CHIEF SCIENTIST OFFICE

CODE: HIPS/17/55

RESEARCH PROJECT BRIEFING

UNDERSTANDING AND ADDRESSING ETHNIC VARIATION IN CERVICAL SCREENING IN SCOTLAND (the SCREEN STUDY)

AIMS

Cervical cancer can be reduced by cervical cancer screening. Participation in screening programmes can vary by ethnicity. The aims of this study were to identify if there are important ethnic inequalities in cervical cancer screening participation in Scotland, to examine the barriers and facilitators to taking part in cervical cancer screening among ethnic minority women in Scotland, and identify from the research literature interventions have been shown to be effective in increasing participation in cervical screening among ethnic minority groups

KEY FINDINGS

- Linked 2011 Census and cervical screening programme data were analysed for over 680,000 women. We found large variation in participation rates by ethnic group, and by length of residence in the UK, even when accounting for socio-economic status.

- Fifty qualitative interviews were carried out with women from diverse ethnic groups. We found that key differences exist in the experience of minority ethnic groups, including accessing screening, delayed introduction to screening, and language difficulties in healthcare settings. Experiences of racism, ignorance, and feeling shamed were reported.

- The literature review identified 29 relevant studies. Interventions were delivered in a range of non-health care settings, and by either medical and non-medical staff or volunteers. All included an educational component. *Any* intervention was associated with an increased uptake in screening compared to usual care, and a higher intensity intervention was associated with increased uptake compared to a lower intensity intervention.

WHAT DID THE STUDY INVOLVE?

The project adopted a mixed-methods approach, examining ethnic minority inclusion in screening participation from different perspectives. 1. Drawing on established linkage methodology the 2011 CHI/Census database was linked with the Scottish Cervical Screening Programme data to generate anonymised individual level information on cervical screening participation rates by self-reported ethnic group in Scotland. 2. The views of ethnic minority women about barriers and facilitators were explored through in-depth, semi-structured individual interviews that were thematically analysed. Fifty women were purposively sampled from South Asian, East European, Chinese, Black African or Caribbean, and White Scottish groups. 3. A rapid review was carried out to summarise the evidence in the scientific literature from five databases; the Behaviour Change Wheel was used to categorise interventions.

WHAT WERE THE RESULTS AND WHAT DO THEY MEAN?

Views of ethnic minority women

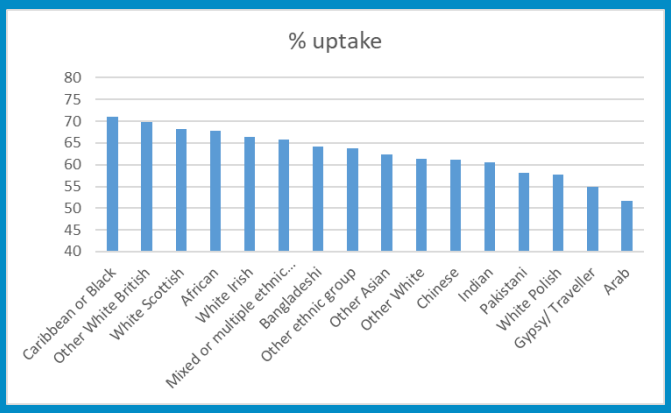
- Irrespective of ethnic group, common themes were identified: competing demands, limited knowledge and risk perception, understanding the health system, and emotional responses.
- Difficulties with medical language and colloquial dialects and accents were raised by migrants to the UK
- Polish and Chinese participants reported regularly attending screening abroad
- Migrants talked of not registering with a GP or accessing healthcare for several years after their arrival, often associated with lack of a permanent address

Rapid review of effective interventions

- 29 studies (12 randomised controlled trials). Most studies showed a high risk of bias.
- Interventions were delivered by community health workers, DVD, text messages, project staff, student volunteers, or medical professionals.
- The settings were community venues, churches, university, or the participant's home.
- Education was an integral component of all interventions; some included persuasion, training, incentivisation and enablement.
- Interventions were effective, but it was difficult to determine which aspects of interventions were most important.

Cervical cancer screening in Scotland 2016 - 2018 by ethnic minority group

Please note these are crude percentages: confidence intervals and adjusted data (e.g. by socio-economic status, age and Health Board) are not shown, but will be reported in detail in the study publication. In addition, participation trends over consecutive rounds of screening have been analysed and will also be described.



WHAT IMPACT COULD THE FINDINGS HAVE?

- Patients: there is need to recognise diversity both within and across ethnic minority groups; in particular, to work closely with local communities and engage with women's advocacy groups about culturally acceptable communication materials and approaches.
- Policy: addressing inequalities in access to and participation in screening is a priority for screening services in Scotland; findings will be shared to inform outreach strategies.
- Practice: qualitative work with women identified issues of racism / shaming from health staff. Although rare, and often unintentional, this has a damaging impact. The findings will be shared with primary care leads and the screening programme.

HOW WILL THE OUTCOMES BE DISSEMINATED?

The qualitative research results have been published (Nelson M, et al. Experiences of cervical screening participation and non-participation in women from minority ethnic populations in Scotland. *Health Expect*. 2021;00:1–14). Further publications are planned for submission in spring 2023 (results from the rapid review, the cervical screening uptake findings, and a component examining uptake of bowel screening against the 2011 Census ethnic categories). Early results were presented at the SHINe meeting (03/21), and the Scottish Cancer Conference (11/21). An abstract will be submitted to the International Cancer Screening Network meeting (06/23). An online stakeholder workshop is planned for late spring 2023 to share findings and obtain feedback on a planned intervention proposal.

CONCLUSION

This study has provided new and important information about how women from different ethnic minority groups participate in cervical cancer screening in Scotland. For the first time, we have a detailed understanding of the patterns of screening uptake, highlighting considerable variations. The qualitative interviews emphasise not only the commonalities of experience among invited women, but also provide novel insights into specific barriers faced by women from different ethnic minority groups, some based on cultural contexts, others experienced from the health system itself. Findings will be shared with community advocacy groups, screening providers and policy makers, and will inform future intervention studies.

RESEARCH TEAM & CONTACT

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Additional Information

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