Institution: King's College London

Unit of Assessment: UoA4 - Psychology, Psychiatry & Neuroscience

Title of case study: 1: Developing a new treatment: Cognitive Behaviour Therapy for Psychosis

1. Summary of the impact

King's College London (KCL) researchers developed cognitive behaviour therapy for psychosis (CBTp), which is now a National Institute for Health and Care Excellence-recommended psychological intervention. CBTp is now part of routine NHS treatment and an estimated 25,000 patients in England and Wales receive it annually. Implementation of CBTp has been steered by KCL researchers' involvement with the Government's Increasing Access to Psychological Therapies - Severe Mental Illness initiative. The KCL model for CBTp has been used to develop clinics in Australia and the US and information on this therapy is disseminated via a KCL-led website.

2. Underpinning research

Psychosis, a serious mental illness, affects at least 1% of the population. Historically, treatment was medication; however, only approximately 50% receive any benefit. Research at the Institute of Psychiatry, King's College London (KCL) on cognitive behaviour therapy for psychosis (CBTp) has been led for over 30 years by Prof Philippa Garety (1997-present, Professor of Clinical Psychology) and Prof Elizabeth Kuipers (1982-present, Professor of Clinical Psychology), who have collaborated over this period with several colleagues including Prof Paul Bebbington (1977-1996, Lecturer to Reader), Prof Daniel Freeman (1993-2010, Lecturer to Reader), Prof Graham Dunn (1979-96, Lecturer to Reader) and Prof David Fowler at the University of East Anglia, who worked previously at KCL (1986-89).

KCL researchers show the utility of CBTp

To investigate the utility of CBTp, in the early 1990's KCL researchers undertook a small waiting list controlled trial involving patients with schizophrenia or schizo-affective psychosis who presented unremitting positive symptoms despite drug therapy. An average of 16 sessions were delivered over 6 months with few drop-outs. The treatment group improved significantly compared with the controls on a number of measures including reduction in delusional conviction, general symptoms and depression scores (1). The new interventions from this study were published in 1995 as a manual that has been used as the basis for subsequent randomised controlled trials carried out by KCL researchers and other groups (2).

Collaborative work highlights the patient and economic benefits of CBTp

In the late 1990's, in collaboration with University College London and the Universities of East Anglia and Manchester, KCL researchers carried out a randomised controlled trial involving participants who received care as usual with (n = 28) or without (n = 32) individualised CBTp. Here, 50% of the CBTp group responded positively compared with only 31% of the controls, with significant and continuing improvement at 9 months. Those who benefited had a long history of psychosis with persistent and medication-resistant symptoms. The effects of CBTp on their symptoms were similar to those found in trials of the antipsychotic drug clozapine, the most effective antipsychotic medication for otherwise medication-resistant patients. Very few dropped out of CBTp treatment and most reported they were extremely satisfied (3). An economic evaluation showed that the cost of providing CBTp had been offset by savings on mental health service utilisation and associated costs during follow-up that individuals would have needed had their symptoms not improved (4). A further, multi-centre KCL-led trial in 2008 randomly allocated 133 out of 301 people with psychosis to receive CBTp plus standard treatment over 9 months. The CBTp cohort improved on depression scores over 2 years, but not on relapse, with improvements seen in delusional distress and social functioning (5). A meta-analysis by KCL researchers of 34 CBTp trials found overall beneficial effects for the target symptom as well as significant effects for positive and negative symptoms, functioning, mood and social anxiety (6).

KCL researchers work with service users to produce a service user valued CBTp outcome

KCL research led by Dr Kathy Greenwood (2002-2008, Research Clinical Psychologist), with Profs Garety and Kuipers, Dr Angela Sweeney (2004-2010, KCL service user researcher) and Dr Emmanuelle Peters (1999-present, Reader in Clinical Psychology) led to the development of a new service user measure of outcome for CBTp in 2010. Traditionally such outcome measures have

focused mainly on symptom change rather than on distress or fulfilment, which were emphasised by service users. This study used participatory methods in partnership with service users who had received CBTp to investigate which aspects of treatment outcomes service users consider most important. The final measure, called CHOICE, includes 24 items and the dimensions severity and satisfaction (6).

3. References to the research

1. Garety PA, Kuipers L, Fowler D, et al. CBT for drug-resistant psychosis. Br J Med Psychol 1994;67:259-71. Doi: 10.1111/j.2044-8341.1994.tb01795.x (122 Scopus citations)
2. Fowler D, Garety P, Kuipers E. (1995) CBT for Psychosis: Theory and Practice (Wiley Series in Clinical Psychology). John Wiley & Sons. Chichester. ISBN-13: 978-0471956181.
3. Kuipers E, Garety P, Fowler D, et al. London-East Anglia randomised controlled trial of CBT for psychosis. I: Effects of the treatment phase. Br J Psychiatry 1997;171:319-27. Doi: 10.1192/bjp.171.4.319 (245 Scopus citations)
4. Kuipers E, Fowler D, Garety P, et al. London-East Anglia randomised controlled trial of CBT for psychosis. III: Follow-up and economic evaluation at 18 months. Br J Psychiatry 1998;173:61-8. Doi: 10.1192/bjp.173.1.61 (136 Scopus citations)
5. Garety PA, Fowler DG, Freeman D, et al. CBT and family intervention for relapse prevention and symptom reduction in psychosis: randomised controlled trial. Br J Psychiatry 2008;192(6):412-23. Doi: 10.1192/bjp.bp.107.043570 (82 Scopus citations)
6. Wykes T, Steel C, Everitt B, et al. CBT for schizophrenia: effect sizes, clinical models, and methodological rigor. Schizophr Bull 2008;34(3):523-37. Doi: (221 Scopus citations)
7. Greenwood KE, Sweeney A, Williams S, et al. CHoice of Outcome In Cbt for psychosEs (CHOICE): The Development of a New Service User-Led Outcome Measure of CBT for Psychosis. Schizophr Bull 2010;36(1):126-35. Doi: 10.1093/schbul/sbp117 (11 Scopus citations)

Grants

- 1991-1992. £20,000. PIs: Garety, Kuipers. Investigation of Cognitive Behavioural therapy for schizophrenia patients: a pilot study. Bethlem and Maudsley Trustees Grant.
- 1993-1996. £302,000. PIs: Kuipers, Garety, Fowler, Dunn, Bebbington. Cognitive Behaviour Therapy in psychosis: a controlled trial. Department of Health.
- 2001–2007. £1.6 million. PIs: Garety, Kuipers, Fowler, Dunn, Bebbington. Cognitive, emotional and social processes in psychosis. Wellcome Trust.
- 2004-2006. £49,870. PIs: Peters, Greenwood, Kuipers, Garety, Scott. Evaluating CBT for Psychosis: a new approach. South London and Maudsley NHS Foundation Grant.
- 2008–2012. £455,511. PIs: Garety, Kuipers, Fowler, Bebbington, Dunn, Freeman. Cognitive mechanisms of change in delusions. Wellcome Trust.

4. Details of the impact

Up to 220,000 people in the UK a year will experience psychosis, at a cost of around £11.8 billion. Only 8% of people with psychosis are likely to be employed and the impact of their difficulties affects close family members. Research at King's College London (KCL) demonstrated that new cognitive behavioural approaches for psychosis (CBTp) together with antipsychotic medication are helpful, as well as cost-effective and popular with service users.

KCL research affects clinical guidelines: In 2010, the National Institute for Health and Care Excellence (NICE) published an updated Schizophrenia guideline (1a). One of its 10 key recommendations is that at least 16 one-to-one sessions of CBTp should be offered. Underpinning evidence for this recommendation included several KCL-led trials (Kuipers et al. 1997, 1998; Garety et al. 2008, along with a number of reviews by Prof Garety). The definitions for CBTp that Profs Garety and Kuipers developed for the 2010 NICE guideline were also used for the 2013 NICE guideline for children and young people with psychosis and schizophrenia (1b). Similar recommendations are made by the USA Patient Outcomes Research Team (PORT), with reference to the research studies of Garety et al. 1994, 2008; Kuipers et al. 1997 and Wykes et al. 2008 (1c). Both NICE and PORT schizophrenia guidelines are rated as among the best in the world (1d).

A November 2012 Schizophrenia Commission survey found that 43% of those questioned

(including practitioners, service users and their families) said that CBTp was the most valued intervention alongside medication. They recommended to NHS Clinical Commissioning Groups that they "should ensure that they commission services for people with schizophrenia and psychosis in line with NICE … including CBT for psychosis" (1e).

KCL research helps implement CBTp: Once a treatment is recommended by NICE guidelines there is a requirement for local services to consider how to deliver this. In 2011, widening access to CBTp was included in the Department of Health (DH) strategy for mental health, where it was stated that "local commissioners and providers need to realise the benefits of talking therapies for people with ... severe mental illness" (2a). To advise on best ways to implement such priorities, in 2011 the DH expanded the Increasing Access to Psychological Therapies to include Severe Mental Illness (IAPT-SMI), which aims to "increase public access to a range of NICE-approved psychological therapies for psychosis, bipolar disorder and personality disorders" (2b). In order to ensure that therapy is delivered to a uniformly high standard, the IAPT-SMI programme developed a competencies framework which included input from Profs Kuipers and Garety. One of the competencies is to have "an ability to draw on knowledge of the theory and principles underpinning therapeutic models commonly applied for people with psychosis and bipolar disorder ... e.g.: cognitive behaviour therapy" (2c,d).

Implementation of CBTp has been steered by an Expert Advisory Group which has drawn on Profs Garety and Kuipers' research and expertise.

- Garety is the clinical lead for the South London and Maudsley Foundation NHS Trust (SLaM, one of KCL's NHS partners) National Demonstration Centre for IAPT-SMI, one of just two such sites (2b)
- IAPT-SMI has adopted a 'Ten Point Charter' developed by Garety and colleagues in SLaM, which shows how to improve access to CBTp in NHS settings (2e)
- A measure for assessing outcomes of CBTp from the perspective of service users, CHOICE (Greenwood et al. 2010), developed at KCL, was selected in 2012 as the key patient reported session-by-session outcome measure for the IAPT-SMI Demonstration sites (2e)

KCL research underpins a model service and international training and dissemination: Following successful trials at KCL, a CBTp clinic was opened in 1999 at the Maudsley Hospital, with DoH funding to Prof Kuipers to develop a model service. The Psychological Intervention Clinic for outpatients with Psychosis (PICuP) investigated the effectiveness of CBTp in routine service settings and found improved outcomes. PICuP is now part of the SLaM IAPT-SMI demonstration site (3a).

These models have now been adopted internationally. For instance, the Voices Clinic at Alfred Hospital in Melbourne, Australia provides CBTp based on KCL researchers' therapy manual. Significant improvements have been shown by their published research (3b). In another example in the USA, the CBTp Program at Weill Cornell Medical College, New York established the Institute of Cognitive Therapy for Psychosis in 2008, based in part on the KCL model. This provides CBTp training throughout the USA (3c). The therapy manual is also used by the Canadian Prevention and Early Intervention Program for Psychoses, a community focused mental health programme (3d) and both the manual and improvements to the therapy method have been adopted in a German multicentre randomised controlled trial (RCT) (3e) and an Italian multicentre RCT of early intervention in psychosis (3f). KCL CBTp experts have also disseminated their approach by training professionals under the auspices of the World Congress of Behavioural and Cognitive Psychotherapies, most recently in Peru in July 2013 (3g).

Public dissemination of CBTp: The impact and effectiveness of CBTp has also been communicated to the wider public. It was featured in an ITV news programme in Dec 2012 (4a) and is also discussed on the KCL-led psychosis carer and patient-centred website mentalhealthcare.org.uk. In May 2013 it had 26,000 hits (7b).

5. Sources to corroborate the impact

1) Clinical guidelines including CBTp

a. NICE Schizophrenia - Core interventions in the treatment and management of schizophrenia in

adults in primary and secondary care. 2010: http://www.nccmh.org.uk/downloads/Schizophrenia_update/Schizophrenia%20full%20guideline%20post-publication%20version.pdf
b. NICE for children and young adults. Kendall T, Hollis C, Stafford M, et al. Recognition and management of psychosis and schizophrenia in children and young people: summary of NICE guidance. BMJ. 2013 Jan 23;346:f150. Doi: 10.1136/bmj.f150.
c. PORT: Dixon LB, Dickerson FB, Bellack AS, et al. The 2009 schizophrenia PORT Psychosocial treatment recommendations and summary statements. Schizophr Bull 2010;36(1):48-70. Doi: 10.1093/schbul/sbp115
d. Gaebel W, Riesbeck M, Wobrock T. Schizophrenia guidelines across the world: a selective review and comparison. Int Rev Psychiatry 2011; 23(4):379-87. Doi: 10.3109/09540261.2011.606801.
e. The Abandoned Illness. A report by the Schizophrenia Commission Report. Nov 2012: http://www.rethink.org/media/514093/TSC_main_report_14_nov.pdf

2) Implementation of CBTp

a. Department of Health. Talking Therapies: A four-year plan of action (pgs 21, 22: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213765/dh_123985.pdf
b. IAPT Website: http://www.iapt.nhs.uk/smi-/
c. Roth and Pilling (2013). A Competence framework for psychological interventions for people with psychosis and bipolar disorder (pgs 17, 23): http://www.ucl.ac.uk/clinical-psychology/CORE/Docs/Working%20with%20Psychosis%20and%20Bipolar%20Disorder%20background%20document%20web%20version.pdf
d. Generic Therapeutic Competencies (p1): http://www.ucl.ac.uk/clinical-psychology/CORE/Docs/All%20generic%20competences%20web%20version.pdf
e. Letter of corroboration from National Clinical Advisor for IAPT SMI (August 2013)

3) Model service, international training and dissemination

a. PICuP
   - Website: http://www.national.slam.nhs.uk/services/adult-services/picup/
   - Booklet: https://www.national.slam.nhs.uk/wp-content/uploads/2011/08/PICuP-Service-Booklets.pdf
   - Evidence of PICuP effectiveness: Peters E, Landau S, McCrone P, et al. A randomised controlled trial of cognitive behaviour therapy for psychosis in a routine clinical service. Acta Psychiatr Scand 2010;122(4):302-18. Doi: 10.1111/j.1600-0447.2010.01572.x.

b. The Voices Clinic:
   - Website: http://www.maprc.org.au/voices-clinic
   - Evidence of effectiveness: Thomas N, Rossell S, Farhall J, et al. Cognitive behavioural therapy for auditory hallucinations: effectiveness and predictors of outcome in a specialist clinic. Behav Cogn Psychother 2011;39(2):129-38. Doi: 10.1017/S1352465810000548.

c. CBTp Program at Weill Cornell Medical College: https://sites.google.com/site/ictpsychosis/
d. The Prevention and Early Intervention Program for Psychoses: http://www.pepp.ca/treat13.html
e. Klingberg S, Wittorf A, Meisner C et al. Cognitive behavioural therapy versus supportive therapy for persistent positive symptoms in psychotic disorders: the POSITIVE Study, a multicenter, prospective, single-blind, randomised controlled clinical trial. Trials 2010;11:123. Doi: 10.1186/1745-6215-11-123.
f. Ruggeri M, Bonetto C, Lasalvia A, et al. A multi-element psychosocial intervention for early psychosis (GET UP PIANO TRIAL) conducted in a catchment area of 10 million inhabitants: study protocol for a pragmatic cluster randomized controlled trial. Trials 2012;13:73. Doi:10.1186/1745-6215-13-73
g. WCBCT Peru 2013 Master Clinician Garety: http://www.inner-peru.com/?q=node/99

4) Public dissemination of CBTp

a. Maudsley Hospital pioneers mental health therapy scheme. ITV news broadcast. 20.Dec.2012: http://www.itv.com/news/london/update/2012-12-20/maudsley-hospital-pioneers-mental-health-therapy-scheme/
b. http://www.mentalhealthcare.org.uk/cognitive_behaviour_therapy