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

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Who we are

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Prizewinning MSc dissertation on preventative cCBT

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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
• 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

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

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