

# Psychoeducation with problem-solving (PEPS) therapy for adults with personality disorder: a pragmatic randomised controlled trial to determine the clinical effectiveness and cost-effectiveness of a manualised intervention to improve social functioning

Mary McMurran,<sup>1\*</sup> Mike J Crawford,<sup>2</sup> Joe Reilly,<sup>3,4</sup> Juan Delport,<sup>5</sup> Paul McCrone,<sup>6</sup> Diane Whitham,<sup>7</sup> Wei Tan,<sup>7</sup> Conor Duggan,<sup>1,8</sup> Alan A Montgomery,<sup>7</sup> Hywel C Williams,<sup>7</sup> Clive E Adams,<sup>1</sup> Huajie Jin,<sup>6</sup> Matthew Lewis<sup>5</sup> and Florence Day<sup>7</sup> on behalf of the PEPS Trial Collaborative Group

<sup>1</sup>Institute of Mental Health, University of Nottingham, Nottingham, UK

<sup>2</sup>Centre for Mental Health, Imperial College London, London, UK

<sup>3</sup>School of Medicine, Pharmacy & Health, Centre for Integrated Health Care Research, Durham University, Durham, UK

<sup>4</sup>Tees, Esk & Wear Valleys NHS Foundation Trust, Middlesbrough, UK

<sup>5</sup>Centre for Psychological Therapies, Cwm Taf University Health Board, Mountain Ash, UK

<sup>6</sup>Institute of Psychiatry, King's College London, London, UK

<sup>7</sup>Nottingham Clinical Trials Unit, University of Nottingham, Nottingham, UK

<sup>8</sup>Partnerships in Care, Nottingham, UK

\*Corresponding author

**Declared competing interests of authors:** Hywel Williams is Deputy Director of the National Institute for Health Research (NIHR) Programme and chairperson of the Health Technology Assessment (HTA) Commissioning Board. From 1 January 2016 he became Programme Director for the HTA programme. The NIHR HTA programme funded this study; however, Professor Williams was not involved in that funding decision.

**Disclaimer:** This report contains transcripts of interviews conducted in the course of the research and contains language that may offend some readers.

Published July 2016

DOI: 10.3310/hta20520

## Plain English summary

### **Psychoeducation with problem-solving**

Health Technology Assessment 2016; Vol. 20: No. 52

DOI: 10.3310/hta20520

NIHR Journals Library [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

## Plain English summary

A personality disorder is a pattern of beliefs and behaviour that causes distress and difficulties to both the affected person and others. We conducted a well-designed evaluation of a treatment called psychoeducation with problem-solving (PEPS) to see if it improved social functioning, which is how well people get on in their day-to-day lives. Psychoeducation involves up to four sessions of an individual talking with a mental health professional about their diagnosis of personality disorder and what it means for them. Participants are then offered 12 group sessions to learn a problem-solving approach to overcome some of their difficulties. We recruited 306 adults and divided them randomly (by chance) to receive PEPS plus usual treatment or usual treatment alone. We planned to recruit 340 people but it was noticed that people receiving PEPS had more adverse events, such as hospital admissions, than those who did not and so we stopped recruiting people early. About 12 months after the end of treatment we found no differences in social functioning between those who received PEPS and those who did not. There were no differences on any other measures – cost of services, quality of life, mood or problem severity. There were more adverse events reported in the PEPS group, but this difference could be as a result of chance. We found no evidence to support the use of PEPS therapy alongside standard care within the NHS to improve social functioning of adults with personality disorder living in the community.



ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 4.058

*Health Technology Assessment* is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the ISI Science Citation Index.

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics (COPE) ([www.publicationethics.org/](http://www.publicationethics.org/)).

Editorial contact: [nhredit@southampton.ac.uk](mailto:nhredit@southampton.ac.uk)

The full HTA archive is freely available to view online at [www.journalslibrary.nihr.ac.uk/hta](http://www.journalslibrary.nihr.ac.uk/hta). Print-on-demand copies can be purchased from the report pages of the NIHR Journals Library website: [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

## Criteria for inclusion in the *Health Technology Assessment* journal

Reports are published in *Health Technology Assessment* (HTA) if (1) they have resulted from work for the HTA programme, and (2) they are of a sufficiently high scientific quality as assessed by the reviewers and editors.

Reviews in *Health Technology Assessment* are termed 'systematic' when the account of the search appraisal and synthesis methods (to minimise biases and random errors) would, in theory, permit the replication of the review by others.

## HTA programme

The HTA programme, part of the National Institute for Health Research (NIHR), was set up in 1993. It produces high-quality research information on the effectiveness, costs and broader impact of health technologies for those who use, manage and provide care in the NHS. 'Health technologies' are broadly defined as all interventions used to promote health, prevent and treat disease, and improve rehabilitation and long-term care.

The journal is indexed in NHS Evidence via its abstracts included in MEDLINE and its Technology Assessment Reports inform National Institute for Health and Care Excellence (NICE) guidance. HTA research is also an important source of evidence for National Screening Committee (NSC) policy decisions.

For more information about the HTA programme please visit the website: <http://www.nets.nihr.ac.uk/programmes/hta>

## This report

The research reported in this issue of the journal was funded by the HTA programme as project number 08/53/06. The contractual start date was in February 2010. The draft report began editorial review in November 2014 and was accepted for publication in December 2015. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health.

© Queen's Printer and Controller of HMSO 2016. This work was produced by McMurrin *et al.* under the terms of a commissioning contract issued by the Secretary of State for Health. This issue may be freely reproduced for the purposes of private research and study and extracts (or indeed, the full report) may be included in professional journals provided that suitable acknowledgement is made and the reproduction is not associated with any form of advertising. Applications for commercial reproduction should be addressed to: NIHR Journals Library, National Institute for Health Research, Evaluation, Trials and Studies Coordinating Centre, Alpha House, University of Southampton Science Park, Southampton SO16 7NS, UK.

Published by the NIHR Journals Library ([www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)), produced by Prepress Projects Ltd, Perth, Scotland ([www.prepress-projects.co.uk](http://www.prepress-projects.co.uk)).

## **Health Technology Assessment Editor-in-Chief**

**Professor Hywel Williams** Director, HTA Programme, UK and Foundation Professor and Co-Director of the Centre of Evidence-Based Dermatology, University of Nottingham, UK

## **NIHR Journals Library Editor-in-Chief**

**Professor Tom Walley** Director, NIHR Evaluation, Trials and Studies and Director of the EME Programme, UK

## **NIHR Journals Library Editors**

**Professor Ken Stein** Chair of HTA Editorial Board and Professor of Public Health, University of Exeter Medical School, UK

**Professor Andree Le May** Chair of NIHR Journals Library Editorial Group (EME, HS&DR, PGfAR, PHR journals)

**Dr Martin Ashton-Key** Consultant in Public Health Medicine/Consultant Advisor, NETSCC, UK

**Professor Matthias Beck** Chair in Public Sector Management and Subject Leader (Management Group), Queen's University Management School, Queen's University Belfast, UK

**Professor Aileen Clarke** Professor of Public Health and Health Services Research, Warwick Medical School, University of Warwick, UK

**Dr Tessa Crilly** Director, Crystal Blue Consulting Ltd, UK

**Dr Eugenia Cronin** Senior Scientific Advisor, Wessex Institute, UK

**Ms Tara Lamont** Scientific Advisor, NETSCC, UK

**Professor Elaine McColl** Director, Newcastle Clinical Trials Unit, Institute of Health and Society, Newcastle University, UK

**Professor William McGuire** Professor of Child Health, Hull York Medical School, University of York, UK

**Professor Geoffrey Meads** Professor of Health Sciences Research, Health and Wellbeing Research and Development Group, University of Winchester, UK

**Professor John Norrie** Health Services Research Unit, University of Aberdeen, UK

**Professor John Powell** Consultant Clinical Adviser, National Institute for Health and Care Excellence (NICE), UK

**Professor James Raftery** Professor of Health Technology Assessment, Wessex Institute, Faculty of Medicine, University of Southampton, UK

**Dr Rob Riemsma** Reviews Manager, Kleijnen Systematic Reviews Ltd, UK

**Professor Helen Roberts** Professor of Child Health Research, UCL Institute of Child Health, UK

**Professor Jonathan Ross** Professor of Sexual Health and HIV, University Hospital Birmingham, UK

**Professor Helen Snooks** Professor of Health Services Research, Institute of Life Science, College of Medicine, Swansea University, UK

**Professor Jim Thornton** Professor of Obstetrics and Gynaecology, Faculty of Medicine and Health Sciences, University of Nottingham, UK

**Professor Martin Underwood** Director, Warwick Clinical Trials Unit, Warwick Medical School, University of Warwick, UK

Please visit the website for a list of members of the NIHR Journals Library Board:  
[www.journalslibrary.nihr.ac.uk/about/editors](http://www.journalslibrary.nihr.ac.uk/about/editors)

**Editorial contact:** [nihredit@southampton.ac.uk](mailto:nihredit@southampton.ac.uk)