PhD Opportunity

Routine Monitoring of Depression and Anxiety in Patients with Chronic Kidney Disease (CKD)

Supervisory Team

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Research Group: Living Well with Long-Term Conditions

This PhD project is aligned with the 'Living with Long-Term Conditions' (LWLTC) research group at the University of Worcester. The LWLTC group aims to facilitate the development and implementation of high-quality research and knowledge exchange, targeted at helping people with long-term conditions and their families to live well.

The PhD Opportunity

Approximately 15 million people in England, representing 1 in 4 adults, have one or more long-term conditions (LTCs). A LTC is an illness that cannot be cured, but may be controlled with medicines or other treatments. People living with LTCs face considerable challenges around the management of their long-term physical and mental health.

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Chronic kidney disease (CKD) is a LTC with a global health concern⁴, high prevalence⁵ and substantial healthcare and societal costs.⁶⁻⁸ Patients with CKD commonly experience considerable symptom burden⁹ and associated poorer long-term health-related quality of life (HRQL)¹⁰ and mortality.^{11 12}

Increasingly, routine measurement of symptoms in CKD populations is undertaken using patient-reported outcome measures (PROMs): psychometrically validated questionnaires which collect informative data provided directly from the patient. ¹³ PROM data can be collected between clinic appointments, often alongside information regarding HRQL, in order to augment clinical data, build a longitudinal picture of disease burden and enhance care. ¹⁴ This approach has demonstrated considerable benefits in patients with cancer, including reduced A&E visits, fewer hospitalisations, increased HRQL and lower rates of mortality. ¹⁵⁻¹⁷ Feasibility of routine symptom monitoring has been established in patients with advanced CKD ¹⁸ and exploration of effectiveness in patients receiving dialysis is currently ongoing. ¹⁹

However, there remains much variation in the PROMs utilised to measure symptoms in CKD. In a recent systematic review and meta-analysis, 54 different PROMs were used to collect data on symptoms across the included studies, with no single tool measuring >45% of symptoms reported in the population. Thus, comprehensive measurement of the symptoms that matter most to patients with CKD currently requires concurrent completion of multiple PROMs, which may lead to questionnaire burden: a widely recognised threat to adherence.²⁰

Whilst there is ongoing work to standardise the PROMs used to measure HRQL and somatic symptoms in CKD, there remains uncertainty regarding the optimal PROM(s) for routine measurement of depression and anxiety. This is important, as the prevalence of both depression and anxiety is particularly high in patients with CKD²¹ ²² and depression is associated with a substantially increased risk of mortality.²³

We are looking for a PhD student who would like to develop an in-depth programme of research to enhance our understanding around the optimal PROM(s) for routine measurement of depression and anxiety in patients with CKD. This multi-disciplinary, collaborative study will be conducted across both University and NHS environments, offering an opportunity for the successful applicant to develop an applied research study which could directly impact patient outcomes in this important area of CKD care.

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Application Process

To begin the application process please go to https://www.worc.ac.uk/courses/allied-health-studies-mphilphd and click on 'How to Apply' in the top menu. This PhD could be caried out on a part time or full time basis so please select the relevant application link. On the application form, please make it clear that you are applying for one of our advertised projects so we can direct it straight to the relevant people.



The Interview

All successful applicants will be offered an interview with the proposed Supervisory Team. You will be contacted by a member of the Research School Team to find a suitable date. Interviews can be conducted in person or over Microsoft Teams.

Funding your PhD:

For information about Doctoral Loans please visit: https://www.worc.ac.uk/study/fees-and-finance/doctoral-loans.aspx

During your PhD you can access the Research Student Support Scheme to support dissemination costs associated with your research, up to £500 a year.

Research at the University of Worcester

Research is central to the University's mission to make a difference in everything that we do. We are committed to delivering excellent research which extends the boundaries of human knowledge but which also improves people's lives by enabling better health outcomes, improving food security, developing environmentally sustainable solutions for crop production and socially sustainable solutions to our ageing population, enhancing public knowledge and understanding of the past and present.

The University hence focuses its research around five high-level challenges facing society, locally, nationally and globally:

- · Human Health and Wellbeing
- Sustainable Futures
- <u>Digital Innovation</u>
- Culture, Identity and Social Exclusion
- Professional Education

The success of our research is reflected in our continuous improvement in external research assessment processes. In the most recent Research Excellence Framework, REF 2021, the University saw a near 50% increase in the scale of its research and 12% increase in quality, building on its performance in REF 2014 when it was the UK's most improved university in terms of Research Power, a combination of scale and quality.

Research Degrees at Worcester

Our research students are central to our overall mission for research. They are working at the cutting edge of their disciplines and driving forward the quality of our research whilst enriching our research culture. We are looking to increase our research student numbers as a strategic imperative.

Our commitment to our students is reflected in the results of the Postgraduate Research Experience Survey 2023 in which we ranked 3rd for overall research student satisfaction nationally. Key to our success in his area is the Research School, a focal point for all our research students.



It provides:

- day-to-day support for our students, both administrative and practical, through our dedicated team
- a Research Student Study Space with both PCs and laptop docking station
- a comprehensive Researcher Development Programme for students and their supervisors
- a programme of student-led conferences and seminars

Research Group

Living Well with Long-Term Conditions Research Group

Approximately 15 million people in England, representing 1 in 4 adults, have one or more long-term conditions (LTCs). A LTC is an illness that cannot be cured but may be controlled with medicines or other treatments. People living with LTCs face considerable challenges around the management of their long-term physical and mental health.

The 'Living Well with Long-Term Conditions' Research Group aims to facilitate the development and implementation of high-quality research and knowledge exchange, targeted at helping people with long-term conditions and their families to live well.

Widening Participation

As part of its mission statement the University is committed to widening participation for its higher degrees. Although most candidates will have an undergraduate and/or a Masters degree, the University is happy to accept applications from candidates with relevant professional qualifications and work related experience.

For further information or an informal discussion on this project, please contact Dr Dez Kyte (Director of Studies) via email at d.kyte@worc.ac.uk

