Wellcome Trust PhD Scheme: Preventing depression in people diagnosed with inflammatory arthritis: systematic review and intervention development.

Proposed supervisory team:

Prof Carolyn Chew-Graham, Professor of General Practice Research, Keele University. Expertise in mental health research in primary care, qualitative research methods.

Dr Sam Hider, Reader in Rheumatology, Keele University., Expertise in inflammatory rheumatological conditions, epidemiology.

Dr Nadia Corp, Research Fellow in Information Science/Systematic Reviews, Keele University. Expertise in evidence synthesis.

Dr Tom Kingstone, Lecturer in Mental Health and Wellbeing, Keele University. Expertise in qualitative methods.

Project description:

Background

Depression ranks third among disorders responsible for global disease burden, with all the concomitant economic costs to society, and will rank first in high-income countries by 2030 [1]. More than half of those with depression develop a recurrent or chronic disorder after a first depressive episode and are likely to spend more than 20% of their life-time in a depressed state. Depression has a significant negative impact on quality of life, morbidity and mortality [2]. Via inflammatory pathways depression also increases the risk of cardiovascular disease, dementia illnesses, and early death while amplifying disability, and health services use in those with coexisting long-term conditions [3].

People with long-term conditions (LTCs) have an increased risk of developing depression, which impact negatively on physical health outcomes [4].For people with Rheumatoid Arthritis (RA), prevalence of depression is estimated at 38% [5] and depression adversely impacts on physical health outcomes and response to treatment, and is an independent risk factor for mortality [6] Several other inflammatory rheumatological conditions (IRCs) such as ankylosing spondylitis, psoriatic arthritis, polymyalgia rheumatica are associated with joint and systemic symptoms and an increased risk of depression.

Prevention may offer new possibilities to reduce the disease burden of depressive disorders. A report of the Institute of Medicine defined prevention as any intervention aimed at preventing the onset of new cases of mental disorders in people who do not yet meet criteria for such a disorder [7]. Prevention may be directed toward the whole population (universal prevention) or high-risk groups (selective prevention), and NICE guidance [8] recommends that case-finding questions should be used to identify depression in people with LTCs. Cuipers et al [3] suggest that rather than identifying established depressive symptoms, and offering treatment, the strategy ought to be to offer stratified care, with depression prevention strategies targeted at people at increased risk, citing the economic argument [9,10]. People with IRCs are such an at-risk group.

There is evidence that depression prevention strategies may be effective in patients on dialysis [11] and other long-term conditions, but to date no evidence in people with inflammatory conditions. The COVID pandemic has reported to have had a significant impact on mental health, although evidence is mixed [12]. People with inflammatory conditions may have been specifically affected for several reasons including specific advice around shielding. Given the pandemic challenges, strategies to prevent depression in people who are at high risk may be of particular benefit.

Aim: to describe the current evidence-base for depression prevention strategies in people diagnosed with inflammatory rheumatological conditions and engage key stakeholders to develop a new prevention intervention.

Objectives

1. Establish the current evidence-base for the prevention of depression in people with inflammatory rheumatological conditions (IRCs).

2. Gain insight into the experiences of people with IRCs and healthcare practitioners, exploring perspectives on impact of the IRC on function and mood, how distress, low mood and depression are understood by patients and healthcare practitioners, and how anxiety and depression may be prevented or ameliorated.
3. Co-design (with lay and clinical stakeholders) a brief intervention to prevent and depression in people diagnosed with IRCs, to be delivered by a range of healthcare professionals (HCPs) in primary or specialist care.

Methods

Phase 1 – Systematic review and qualitative metasynthesis (objective 1)

A systematic review and qualitative metasynthesis of interventions to prevent anxiety and depression in people with IRCs will be conducted.

Phase 2- Qualitative study (objective 2)

Primary data collection – individual interviews (telephone, online, or in-person if allowed by COVID-19 restrictions) with:

1. People diagnosed (within previous 5years) with IRCs
2. Primary and Specialist care clinicians working with people with IRCs [general practitioners (GPs), practice nurses (PNs), health care assistants (HCAs), rheumatologists and rheumatology specialist nurses]
3. Clinicians who deliver interventions from the 'Improving Access to Psychological Therapies' (IAPT) service and specialist mental health services
4. Commissioners of services and members of Third sector organisations (including 'Social Prescribing').

Up to 40 semi-structured interviews will be conducted, using a topic guide to explore understandings of distress, stress, anxiety, low mood and depression in IRCs, how interventions to prevent mood problems might be developed, structured, commissioned and delivered. Impact of COVID-19 restrictions will be explored. The topic guide will be refined iteratively, as data collection and analysis progress. Transcripts from the interviews will be analysed using a framework approach [13] codes and themes within the frame will be agreed amongst the research team and patient advisory group to support trustworthiness of the analysis.[14]

Phase 3 Development of a brief psychological intervention to prevent depression in people diagnosed with IRCs (objective 3)

Expert group (including PPIE group members) will consider findings from phases 1 and 2 to co-design components of a brief psychological intervention that could be delivered by non-specialists. Further funding would be applied for to test this brief intervention in a feasibility study.

Dissemination plans

Results from this PhD will be disseminated via a variety of platforms, targeted to ensure maximum impact including presentation at clinical and academic conferences, publications, summary report for patients and information (written, video on You-Tube) for patients and carers about prevention of depression in IRCs.

Training plan:

This will be individualised and informed by the skills and needs of the student but will include

- Systematic review training
- Qualitative Research Methods and Advanced Qualitative Research Methods
- Co-production methods

Throughout the PhD the student will receive support and career mentoring from the supervision team. There will be opportunities to attend seminars in the School of Medicine as well as Keele University training courses and interdisciplinary training offered via the Keele Doctoral Academy and Keele Institute for Liberal Arts and Sciences.

References

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