Title: Mixed-methods evaluation of a co-designed peer-led intervention to tackle barriers to early diagnosis of prostate cancer for Black men in North-East England and Scotland

Floor Christie-de Jong, Olugbenga Samuel Oyeniyi, Judith Eberhardt, John Kabuye, Martin Kalemba, Lawrence Nnyanzi, Marie Kotzur, Kathryn A. Robb

Background: Black men are twice as likely as White men to develop, and die from, prostate cancer. Black men access prostate cancer care less than White men. Barriers to care are complex, ranging from lack of knowledge to trust issues with healthcare providers. This study aimed to evaluate acceptability of an intervention to encourage early diagnosis of prostate cancer among Black men in North-East England and Scotland. The intervention, a peer-led workshop, co-designed with Black men (n=13) and underpinned by the Integrated Screening Action Model (I-SAM), consisted of multiple components, including health education by a Black GP and videos with testimonials from survivors, women, and religious leaders.

Methods: In this mixed-method pilot study, Black African and Caribbean men, aged 42-63 (n=62), were recruited through snowball sampling from community networks. The intervention was delivered twice in November 2023 (n=21), and subsequently qualitatively evaluated through two focus groups (n=14). Feedback was used to improve the intervention, delivered again twice in February 2024 (n=41) and assessed through two focus groups (n=26). Analyses were conducted thematically. Additionally, pre-and post-surveys were collected to investigate knowledge, attitudes and intention to engage in prostate cancer testing (n=41). Wilcoxon Signed Rank Tests compared pre-and post-intervention scores.

Findings: Qualitative data indicated participants felt positive about the intervention and perceived it as effective. Participants reported increased knowledge of prostate cancer risks and positive attitudes to help-seeking. They particularly liked the culturally appropriate and peer-led intervention design and delivery, which helped build trust. Quantitative findings included significant increases in knowledge ($Z= 4.939$, $p < 0.001$) and intention to undergo prostate cancer testing ($Z = 3.975$, $p < 0.001$).

Interpretation: The sample size is small and findings must be interpreted cautiously. However, the intervention shows potential to encourage help-seeking and tackle prostate cancer inequalities. Effectiveness testing is needed on a larger scale.

Funding:
Prostate Cancer Research

Word count: 300