

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/161855/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Boots, Madeline C., Button, Kate and Bundy, Christine 2017. Exploring practice & clinical evidence with pre-manipulative testing for cervical arterial dysfunction amongst musculoskeletal physiotherapists within a Welsh Health Board. *Physiotherapy* 103 (1) , e110. 10.1016/j.physio.2017.11.088

Publishers page: <https://doi.org/10.1016/j.physio.2017.11.088>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



## CSP ABSTRACT SUBMISSION APPLICATION

### **a) Title (less than 20 words)**

Exploring public perception of brief interventions for physical activity according to guidelines, for the management of MSK pain, in Wales.

### **b) Names of presenter and co-author:**

Madeleine C Boots, Dr Kate Button, Professor Christine Bundy

### **c) Contact details of all authors to include:**

Madeleine C Boots, Lecturer (Physiotherapy), School of Health Care Sciences, Cardiff University, [bootsm1@cardiff.ac.uk](mailto:bootsm1@cardiff.ac.uk), Tel: +44(0)29 206 87567, Address: GF1/1, School of Healthcare Sciences, College of Biomedical and Life Sciences, Cardiff University, Tŷ Dewi Sant, Heath Park, Cardiff, CF144XN

### **d) Relevance to conference theme(s) (50 words) Exercise & Decision Making (49)**

Physical activity & exercise impacts health, comorbidity risk and musculoskeletal pain. Prudent healthcare encourages evidence-based practice discouraging inactivity & influencing behaviour change principles for significant physical activity uptake. Understanding the context of barriers to change is central to effective brief intervention; this study seeks a public perspective & experiences.

### **e) Brief biography of presenting author [150 words]**

Madeleine is a qualified physiotherapist specialising in persistent musculoskeletal pain and behaviour change, with over 12 years of NHS clinical experience, now lecturing at Cardiff University and running her private clinical practice in Cowbridge.

Her current research portfolio is exploring influences on behaviour change in students, clinicians and the general public with a view to understanding how the quality of brief interventions can be improved. She is starting her PhD in 2020 to examine innovative ways to improve efficiency and effectiveness of physical activity brief intervention, enhancing individual tailoring and increasing clinician confidence in signposting to physical activity providers within Wales.

### **f) Information concerning any presentations or publications of the work made prior to conference (see General information, point 13) [maximum 50 words]**

This research has not yet been presented elsewhere prior to Physio UK 2020.

### **g) Ethical review This section is very important and many abstracts 'fall down' here. If you are undertaking research in health and social care, independent ethical review is a legal requirement. We expect each author to have abided by the requirements of their country/organisation.**

This study has received ethical approval granted by the *Cardiff University School of Healthcare Research Ethics Committee Board* on 25<sup>th</sup> June 2019

**Title**

Exploring public perception of brief interventions for physical activity according to guidelines, for the management of MSK pain, in Wales.

**Publications:** This research has not yet been presented elsewhere.

**Ethical Review:** This study has received ethical approval granted by the *Cardiff University School of Healthcare Research Ethics Committee Board* on 25<sup>th</sup> June 2019

**Authors:** Madeleine C Boots, Dr Kate Button, Professor Christine Bundy

**Purpose:** To explore the experiences of those with musculoskeletal (MSK) pain, having received physical activity (PA) brief intervention by healthcare professionals; understanding how the advice was accepted and whether advice and signposting influenced change behaviour. It will examine whether individualised approaches were received and whether behaviour change (BC) interventions were supportive and resulted in PA levels in accordance with national guidelines.

**Methods:** Qualitative approach using semi-structured focus groups of 6. Public & Patient Involvement (PPI) was used to develop questions alongside the theoretical domain framework. A robust convenience sampling strategy was designed to target PPI groups (Cardiff University & Swansea University), through Twitter & Facebook linking in Cymru Versus Arthritis, Versus Arthritis, Health Care & Research Wales, NIHR and Cardiff University social media handles & platforms. Hashtags used were: #physicalactivityresearch, #physicalactivity & #loveactivity. Recruitment posters were also displayed in most Cardiff Community Hubs and Cardiff University Building on Heath Campus. Inclusion criteria required adults with MSK pain who had received brief intervention addressing improving physical activity.

**Results:** 7 volunteers expressed an initial interest from PPI groups. 4 were recruited. Two focus groups were conducted, in Cardiff and Swansea, in October 2019 with 2 participants in each. Non-attendance was 71%.

Further recruitment drive extended to include social media platforms.

Focus group numbers did not meet minimum levels anticipated. Further 50% of each conducted focus group did not meet the full inclusion criteria, resulting in discussion around exercise prescription and not PA brief interventions in keeping with national guidelines. Further recruitment methods did not result in further participants and significant blocks to recruitment were experienced.

**Conclusion:** The significant finding here is in the inability to successfully recruit appropriate participants to answer the proposed research question. This poses more questions about whether this the leading cause of a lack of published research targeting participant experiences with brief intervention and their resultant BC. BC is complex and changing PA levels requires complex and theoretically unpinned interventions ensuring they are appropriate and effective. Published research calls for the need to delve into PA in those with MSK pain and adherence to BC interventions. Simple quantitative outcome measures however cannot successfully measure the impact of BC interventions calling into question the evidence base around efficiency,

effectiveness and cost-effectiveness to be in question and often poor. Further qualitative data is required to explore this issue, but tackling recruitment is vital and requires support at local & national levels to explore the adequacy of BC interventions at changing physical activity behaviour to improve musculoskeletal pain and general health.

**Impact:** This study has supported a need for local and national level involvement to review and create channels for participant recruitment with fewer obstacles; such as collaborative ethics boards, to allow researchers to work across private, public and third sector to explore the impact of BC interventions of physical activity behaviour within the MSK pain population within Wales.

433

**Key words (up to 3 words, reflect themes)**

Behaviour decision making

**Funding acknowledgements**

This study was funded by RCBC Wales First into Research and supported by Cardiff University