BU PhD STUDENTSHIPS 2017
PROJECT DESCRIPTION

PROJECT DETAILS

Project Title

Communication: Can language as a contextual factor influence treatment efficacy of low back pain?

Project Summary

Aims

This match-funded studentship (matched by Anglo European College of Chiropractic (AECC)) across three HEIs aims to explore non-specific factors that influence treatment efficacy for low back pain (LBP) following manual therapy. A systematic review will precede a cohort study to explore influential non-specific components. Followed by a feasibility intervention study to explore the efficacy of these components.

Rationale

LBP is a major health problem, causing more global disability than any other health condition. Its economic and societal impact is significant. In the UK, five million working days are lost annually to LBP at a cost of approximately £600 million. LBP is the leading reason for medical consultation accounting for 2-3% of all GP consultations. Research is needed to aid the understanding of how to manage LBP more effectively.

There are so-called “non-specific (contextual) factors” associated with treatments that influence outcomes, which have been described broadly as “social, environmental and psychological factors”. It has been proposed that there are five domains: i) patient-professional interaction; ii) patient beliefs, iii) practitioner beliefs; iv) healthcare environment and v) treatment characteristics. Functional MRI has shown that pain related words can activate brain circuits in a similar way to an external pain source (e.g. metabolite accumulation in an exercising muscle). It is suggested that patient beliefs and practitioner’s beliefs about LBP and the patient-professional dialogue may be powerful mediums that influence treatment efficacy.

On the positive side, listening to a person’s story and communicating within the context of the human dimensions of illness and healing are believed to be integral to the therapeutic management of pain. Little if any research has explored the influence of non-specific factors, such as the modulation of language, alongside a treatment intervention for LBP.

Methods

1. A systematic review of the literature to evaluate current evidence relating to non-specific factors and their impact within a therapeutic setting.

2. A mixed methods study – using a published protocol (Bradbury et al 2016). In which chiropractic practitioners practicing in the UK (including AECC) each recruit adults presenting with LBP. The primary outcome measure with be the Roland-Morris Disability Questionnaire (RMDQ) for LBP and the evidenced non-specific factors. Patients will be selected randomly for interview to add insight into patient-professional communication.

3. Feasibility assessment in 50 patients for a randomized controlled intervention study to examine scripted patient-professional communication. Primary outcome measure will be the RMDQ.
Outcomes

- Unique knowledge relating to patient-professional communication within a therapeutic setting - potential for broader translation in other health and social care settings.
- A detailed understanding of the impact of communication style in practitioner-patient interactions and outcomes in those with LBP - potential for broader translation to other chronic conditions.
- Peer reviewed publications in high impact journals, e.g. British Medical Journal open (IF 2.56), Journal of Pain (IF 4.01).
- Opportunity to collaborate with two neighbouring HEIs, building on existing research collaborations and building links with a high ranking HEI.
- Supervision of a PhD and training for an early career researcher in supervising a PhD.

Academic Impact

This study will be supervised/advised by a team from three HEIs that will contribute new knowledge, influence practice, provide collaborations with a high ranking university and provide a development opportunity for an early career researcher. The team comprises Associate Professor Carol Clark (BU) with clinical and research expertise in LBP. Dr Dave Newell (AECC) an experienced musculoskeletal researcher with expertise in patient reported outcomes measures in large prospective cohorts. Associate Professor Felicity Bishop (Southampton University) a health psychologist with expertise in non-specific/contextual effects and mixed methods research. Dr Clare Killingback (BU), an early career researcher with expertise in mixed-methods systematic reviews and qualitative research methodologies.

There is a gap in knowledge relating to non-specific/contextual factors influencing treatment efficacy. This hampers any rigorous and clinically informative efforts to advise clinicians on the most efficacious communication approaches that will improve treatment outcomes. Understanding the importance of communication and interactions that improve therapeutic outcomes are likely to be translational to other long term conditions. This study will add substantively to the academic literature on the management of LBP. Clinically, the findings could form the basis of detailed protocols that support clinicians working with LBP and other long term conditions.

Societal Impact

Analgesia in the form of medication and/or therapeutic intervention is commonly used for the treatment of LBP. There is evidence that this analgesic effect is enhanced by non-specific factors within a therapeutic encounter, such as patient-practitioner communication style. The analgesia effect associated with non-specific factors has a neurophysiological basis and can be clinically significant, with a large and sustained effect.

There is a high prevalence of LBP which is burdensome for patients, and has both direct and indirect societal costs. There is a need to understand the role of contextual factors and to use these factors to maximise treatment effects for those with LBP. Addressing the non-specific factors offers an alternative perspective that could lead to tangible benefits for individual patients with both economic and societal impact. This study aims to model the role of non-specific factors in terms of increasing treatment efficacy for patients and also in terms of reducing analgesic medication and/or therapeutic intervention through the enhancement of non-specific factors which increase endogenous pain modulation.

Training Opportunities

This project involves a supervisory/advisory team spanning three academic institutions with multidisciplinary expertise.

Carol Clark - mixed methods clinical research in long term musculoskeletal conditions including LBP.
Dave Newell - qualitative and quantitative clinical research large cohort musculoskeletal studies.

Clare Killingback – expertise in mixed methods systematic reviews and qualitative studies.

In addition, Felicity Bishop (advisor) extensive experience and a publication record exploring non-specific factors. She has led projects in primary health care research at University of Southampton in a group that ranks highly in the national rankings in primary health care research and has links with research teams in the NHS.

The successful PGR would have access to the Bournemouth University Graduate School Research Development Programme. This provides regular training opportunities on key research skills such as knowledge and intellectual abilities, personal effectiveness, research governance and organisation, engagement, influence and impact. This would support the PGR in taking an organised and logical approach to their personal and professional development as well as enhancing their employability at the end of their studies. The annual PGR conference would provide further opportunities for the successful candidate to grow in confidence in disseminating research findings through conferences.

**SUPERVISORY TEAM**

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<tr>
<th>First Supervisor</th>
<th>Dr Carol Clark</th>
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<td>Additional Supervisors</td>
<td>Dr Dave Newell</td>
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<td>Dr Clare Killingback</td>
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<td>Dr Felicity Bishop (advisor)</td>
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**Recent publications by supervisors relevant to this project**

Bishop FL, Lewith GT. (2016) A qualitative exploration of how patients conceptualise their acupuncturists: technicians, caring professionals, and wise healers. Complementary Therapies in Medicine, 27, 74-81. DOI: http://dx.doi.org/10.1016/j.ctim.2016.06.005


Clark, C.J., Doherty, S, Osborne, N, Khattab, A. 2014. A pilot study to compare passive lumbar spine repositioning error in those with chronic low back pain. International Musculoskeletal Medicine 36 (3) 105-110

Clark, C.J., Khattab, AD., Carr, ECJ., 2014 Chronic widespread pain and neurophysiological symptoms in Joint Hypermobility Syndrome (JHS). International Journal of Therapy and Rehabilitation 21 (2) 60-67

(Killingback neé Farrance)


Farrance C, Tsolfiou F, Clark C.J.2015 Evaluating the views of participants and adherence rates of community based group exercise interventions: a mixed methods systematic review Physiotherapy, Volume 101, Supplement 1, May 2015, Pages e374-e375


BU PhD Studentship Project Description
INFORMAL ENQUIRIES

To discuss this opportunity further, please contact Carol Clark via email: cclark@bournemouth.ac.uk

ELIGIBILITY CRITERIA

Studentship candidates must demonstrate outstanding academic potential with preferably a 1st class honours degree and/or a Master’s degree with distinction or equivalent Grade Point Average. An IELTS (Academic) score of 6.5 minimum (with a minimum 5.5 in each component) is essential for candidates for whom English is not their first language. In addition to satisfying basic entry criteria, BU will look closely at the qualities, skills and background of each candidate and what they can bring to their chosen research project in order to ensure successful completion.

Additional Eligibility

All candidates must be a member or applying for membership of the General Chiropractic Council (GCC) by commencement of the PhD.

HOW TO APPLY

Please complete the online application form by 5 April 2017. Further information on the application process can be found at: www.bournemouth.ac.uk/studentships