in the development of the resources. Particularly the suggestion of developing locally produced resources and pathways to support the project delivery (NICE, 2017). Men's Health Forum led on this and participants from the coproduction group, especially members with lived experience of high blood pressure, gave valuable contribution.

A banner with two different designs, posters, and strut cards for publicising the blood pressure sessions was produced. Small leaflets with targeted information about high blood pressure and why it is important for black African and African Caribbean men to get their blood pressure measured was produced to use during the sessions. The leaflets included a section to write down the men's reading which was important especially if they needed to pass on this information to their GP practice if follow up was required (See appendix A). The resources were also made available digitally for stakeholders to use to promote the blood pressure sessions.

Implementation

The pilot sessions were scheduled over a two month period and involved some repeat sessions at some venues.

Venues

The intention was to hold the blood pressure sessions in trusted settings used by African and African Caribbean men. Barbershops were a key target as they had

been successful in another community based blood pressure intervention (Ronald et al., 2018). We visited barbershops in the targeted areas to explain the project. This involved several visits and telephone calls to the barbershops to ensure the aims of the programme were clear and that our intention was not to disrupt the normal running of their business. Agreement was obtained from the managers or owners of the barbershops.

We were also guided by local knowledge including which setting to approach. For example this included a bus depot whose drivers were predominately of the project target group, and a black majority church for the Hackney borough. Contact with the Head of Partnerships at the bus depot, led to a meeting with the Head of Operations, Staff Manager, and union representative leading to discussion of the project and agreement. We contacted two churches, and agreement was given by the Pastor at the RCCG Assembly church.

The Pilot programme

Recruitment

Most of the venues had used our resources to promote the session, displaying posters with the date and timing of the session. But others has also used their Instagram, Twitter and WhatsApp to inform clients and members of the church congregation.

> *I have seen it on my barber's social media, on Instagram*

(African man).

> *I just came in here. But I've seen the poster before, maybe online*

(African man).

A couple of the barbershops also had the poster displayed on the TV feed in the barbershop.

Some of the men at the time of the pilots in the barbershops were therefore aware of the sessions happening, but the majority were recruited on the day following a conversation about the programme and agreed to get their blood pressure read.

> *I just walked into the barbers and the lady just approached me, and I said to her 'Anything health, I'm happy to do it, because I don't joke with my life!'*

(African man)

Some of the barbershops made it clear in their publicity that it wasn't necessary to come along to have a haircut to take part in the pilot programme. That way they were opening up the session to a wider group of African and Caribbean men.

Those who attended the church session were aware for a few weeks beforehand, and the bus depot had also informed drivers of the project.

Health care practitioner

Community pharmacists, blood pressure champions or training non-clinical advisors are some of the ways community blood pressure programmes have been implemented. We are aware that people respond well to having a health practitioner present (Behaviour Change Hub, Croydon unpublished). The healthcare practitioners involved were qualified nurses, health care assistant, a Senior Pharmacist and Advanced Nurse Practitioner. However, it was not always easy to reconcile the current demands of the primary care staff with the project needs. This meant there was difficulty locating a nurse to take part in one of the pilots. The CCG suggested using the Stroke Programme workers from the Shoreditch Trust who regularly undertake blood pressure testing within community settings. In another incident, the nurse booked for the session had to pull out at short notice which with the support of other CCG staff led to a Senior Pharmacist taking part in one of the pilot sessions. This appeared to benefit both the men and pharmacist by showing a different way of addressing high blood pressure with an at risk group.

Undertaking the sessions

The sessions took place according to what 'fitted' best with the setting. For the barbershops this was late afternoon to early evening, with some sessions on a Saturday. This setting was noted as a good place to hold the session with one African man stating

> *Because a lot of people come to the barber shop so you can [*inaudible*] talk to them*

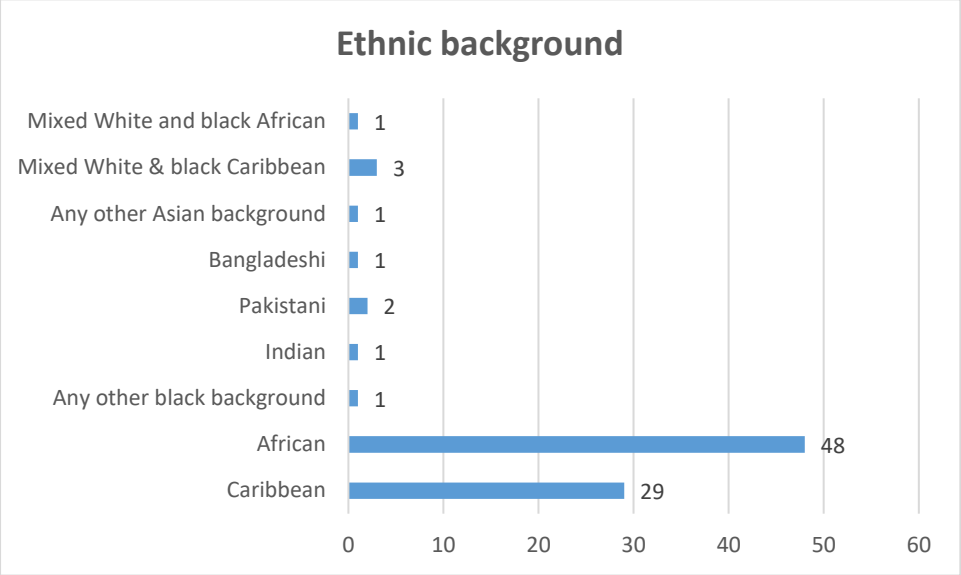
Most of the men through the barbershops were recruited on the day. Almost all were willing to participate after an introduction to what the pilot was for and why it was important to know about high blood pressure and risks for other health conditions. Men were able to read the leaflet if they had not already done so, and ask general questions to the project team or health practitioner attending. Those who did not read the leaflet fully, agreed to have a look at it when they got home. Indeed one man who had his blood pressure measured, was later still in the barbershop reading the leaflet.

On the other hand, the church and bus depot saw men deliberately attending to take part in the session. The church arranged a session on a Saturday afternoon. The bus depot held the session on a Friday which fit well with the driver's schedules which meant a lot of drivers were available and could participant either when on their break, before or after their shift. The project team also spoke to men in the rest room to try to elicit their participation in the programme.

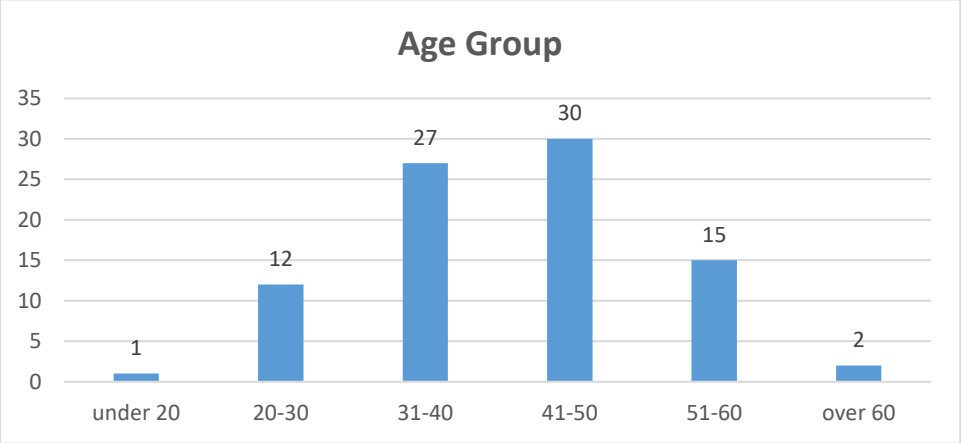
Findings

Participants

87 men participated in the sessions. 29 were of African Caribbean background, 48 were African, several were of mixed background and five were Asian origin



The majority were aged between 30-50 years. The eldest was aged 70 and youngest participant was 17.



Both the church and bus depot had a mixed age range. There was more of a younger profile in the barbershops. We found for one barbershop that younger men came along to appointments in the early afternoon. Whilst there was no real pattern, we did observe that older men tended to arrive in the late afternoon.

Understanding of high blood pressure

Most participants knew something about high blood pressure and that it was affected by too much salt, drinking alcohol, or not doing enough exercise. However, very few understood how your blood pressure worked and some thought there were obvious symptoms.

For example, in one of the barbershops a couple of the men said they were healthy and demonstrated this by standing tall and pushing out their chest. At the bus depot, one driver said that he was healthy and that his blood pressure was fine. When asked how he knew this to be the case, he said that 'his heart does not beat fast'. After giving an explanation that this is not necessarily an indication of high blood pressure and that there are often no symptoms, he still refused to take part.

The project did not aim to make comparisons between the two ethnic groups, but it was noted that there was less of an understanding of high blood pressure by the African men who attended the African barbers. Language was an issue for some of the African men in understanding information about high blood pressure.

Men's willingness to take part in the sessions

The willingness to participate in the pilot sessions varied. In one of the barbershops there was some confusion about how measuring blood pressure would happen. One man thought the measurement would involve a blood test and stated he did not like needles.

The timing of the session from mid to early evening enabled some men to take part, but for others coming after work meant that they wanted to get their haircut and then go home.

At the bus depot some of the drivers had had conversations with their manager who had encouraged them to come along to the session. Others had seen the poster and turned up.

> *There was a note on the noticeboard. It gives a lot of information and you get the information from there*.

(African Caribbean man)

However it was sometimes difficult to get some of men to participate as they had a misunderstanding of what high blood pressure is and also thought that having no symptoms meant that they were okay.

One driver mentioned that it was fear that prevented some of the men from participating. He suggested that if you take part in a check up on a health issue and there is a problem, then you have to do something about it. Some men may not want to have to make an immediate decision about their health.

At one of the barbershop sessions two African Caribbean men were reluctant to get their blood pressure measured. One man read the leaflet then changed his mind and has his blood pressure measured. The other was encouraged to participate by the barber.

Reluctance was noted much more from the African men in the attending the predominately African barbers. There was some concern about whether some were registered with a GP and if there was a need for clinical follow up, how this would happen. Also one man who was not sure of his rights in relation to healthcare and was therefore reluctant to follow up on his raised blood pressure reading despite being advised. The healthcare practitioner was able to signpost him to another project at a health centre for migrant health.

Help from stakeholders

Stakeholder participation helped some men to take part in the pilot sessions.

It was helpful that the barbers were encouraging men (all men regardless of their age and whether they met the target ethnic groups) to get their blood pressure measured and take the information. This often happened before the men had their haircut, as the barber said that they had time to do it. Barbers themselves also had their blood pressure read and made comparisons with their readings afterwards as well as discuss lifestyle issues. The discussion that followed on from the comparisons were a good way to start to look at lifestyle issues for African and African Caribbean men and what changes they could make if needed to improve their health.

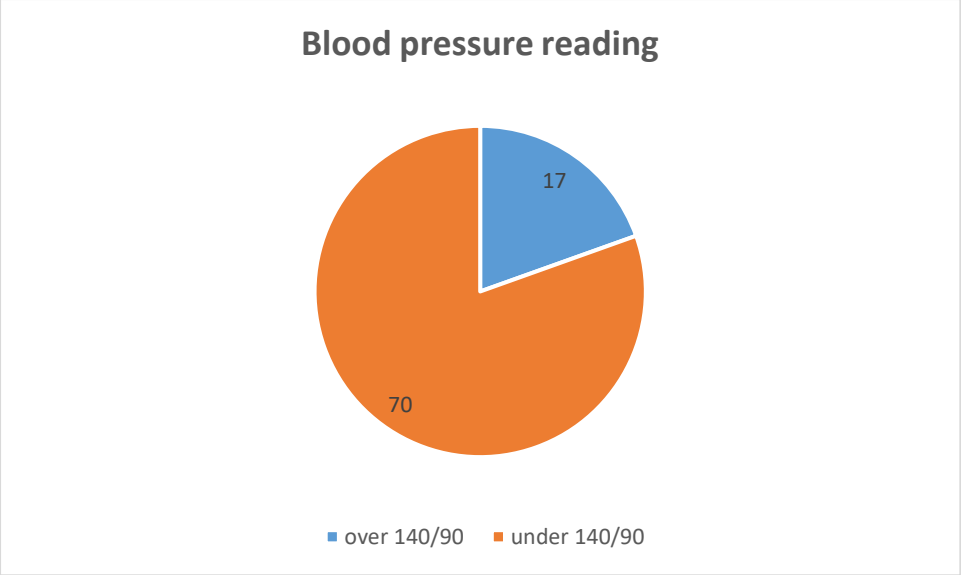
Seeing relevant people participate in the pilot sessions was likely an encouragement for other men to take part.

The Pastor at the church was one of the first men to take part in the blood pressure session, and called a few other members of the church once he'd taken part. He was also interested in how they could train up to do the blood pressure readings themselves for the wider congregation and run similar sessions with the local Shoreditch Trust on stroke prevention.

Blood pressure readings

The community referral pathway enabled the relevant action to be taken for raised, low or extreme blood pressure readings

Of the 87 men, 20 initially had raised blood pressure (over 140/90 mmHg). Some men had their pressure measured two or three times and the reading lowered to an acceptable level. NICE guidance recommend that blood pressure measurement should be taken more than once if the reading is 140/90 mmHg or higher and health practitioners should record the lower of the last two measurements (NICE, 2019). Whilst this is the guidance for measurements in clinical settings, the health practitioners still adhered to this practice.



Overall, 17 men across all the settings had a blood pressure reading that was higher than the recommend level of 140/90 mmHg (NICE, 2019). There was at least one man in each of the settings with a raised blood pressure reading. Worryingly over half (9 out of the 16 men who participated) of the African men in one barbershop had high readings leading to several being advised to have a clinical reading at their GP practice or referred to a NHS Health Check. One man was given a written note to take to his practice by the healthcare practitioner. It must be noted that time was spent with each man talking about diet specific to the African communities to help the men see what would be contributory factors for high blood pressure.

There were a few men who had recently had their blood pressure tested via work but still wanted to participate. A few men were on medication for their high blood pressure and some men used home monitoring machines, but overall, the majority had not had their blood pressure tested or knew what a normal reading should be like. However, there was overall knowledge of what a healthy lifestyle involves.

Initial feedback on participation

An evaluation of the process and implementation of the pilot programme is in a separate report. However there was initial feedback given at some of the sessions.

Most of the men were positive about having the community blood pressure programme

> *I think it's a good idea, especially in this job. As you could be driving and have high blood pressure and you don't know and this is dangerous.*

(African Caribbean man)

Having the session in the community was noted as 'ease of access' for some men. Some of the bus drivers liked the session being at their workplace due to the difficulties in accessing primary healthcare

> *It's very good to have it at work, because try booking an appointment at the doctor it's very difficult. Sometimes you have to be on the phone very early in the morning. Be on the phone from 7:55am to get such and such appointment in the evening. Bus drivers don't have regular times so you see you coming here is very beneficial for everyone.*

(African Caribbean man)

> *It's good because it has so many people that if they don't want to go to the GP, you* [project team/nurse] *are the person that will advise them to go to the GP.*

(African man)

The information leaflet was also well received

> *I received a leaflet which I'm going to read. As they said according to the age when you are above 40 or 50 you have to read more, cause you have to know exactly, especially as it affects more men and as they said black Africans. And we don't go to the GP to have it checked out, so good to have it checked here, so you know where you stand.*

(African man)

There were few suggested changes to the project approach. One African man suggested '*There should be more people to employ so you can go to other shops, more resources'* whilst another suggested other venues '*It's better if you do it in a library or an open place, there's a lot of people walking up and down so they can have an interest'.*

Overall, all the community settings welcomed the pilot programme coming out to them in the community. Most of the stakeholders expected the programme to continue for some time with one barber stating that they had expected the sessions to last for at several months. We were asked to run more than one session at different venues, and the willingness to participate in a longer term programme was evident in all of the settings.

More detailed feedback is available in the process evaluation report.

Impact of Covid-19 on the sessions

The spread of Covid-19 happened as the pilots were being implemented and had a real impact on how the project could proceed. Brent CCG had difficulties getting a health practitioner to participate in their sessions as their response to Covid-19 was the priority. One of the sessions in Southwark was impacted. The barber reported that customers had been dropping. Some men were reluctant to participate due to fears about coronavirus and how it is spread. Despite this, at that specific session, we saw eight men in three hours. One of the barbershops in Brent, also saw a reduction in trade between the two blood pressure sessions. Others made decisions to close temporarily until the situation improved.

Lessons from the community pilot programme

There are some lessons that are useful to share from the development and implementation of the community blood pressure project.

Buy in from the CCG/public health

Any focus on addressing high blood pressure would involve both the clinical commissioning group (CCG) and public health department. The preventative approach through public health would include looking at high blood pressure often as part of the annual health check programme. The CCG would be needed to provide the practical support of a healthcare practitioner to take the blood pressure reading and also confirm the community blood pressure pathway.

Firstly we found that it took some time to get the right person involved and also for a decision to be made to work with us on the project. The pilot project was only six months but yet it took some time to contact, meet with the relevant person in both the CCG and public health, and then for a decision to be made. In one instance, despite continual contact, it was not until early January that the final agreement was given and the practicalities for implementing the project sorted.

Secondly, an issue for the CCG was how the project fitted with their current priorities on high blood pressure and if they had the resources to support the project. There was strong input from one CCG however, there was difficulty sourcing a health care practitioner to take part in the blood pressure sessions and a nurse was sourced through other avenues agreed with the CCG. Whilst the barbershops in one borough were keen to participate and steps were taking place to set up the sessions, it took some time to have meetings with both the CCG and public health department to get their support for the project. The length of time to meet with relevant healthcare practitioners, did have an impact on the time available for implementation. However, getting the 'buy in' from the CCG and public health was necessary in considering how the project could support the authority's cardiovascular disease priorities and hypertension challenges, particularly where they related to black African and African Caribbean men or communities.

Whilst it is difficult to assess what influenced the swiftness of decision making within the different areas, having decision makers acknowledge the time limits of the project would likely have sped up decisions about 'buy in'. Flexibility about different community based approaches would be another factor. Additionally, how the CCG are implementing health services through primary care networks could be another consideration that impacts on willingness to participate in the pilot project.

Getting the right person as the main contact for a particular community setting

We had to ensure that we had the right person who could make the decision about taking part in the pilot programme. This was not always straight forward. In barbershops, barbers often rent out a chair to use and have set clients. It is not always clear who the manager is or whether the different barbers had been made

aware of the project. For example, in one of the barbershops, despite being introduced to the manager who had agreed to take part in the project, a further visit found the manager was away and the owner was not aware of this agreement. Further discussions and visits took pace before a session was arranged. We found it difficult to make contact with the Staffing Manager at the bus depot over a period of weeks, but found the Partnerships Manager who turned out to be the right person to agree and arrange for a liaison person at the depot to manage the programme from their end.

Persistence to find the right person paid off, but also took a longer time than expected.

The importance of building relationships within community settings

Visits were made to each community setting to ensure the practicalities needed for the blood pressure session were there. This included making sure there was the necessary space, understanding the layout, a sink to wash hands and a table to place the monitor on, for example. But more importantly, that sufficient time was set aside to build the relationships in the different community settings and gain trust and understanding of what agreeing to participate in the project actually meant.

With the bus depot, this followed a meeting with the relevant staff and regular contact with the Operations Manager who was the liaison for the project at the depot. A visit to the depot was also necessary to meet other staff and have a look at where best to hold the session. Regular phone calls and emails to the Pastor of the church took place over a period of two months whilst the practicalities of getting a healthcare practitioner to participate, setting the date for the session, and ensuring access to the blood pressure monitoring equipment, were also arranged.

The importance of an ongoing effort to segment relationships was more evident with the barbershops. This involved, several visits to the different barbershops to meet and talk to the owner/manager and some of the barbers as well as clients at the time of each visit. Most of the barbershops did not use emails regularly so a more informal approach was necessary. Regular phone calls were made, WhatsApp messages exchanged, and visits to the shops to talk about the session, hand out leaflets and posters and be a familiar face for the project. Physically visiting the barbers also enabled quick recognition when follow up phone calls were made to the managers of the shops.

There is no ideal ‘sufficient time’ to build these relationships as this will be assessed by the project team in contact with the barbershop owners/managers. But it is important to note that this time should not be reduced in order to implement the pilot sessions. It is likely that such relationships within a community based project will help with longer term contact with the relevant practitioner for the development of longer term health interventions.

Fear of taking part in the session

It is evident from the literature that fear can be an issue that stops men addressing health conditions (Kessler et al, 2019; Joseph et al, 2018; Anderson et al., 2014). As noted above, it was suggested that some of the drivers at the bus depot did not want to know about high blood pressure due to the fear that they may have it. We did notice a few men at the barbershops were happy to talk about high blood pressure and had some knowledge about it, but still did not want to be involved in the programme. Whilst, participation in the session was voluntary, it is questionable whether some of the issues to do with fears about treatment and diagnosis, particularly relating to medication and possible side effects (Kessler, 2019; Joseph et al., 2018) could have been an issue.

We also observed in one of the sessions within a barbershop that those African men who were told they had raised blood pressure, and given information and advice, when later took part in feedback sessions, were reluctant to admit it. Recognising that such fears can be a barrier to participation and determining ways to mitigate this, would be beneficial for community blood pressure programmes.

Understanding what blood pressure and high blood pressure is

The majority of the men understood that having high blood pressure was not a good thing and could have detrimental consequences to their health. However, there was little knowledge of blood pressure overall and what it does within the body. Most of the men understood healthy living and associated this with eating well and taking exercise. Not everyone knew what the average blood pressure reading should be and how they could get their blood pressure measured. For those who were eligible, most did not appear to have heard much about the NHS Health Check or seen information leaflets about it. There is the need for more work to educate about blood pressure and its role within the body, why it's important to have 'good' blood pressure and what can be done to manage high blood pressure specifically targeting African and African Caribbean men.

Language

Barbershops are a place for social interaction, as well as somewhere to get a haircut (Ronald et al., 2018; Anderson et al., 2014). We found the African barbers also ran a membership scheme where clients could have food and network socially. But we found fluent communication in English was not always easy at the sessions held in the African barbershops. In one barbershop in particular, some of the men had limited English. It was due to the skills of Advance Nurse Practitioner and other men also translating some of the information that blood pressure measurements took place for some of the men who were willing to participate. However, there was still some misunderstanding. For example, one man had a fast pulse rate because he had been rushing around and on the second reading, this had gone down. His blood pressure was fine. Yet he came back several times pointing to the high pulse rate and it took several conversations with one of the barbers who was interpreting for him to understand that the pulse reading was fine.

It is clear that fluency in, and understanding of English, is a real issue for conveying messages about high blood pressure. Community blood pressure sessions need to have the right communication support in place to ensure people can participate and key messages are understood fully.

Having a health care practitioner present

The healthcare practitioners were essential to the delivery of the programme and conveyed confidence in the information they were giving to the men. We especially found having a healthcare practitioner who was confident and could convey information to the men was beneficial. For example, the Advanced Nurse Practitioner had local knowledge and was aware of African community's diet and lifestyle. She pronounced names correctly or asked a bit about each individual man that she took the blood pressure reading for. She could further probed and ask questions to the men who had raised blood pressure about their diet and lifestyle.

The Advanced Nurse Practitioner had local knowledge of diet applicable to the African community and could make suggestions of alternative foods to reduce salt and encourage healthy eating. As well as the local GP practices so she could talk to the men about who they might need to see if they needed further advice about their blood pressure.

In another session a Senior Pharmacist participated. This was particularly useful given the concerns raised in the evidence about the effect of medication and factors that will influence anti-hypertension medication adherence (Kessler et al, 2019; Lor et al, 2019; Joseph et al, 2018 Petty et al., 2016). Having the Senior Pharmacist present was helpful to one man who had a very long discussion about blood pressure medication and how health practitioners ensure they issued the right one, given that he had had a lot of side effects with the number of medications he was taking.

Whilst we had tried to ensure that the healthcare practitioner was from the same ethnicity as the men or a black and minority ethnic background, this did not happen in all of the sessions. The Advanced Nurse Practitioner was of Irish ethnicity and similarly the nurse for one of the Neasden barbershop sessions. Whilst ethnic background can be an advantage to elicit participation for black and minority ethnic communities engagement in health services (Aggarwala et al., 2016), the confidence of the healthcare practitioner and how they related to the men, was found to be an asset in the pilot programmes.

Confidence of health care practitioner in setting

The pilot programmes were implemented in non clinical sessions and the healthcare practitioners needed to be confident in participating in these settings. This means not only undertaking the blood pressure measurements in settings that were not familiar, but feeling able to understand the local population and their health and cultural needs.

One nurse did not want to take part in barbershops sessions and conveyed that she would not ‘feel comfortable’ in that male environment. The Senior Pharmacist had not done a session in a barbershop before and found this was a unique way of talking to men about high blood pressure.

Timing

The timing of the blood pressure sessions meant that flexibility was essential in order to fit best with the different community settings. This also needed to be reconciled with the availability of the healthcare practitioners. Most of the sessions were at a time that the venue felt was suitable for their clients. This was from late afternoon or and could be at the weekend. Programmes within community settings need to be able to accommodate the needs of the target group they want to take part in the programme. Whilst this may not ‘fit’ well with the usual clinical practice, it does enable a wider reach into the community to those who are less likely to be engaged with ‘traditional’ healthcare services or access health education information within community pharmacies or health settings..

Concluding remarks

The community blood pressure pilot sessions successfully reached both black African and African Caribbean men. The sessions were positively received and input from the different stakeholders helped the sessions run effectively. It is clear that sufficient time is needed to build the relationship to help the implementation of such a programme in non clinical settings, and the necessary resources, in particular, the health care practitioner is essential for the pilot programme to run successfully. There was a willingness from community stakeholders for such a programme to be implemented over a longer period of time, and healthcare providers may wish to consider the practicalities of delivering blood pressure testing in similar settings for specific target groups.

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Appendix A

Images used for the posters, banners and leaflets