PROJECT PROPOSAL

2025/6 Academic Entry Year – Cohort 4

Supervisory Team

Primary Supervisor

Name: Dr Kajal Gokal
Input (%): 60
Email: k.gokal@lboro.ac.uk
Centre/Institute/School/University: Centre for Lifestyle Medicine and Behaviour in the School of Sport, Exercise and Health Sciences at Loughborough University
Website: https://www.lboro.ac.uk/schools/sport-exercise-health-sciences/people/kajal-gokal/

Second Supervisor

Name: Prof. Amanda Daley
Input (%): 40
Email: a.daley@lboro.ac.uk
Centre/Institute/School/University: Centre for Lifestyle Medicine and Behaviour in the School of Sport, Exercise and Health Sciences at Loughborough University
Website: https://www.lboro.ac.uk/schools/sport-exercise-health-sciences/people/amanda-daley/

Project Details

Title: Empowering those of Black and Asian ethnicity to engage in physical activity through the co-development of culturally appropriate resources within the oncology pathway to increase survival

Summary: Women of Black and Asian ethnicity have a lower incidence of breast cancer than white women. Yet, they have a higher risk of recurrence, comorbid conditions and have poorer survival rates. Physical activity is safe and efficacious for the management of breast cancer and is endorsed by the World Health Organisation (WHO). However, physical activity is not part of routine oncology care. Ethnically diverse patients are often physically inactive due to an array of culturally specific barriers and are often excluded from health research or can be reluctant to take part. Inclusive research is needed to address the cultural barriers to engagement in physical activity among Black and Asian women with breast cancer and to facilitate the promotion of activity as part of routine oncology care. This proposal aims to reduce health disparities and improve the health and survival of ethnically diverse patients with breast cancer. The project will involve a scoping review and synthesis of existing approaches to inform the co-development of behavioural resources to support participation in physical activity with patients and stakeholders. The co-developed resources will be assessed for acceptability and feasibility among patients when embedded within routine oncology care for patients receiving treatment for breast cancer.

Leicestershire Healthcare Inequalities Improvement DTP

Aim: Reduce health disparities and improve survival among ethnically diverse patients with breast cancer.

Background: Cancer is the second largest cause of death in the UK (1). There are around 57,000 cases of breast cancer diagnosed each year in the UK (2). Women of Black or Asian ethnicity have a lower incidence of breast cancer than white women (3). However, they have poorer survival rates and often present with cancer at a later stage (4). Black and Asian women are at higher risk of recurrence (5) which may be explained by later diagnosis, poor lifestyle behaviours (i.e. physical inactivity and poor diet) and because they are prone to higher rates of cardiovascular disease and subject to adverse healthcare disparities (6). Living a healthier lifestyle such as participation in regular moderate-vigorous physical activity during and after treatment for breast cancer can help to reduce these increased risks (7,8) as confirmed by multiple systematic reviews (7,9,10). Physical activity during treatment for breast cancer can enhance chemotherapy completion rates (11,12), reduce the risk of comorbidities, reduce the risk of recurrence by up to 40%, ultimately improving chances of survival (7,13) and is endorsed by the WHO (14).
However, levels of physical activity are below the national average among those from Black and Asian backgrounds and women are less likely to be active than their male counterparts (15). Some South Asian women perceive physical activity as culturally inappropriate and believe it could question their modesty and conflict with their role as a homemaker (15). Those from under-represented communities experience a lack of motivation, enjoyment and self-efficacy towards being active which often stems from cultural beliefs. In some cultures, being overweight is classified as a symbol of health, affluence and success (16), and therefore being physically active is not prioritised. Current evidence is not representative of those from ethnic groups who are regularly excluded from health research or are hesitant to participate due to a lack of trust in the healthcare system, cultural differences and language barriers. Inclusive research is needed to address the culturally unique barriers to engagement in physical activity among Black and Asian women and to encourage active lifestyles to improve their health and survival following a diagnosis of breast cancer. We hypothesise that the development of culturally appropriate resources and increasing knowledge regarding the benefits of physical activity will improve engagement in physical activity among ethnically diverse patients.

Research Plan: WP1: scoping review and evidence synthesis of barriers and facilitators and existing approaches to engage ethnically diverse cancer patients in physical activity. Learnings will be taken from evidence and approaches currently used among those from culturally diverse backgrounds to support rehabilitation of other non-communicable diseases such as cardiovascular disease and diabetes. WP2a: utlising existing relationships with collaborators such as Centre for Ethnic Health Research, South Asian Supernovas and Black women rising, co-design culturally appropriate resources to facilitate the promotion of physical activity for patients with breast cancer. WP2b: stakeholder engagement with healthcare professionals (i.e., oncologists, surgeons, nurses, radiographers and physiotherapists) to support (i) the co-development of culturally appropriate resources for patients and (ii) resources to support healthcare professionals to facilitate promotion of physical activity in the oncology pathway. WP3: assess the acceptability and feasibility of the co-developed resources with patients from ethnically diverse backgrounds.

Expected outcomes and impact: The co-developed resources will be embedded in routine oncology care to support the promotion of physical activity for breast cancer. Understanding of the barriers and facilitators to engagement of ethnically diverse patients in physical activity allowing healthcare professionals and the research community to better understand the integration of care into the

oncology pathway. Peer reviewed publications, national and international conferences and sharing of knowledge with medical professionals, researchers, charities and patients. The student will gather in depth experience of mixed-methods research, working in NHS settings and engaging with a diverse range of patients.

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