PROJECT PROPOSAL

2023 Academic Entry Year – Cohort 2

Supervisory Team

Primary Supervisor

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Centre/Institute/School/University: Associate Professor, Department of Cardiovascular Sciences

Secondary Supervisors

Name: **Dr Rachael Evans** (Associate Professor)

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Centre/Institute/School/University: Associate Professor, Department of Cardiovascular Sciences

Collaborator

Dr Tom Ward is an NIHR Academic Clinical Lecturer in Respiratory Sciences, has a research interest in breathlessness and has been involved in the development of this proposal.

Project Details

Title: **Symptom perception of "breathlessness" and impact on healthcare access in culturally diverse populations**

Summary:

Breathlessness is a debilitating symptom caused by multiple clinical conditions, resulting in reduced quality of life, increased hospitalisations and earlier death. There are long delays to diagnosis for breathlessness associated with worse outcomes. Individuals need to recognise and seek help for breathlessness, and healthcare professionals need to correctly interpret their symptoms. Different cultural groups may have different understandings of breathlessness and ways of articulating symptoms and concerns, with discordance between patient and clinician symptom perception. To meet the needs of the diverse and multicultural population of Leicestershire, this mixed-methods project will develop a better understanding of how people from different cultural traditions perceive and express symptoms of 'breathlessness', and how these influence their experiences of healthcare and health outcomes. We will (i) use primary healthcare records (CPRD database) to describe the characteristics of people accessing healthcare for breathlessness, their subsequent pathway and health outcomes, and (ii) use novel qualitative reflexive methods with people from diverse backgrounds to capture, illuminate and optimize culturally-competent healthcare practice. Findings will highlight overlooked population groups, empower diverse local patient groups and organisations, and provide health services and practitioners with deeper understanding of factors that influence symptom perception and seeking healthcare in people from different backgrounds.

Theme(s) the project most closely aligns to:

This project aligns with the overarching aim of addressing health inequalities, using patient-centred methodologies and digital health data.

How the PhD project and training would be appropriate for NMAHPs or GPs:

Breathlessness is a common presentation to both primary and secondary care and assessment and management of breathlessness is a core component of NMAHPs' and GPs' clinical role. This project cuts across clinical specialities and conditions and the student will benefit from a multi-disciplinary team of supervisors (nursing, medicine, health and social science). Training will be provided in the different proposed research methodologies, as well as in the relevant clinical background knowledge of the different conditions being studied. Specific courses on qualitative and mixed methods research methodology will be identified.

How the project addresses health inequalities:

The first step in addressing health inequalities is to address inequalities in healthcare access. To access healthcare, individuals need to first recognize symptoms and perceive them as being abnormal. The influence of cultural differences in what is perceived to be an acceptable part of ageing, potential biases and previous experiences of seeking healthcare, on healthcare access is unknown. In addition, language barriers and cultural descriptions can adversely influence the patient-clinician interaction, particularly the clinician's interpretation, potentially leading to delay in diagnosis and management. This proposal will explore this important research question and identify areas for improvement, in order to develop culturally-competent healthcare models that reduce health inequalities in access for one of the commonest symptoms: breathlessness.

This project is ideally suited for the WT LHIIP DTP and comes with a strong multi-disciplinary team of supervisors, with an interest in breathlessness, health inequalities and/or the research methodologies to be used, who will provide training and supervision, whilst supporting the student to develop the proposal further. The supervisory team itself is cross-disciplinary in terms of expertise (Cardiology, Respiratory, SAPPHIRE/qualitative) and professional background (medical doctor, nurse, data and social scientists), and consists of academics at different stages of their careers.

Aim:

To explore the influence of cultural background on symptom perception, access and interaction with healthcare services, and health outcomes for breathlessness.

Background:

Breathlessness is a debilitating symptom that results in reduced quality of life, increased hospitalisations, and premature mortality. The underlying aetiology cuts across different disciplines, with cardiovascular and respiratory conditions being the commonest for which delays to diagnosis is associated with worse outcomes. Breathlessness is a complex multi-dimensional sensation with established bio-psycho-social influences (1) that are likely to interact with cultural differences (2). These same influences likely influence symptom perception and seeking healthcare, as well as the take-up of investigations and treatments offered. Current management follows a one-size fits all approach, which may not meet the specific needs of the diverse and multi-cultural population of Leicestershire. We aim to develop a deeper understanding, that is multidisciplinary and informed by social science, of the cultural differences in symptom perception and healthcare access, that may be exacerbating health inequalities in the increasingly ageing and multi-morbid local population.

References

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