Realist literature review of cCBT for prevention and early intervention in anxiety and depression

15th October 2009

Who we are

Amy McKeown

Honorary Research Assistant at CHIME, University College London

Founder and developer of Xanthis preventative cCBT tool

Prizewinning MSc dissertation on preventative cCBT

amy.mckeown@xanthis.ltd.uk

www.xanthis.ltd.uk

+44 7931 385 944

Henry W. W. Potts

Lecturer at CHIME, University College London

Research interests include:

online peer support

Web 2.0

health belief modelss

h.potts@chime.ucl.ac.uk

http://www.chime.ucl.ac.uk/~rmhihpo/

+44 20 7288 3383

Overview

- Background and Introduction
  - Computerised Cognitive Behavioural Therapy (cCBT)
  - Prevention
- How and Why Study Done
  - Realist methodology
- Results
- Discussion
  - Core themes
  - Issues raised
  - Implementation and commercialisation
  - Next steps

Cognitive Behavioural Therapy (CBT) and computerised Cognitive Behavioural Therapy

- UK NHS recommends stepped care for treatment of anxiety and depression:
  - different levels of treatment based on need
  - includes CBT and cCBT
- CBT recommended for many conditions
  - multiple modalities possible: face to face, bibliotherapy, through a computer
- **cCBT packages effective in treating a number of mental health conditions in a variety of user groups**
  - confidential
  - accessible and available to all, 24/7
  - repeatable: booster sessions possible
  - can be used as a waiting list intervention
  - cost effective
  - used for prevention and treatment
- **Access to cCBT often through a prescription - Primary Care**

Our focus is on prevention not cure…

- Cheaper, easier and less suffering if problems prevented or treated early
- **CBT interventions may prevent onset of depression by up to 50%**
- Interventions that target specific, at risk populations better than universal
- **cCBT is a promising new way to deliver preventative treatment**
  - cost effective
  - can be delivered to a large number of people & different population groups
- **Preventative cCBT can be used in stepped care, chronic illness and occupational models**
- **Internet-based cCBT can be accessed spontaneously**

A realist review approach was chosen as it:

- is a structured methodology for conducting secondary research
  - similar to a traditional systematic review
- is more flexible and pluralistic
  - more suitable for new and complex research subjects
- includes all literature found, a much greater use of data sources
- sorts data by relevance and rigour, not by hierarchy of research type
  - deconstructs complex interventions into component theories
  - **What works? For whom? In what circumstances?**

Our structured search found 5 papers on use of cCBT in prevention

Paper	Problem	Type	Population	Results
Kenardy, McCafferty & Rosa 2003, 2006	Anxiety	RCT + 6 month follow-up	Individuals with high anxiety sensitivity	Reduced anxiety-related cognitions & negative affect Results held at 6 months
Patten 2003	Depression	RCT	Public	No difference between groups
Van Voorhees 2007	Depression	Process Evaluation	Primary Care Patients	Good results on mood Users liked package Willing to pay for use Primary care setting good
Christensen & Griffiths 2002	Depression	Editorial		Good argument for cCBT Mentioned a few limitations

One large RCT showed no effect, but other papers support cCBT as being effective in reducing symptoms

A number of other papers used cCBT in a sub-clinical population but not as prevention

- Body of work around MoodGYM – cCBT being used in different ways
  - reduces symptoms of depression
  - improves mental health knowledge
  - attrition rates higher than in face-to-face therapy
  - positive results in different user groups: spontaneous users, schools, sub-clinical
- 6 further RCTs show improvements in symptoms
- 1 RCT (Clarke 2002) found no effect
- **cCBT can positively affect outcomes in a number of conditions at once**
  - stress
  - anxiety
  - depression

Core themes from the research

- Little research on preventative cCBT to date
- **Overall results are positive on use of cCBT in a sub-clinical setting**
- Heterogeneity in studies: helpful to decide what packages work in what circumstances
- **One cCBT package has outcomes on a number of different conditions**
- **One cCBT package can be used in different ways in different populations**
  - different user groups
  - different entry points and environments
- **Maintaining good adherence remains a challenge**
  - especially in spontaneous Internet users
  - need to be long enough to be therapeutic, short enough to prevent attrition

Issues arising

- **Differentiating between the prevention and treatment:**
  - most studies looked at symptom reduction not prevalence rates
  - treatment and prevention used interchangeably
  - most trial groups self selecting – higher depression rates, not 'normal'
- **Realist reviews have advantages and disadvantages**
  - allow more papers in very new field
  - analyse and sort data for relevance and rigour
  - learn more about context and circumstances
  - 'not as academically valid' (some might say) / more subjective
- **A purely preventative trial needs conducting for preventative**
  - large cohort of individuals
  - monitored longitudinally for prevalence rates

Preventative cCBT is an exciting new field….

- **Large public health potential for preventative cCBT**
  - international spontaneous web users
  - occupational health /community groups / schools
  - via primary care – use ‘therapeutic alliance’
- **cCBT used in different ways in different populations (many conditions)**
- **Technology offers a new delivery platform**
  - reach individuals at different illness stages, confidentially, accessibly
- **Challenge in commercialising and disseminating**
  - developing a sustainable funding model
  - many interventions fall down if reliant on NHS purchasing

Overcoming cultural and commercial barriers, including developing a financial model and encouraging individuals, organisations and health systems to use it will take time and more research

So, what are we doing now?...

- Article submitted
- **Poster on display**
- Continuing our other work with Xanthis – real world use
- Investigating different models of use
  - using Xanthis real world case studies
  - extending from occupational use
  - undertaking feasibility study, interviewing different potential users
  - developing sustainable implementation models
- Developing RCTs trials on Xanthis
  - effect on symptoms
  - proper preventative study – prevalence rates

Thanks for listening and we look forward to meeting you soon

Amy McKeown

amy.mckeown@xanthis.ltd.uk
www.xanthis.ltd.uk

+44 7931 385 944

Henry Potts

h.potts@chime.ucl.ac.uk
www.chime.ucl.ac.uk/~rmhihpo/

+44 207 288 3383