CBT for personality disorders with men with ASPD and psychopathy

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Can we treat Antisocial Personality Disorder?

11 trials in total
8 trials - ASPD + substance abuse
2 trials - mixed PD (with self harm)
- Tyrer et al 2004
- Huband et al 2007
1 trial - ASPD with violent men
- Davidson et al 2009

No data specifically on ASPD outcomes
Cochrane review ASPD
Gibbon Duggan et al 2010

Little good quality evidence as to what might (or might not) be effective
Assessment of methodological quality of studies
Cochrane review: Gibbon 2010

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Psychological treatment
Evidence in mental health forensic settings

Anger Related Aggression - CBT for anger management

General Violence - CBT

Sexual Offending - CBT and Behavioral therapy

General Offending Behaviour - CBT
Psychological treatment
Evidence in mental health forensic settings

Anger Related Aggression - CBT for anger management

General Violence - CBT

Sexual Offending - CBT and Behavioral therapy

General Offending Behaviour - CBT
Number of studies by diagnostic category up to 2006. Duggan et al. (2007) Personality and Mental Health, 1, 95-125
Psychotherapy of BPD

• 20 years of research (10 studies) shows DBT better than TAU
• Two studies support MBT (Bateman and Fonagy)
• Two studies support schema-focused therapy (Giesen-Bloo; Farrell et al)
• Two studies support transference-focused therapy (Clarkin et al, Doering et al)
• Evidence for CBTpd (Davidson et al)
• Some support for STEPPS (Blum et al)
Specific vs. Common Factors

- DBT may not be superior to well-structured psychiatric management (McMain et al, 2009)
- Head-to-head studies show few differences
- Conclusion: any three-letter acronym therapy beats TAU (quote Livesley and Paris!)
- Reason: BPD patients need structured and specialized psychotherapy
Psychological therapies

DBT  CBT  MBT  CAT  SFT  TFT

Behavioural       Psychodynamic
TFT also delivered for 1 year (Clarkin et al, 2007)
Changes seen in some psychological therapy in BPD

Object relations  Dyadic / interpersonal/ schema focused

Less emphasis on developmental history
More emphasis on interactions with therapist
Supportive educational stance

• Depressive experiences need to be validated
• Lack of “how to” skills require education and skills training
• Flexible boundaries. Not rule bound.
Type of therapy / interaction with BPD patients needs

• Passive stance of therapist activates abandonment and neglect schemas

• Evoke anger – I’m bad
• Suicidal behaviours – Nobody cares
• Drop out from therapy – Nobody cares
Structured care helpful

McMain SF, Links PS, Gnam WH, Guimond T, Cardish RJ, Korman L et al.

A randomized trial of dialectical behaviour therapy versus general psychiatric management for borderline personality disorder.

DBT vs General Psychiatric Management
Mean Number of Suicidal episodes (McMain et al 2009)

![Graph showing comparison between DBT and General Psychiatric Management](image)
MBT vs SCM: N with severe self harm incidents

Bateman & Fonagy 2009
Structured Clinical Care for BPD

• Core treatment given by community mental health teams.

• No patient excluded by having diagnosis of BPD

• A joint care plan will be developed with the service user (and others, including family members where agreed), that will use ‘an explicit and integrated theoretical approach’ as recommended by NICE guidelines

• Plan includes a diagnostic summary, treatment goals, risk management and a detailed crisis response plan.

• A named care coordinator will be identified for each patient
Hospitalization

• No evidence it prevents suicide
• All effective treatments can be conducted out of hospital
• Regressive effects of in-patient stays
• Day treatment has a better evidence base
Central problems in BPD

- Behavioural regulation
- Emotional regulation
- Cognitive/Interpersonal regulation
Central problems in BPD - link to major theories/therapies
THE EFFECTIVENESS OF COGNITIVE BEHAVIOR THERAPY FOR BORDERLINE PERSONALITY DISORDER: RESULTS FROM THE BORDERLINE PERSONALITY DISORDER STUDY OF COGNITIVE THERAPY (BOSCOT) TRIAL

Kate Davidson, PhD, John Norrie, Peter Tyrer, MRCPsych, Andrew Gumley, PhD, Philip Tata, CPsychol, Heather Murray, and Stephen Palmer
Targets of CBTpd

- Behavioural regulation
  - Behavioural experiments to test out assumptions self & others

- Emotional regulation
  - Empathic shared formulation
  - Changes in interpretation of view of self & others changes emotional response

- Cognitive / Interpersonal regulation
  - Develop new beliefs about self and others
  - Interpersonal problem solving

- Interpersonal problem solving
  - Empathic shared formulation
  - Changes in interpretation of view of self & others changes emotional response
CBTpd BOSCOT study: Summary main findings after one year therapy + 1 year follow up

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<th>Outcomes</th>
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<td>Number of suicidal acts</td>
<td>0.02</td>
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<tr>
<td>Anxiety</td>
<td>0.013</td>
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<tr>
<td>Beliefs (YSQ)</td>
<td>0.0064</td>
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<tr>
<td>BSI –Distress</td>
<td>0.0047</td>
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Early Maladaptive Schema Questionnaire (Young 1990)

- Independence
- Subjugation/ lack of individuation
- Vulnerability to harm and illness
- Fear of losing control
- Emotional deprivation
- Abandonment & loss
- Mistrust
- Social isolation
- Unlovability/ defectiveness/ badness
- Social undesirability
- Guilt punishment
- Incompetence / failure
- Unrelenting standards
- Loss emotional control
- Entitlement/ insufficient limits
BOSCOT study 106 patients with BPD (Davidson et al., 2006)

- Subjugation/ lack of individuation **
- Emotional deprivation **
- Abandonment & loss **
- Mistrust **

- Unlovability/ defectiveness/ badness***

- Incompetence / failure **

BPD**
Cognitive therapy v. usual treatment for borderline personality disorder: prospective 6-year follow-up

Kate M. Davidson, Peter Tyrer, John Norrie, Stephen J. Palmer and Helen Tyrer

Background
Longer-term follow-up of patients with borderline personality disorder have found favourable clinical outcomes, with long-term reduction in symptoms and diagnosis.

Aims
We examined the 6-year outcome of patients with borderline personality disorder who were randomised to 1 year of cognitive–behavioural therapy for personality disorders (CBT–PD) or treatment as usual (TAU) in the BOSCOT trial, in three centres across the UK (trial registration: ISRCTN86177428).

Method
In total, 106 participants met criteria for borderline personality disorder in the original trial. Patients were interviewed at follow-up by research assistants masked to the patient’s original treatment group, CBT–PD or TAU, using the same measures as in the original randomised trial. Statistical analyses of data for the group as a whole are based on generalised linear models with repeated measures analysis of variance type models to examine group differences.

Results
Follow-up data were obtained for 82% of patients at 6 years. Over half the patients meeting criteria for borderline personality disorder at entry into the study no longer did so 6 years later. The gains of CBT–PD over TAU in reduction of suicidal behaviour seen after 1-year follow-up were maintained. Length of hospitalisation and cost of services were lower in the CBT–PD group compared with the TAU group.

Conclusions
Although the use of CBT–PD did not demonstrate a statistically significant cost-effective advantage, the findings indicate the potential for continued long-term cost-offsets that accrue following the initial provision of 1 year of CBT–PD. However, the quality of life and affective disturbance remained poor.

Declaration of interest
P.T. is Editor of the British Journal of Psychiatry but had no part in the evaluation of this paper for publication.
BOSCOT study
PD Criteria: Presence at Baseline (n=106), Frequency %

- abandonment
- identity dist
- anger
- relationship dist
- impulsivity
- emptiness
- paranoid
- affective instability
- self harm
BOSCOT study 6 years follow-up
% change in PD criteria endorsed (n=76)
# Resource utilisation year 3 to 6

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<th>Service use</th>
<th>TAU</th>
<th>CBT</th>
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<td>Inpatient days Mean</td>
<td>61</td>
<td>11</td>
</tr>
<tr>
<td>Outpatient attendances</td>
<td>13</td>
<td>13</td>
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<tr>
<td>A&amp;E attendances</td>
<td>8</td>
<td>4</td>
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Follow-up costs

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<th>Services</th>
<th>TAU (£)</th>
<th>CBT (£)</th>
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<td>Hospital</td>
<td>16,658</td>
<td>5,015</td>
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<td>Primary care</td>
<td>1,199</td>
<td>885</td>
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<tr>
<td>Criminal Justice</td>
<td>325</td>
<td>142</td>
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<td><strong>TOTAL costs</strong></td>
<td><strong>18,737</strong></td>
<td><strong>6,582</strong></td>
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Central problems in ASPD

- Emotional regulation
- Interpersonal / Cognitive regulation
- Intolerance of negative emotions

Relationship difficulties
Main elements in CBTpd

- Structured therapy with coherent therapeutic rationale
- Therapeutic relationship built incrementally
- Individual narrative formulation – linking past and present
- Core beliefs about self and others
- Over-developed behaviours related to beliefs
Cognitive behaviour therapy for violent men with antisocial personality disorder in the community: an exploratory randomized controlled trial

K. M. Davidson¹, P. Tyrer², P. Tata³, D. Cooke⁴, A. Gumley¹, I. Ford⁵, A. Walker⁵, V. Bezlyak⁵, H. Seivewright², H. Robertson¹ and M. J. Crawford³

¹ Faculty of Medicine, University of Glasgow, Cartnaxel Royal Hospital, Glasgow, UK
² Department of Psychological Medicine, Imperial College London, London, UK
³ Adult Psychology Services, Central North West London NHS Foundation Trust, Psychology Department, London, UK
⁴ Department of Psychology, Glasgow Caledonian University, Glasgow, UK
⁵ Robertson Centre for Biosialistics, Boyd Orr Building, University of Glasgow, UK

Background. Little information exists on treatment effectiveness in antisocial personality disorder (ASPD). We investigated the feasibility and effectiveness of carrying out a randomized controlled trial of cognitive behaviour therapy (CBT) in men with ASPD who were aggressive.

Method. This was an exploratory two-centre, randomized controlled trial in a community setting. Fifty-two adult men with a diagnosis of ASPD, with acts of aggression in the 6 months prior to the study, were randomized to either treatment as usual (TAU) plus CBT, or usual treatment alone. Change over 12 months of follow-up was assessed in the occurrence of any act of aggression and also in terms of alcohol misuse, mental state, beliefs and social functioning.
MASCOT trial

- RCT
- All men living in community
- All physically and/or verbally aggressive
- All met criteria for Antisocial Personality Disorder (n=52)
  - 96% had evidence of anxiety disorder
  - 64% met criteria for probable alcohol misuse
Attendance at therapy (25 men in CBTpd arm)

- 11 attended more than 10 sessions
- 6 attended between two and nine sessions.
- 4 attended one session
- 4 attended none
% reporting any act of verbal or physical aggression

verbal

physical

CBT TAU

baseline

1 year
Harmful alcohol use (AUDIT) p=0.08
Social functioning

CBT vs TAU, P=0.08* cbt 6 months

In favour of CBT
• reduction in aggression
• alcohol misuse
• improvement in social functioning
• more positive beliefs about others
CBT for violent men with antisocial personality disorder. Reflections on the experience of carrying out therapy in MASCOT, a pilot randomized controlled trial

KATE DAVIDSON, JUDITH HALFORD, LINDSAY KIRKWOOD, GILES NEWTON-HOWES, MELANIE SHARP AND PHILIP TATA, University of Glasgow, Faculty of Medicine, Gartnavel Royal Hospital, Glasgow, UK; 2Liaison Psychiatry Teambase, NHS Ayrshire and Arran, UK; 3Consulting and Clinical Psychology, NHS Ayrshire and Arran, UK; 4Imperial College (UK), Hawkes Bay District Health Board, New Zealand; 5NHS Greater Glasgow and Clyde, Glasgow, UK; 6Central and Northwest London NHS Foundation Trust, London, UK

ABSTRACT
Cognitive therapy for personality disorders (CBTpd) has been developed and assessed in borderline and antisocial personality disorders (ASPD) using a variety of research methodologies from single cases to randomized controlled trials. An exploratory randomized controlled trial of CBTpd compared with the usual treatment for men with ASPD in the community allowed insights into how to carry out therapy with this group of patients who are traditionally thought of as being difficult to manage. CBTpd for ASPD is time-limited, is problem-focused and aims to develop new ways of thinking and behaving that would reduce anger and acts of violence and improve interpersonal relationships. Men with ASPD often held beliefs that could interfere with the development of a therapeutic relationship. The beliefs were hypothesized to have arisen from experiences of being humiliated in childhood and adolescence as well as having experienced neglect and abuse. Equally, therapists needed to be aware that in developing a compassionate formulation of the patient’s problems, they should not minimize the potential for violence. Supervision of both process and content had a greater importance than in other CBT models, and supervision required recordings of clinical sessions to enable this to happen. Copyright © 2009 John Wiley & Sons, Ltd.
.....the formulation

• Crucial in allowing therapy to be structured around a shared understanding of experiences, problems, under-developed and over-developed behaviour and associated beliefs about self and others.
Importance of a narrative formulation in CBTpd

- Creates a more empathic response from therapists
- Knowledge about the patient is increased
- Aids reflection on patient’s experience and mental states
- Short cuts crisis reactions
But...

• A few men found the compassionate stance taken in formulation difficult to accommodate
  - maybe it was too so far outside their experience
  - may be it was too intrusive/ threatening.

• Pacing of delivery of the narrative formulation may be important.
Some problems faced by therapists

- Increased empathy sometimes interfered with a therapist’s insight into ongoing risk
- Habituated to accounts of violence
- May threaten therapist’s ‘moral compass’
  e.g. ‘forget the risk’
- Lots of ranting at the beginning
- Poor comprehension/ literacy levels
Views of therapists and men with ASPD

• Supervision
  - Necessary to maintain alliance
  - Keep risk aware
  - Improve therapy outcomes
  - Men can usefully engage in therapy
    - Possible to change behaviour and social functioning
    - When asked for feedback at end of therapy, both participants and partners wanted more
Clinical Example

Male in 40s
Violence
Alcohol abuse
Interpersonal difficulties
Low mood
CBTpd ASPD

CHILDHOOD EXPERIENCE
Father aggressive, violent.
Emotional neglected. Belittled, abused.
Ridiculed when expressed emotion- e.g. “cry baby”
Parental relationship broke down early in childhood. In and out of care.
School “failure to learn” /truanted.
Carried knife to fend people off & feel “safe”.
Abused alcohol from age 14 years
CORE BELIEFS SELF
I need to watch out
I need to be “top dog” if I am to survive

ASSUMPTIONS about SELF
If I’m aggressive others will respect me
If I’m upset, I’m vulnerable
If there is a threat I should fight

OVER-DEVELOPED BEHAVIOURAL STRATEGIES
Aggression
Suppress or hide emotion
Alcohol abuse

CORE BELIEFS OTHERS
Others cannot be trusted
Others are more powerful than me

ASSUMPTIONS about OTHERS
If others see I’m weak, they’ll humiliate me.

UNDER-DEVELOPED BEHAVIOURAL STRATEGIES
(Ability to) tolerate negative emotion
(Knowing when to) trust others
ASPD - targets of CBTpd

Hypervigilance/alert
Alcohol to suppress emotional distress
Aggression

I need to be on my guard to survive

Others will humiliate me/ don’t understand me

anxiety depression

Emotion

Interpersonal sensitivity

Behaviour
Violent offenders with PD

• PD offenders
  – drop out of treatment programmes
  – have difficulty engaging in treatment
  – heterogeneous in terms of problems and needs

Psychopathological needs & risk of offending addressed by complex multi-component programmes
CBTpd in Chromis DSPD (Tew, 2011)

92 men assessed as suitable

PCL-R scores:
50% scored 30+
> 90% scored 25+

Majority of these men 2/+ PD diagnosis
Most prevalent PDs: borderline, paranoid, narcissistic and antisocial.
Offences

- Majority serving life sentences for offences relating to violence (murder, attempted murder, conspiracy to murder, malicious wounding, robbery and assaults with intent to rob).
- A number also have convictions for arson, rape and kidnap.
Adapting CBTpd for men in DSPD prison setting

Assume they do not want to change or know what change is possible.

Forming a trusting relationship will be difficult.

Listen very carefully to find out what it is they want / value
Considerations in therapeutic programme: from the offenders view point (Atkinson 2011)

Special and complex needs
High status orientation
Game playing the need to ‘win’
Individualised rationale - why treatment would be relevant to them.
The right to make choices and have control
Not boring! - need for stimulation.
Therapy structure in CHROMIS CBTpd

- Individual formulation
- Group share formulations
- Plan behavioural change
- Behavioural change - practice
So far ... CBTpd in Chromis

- Highly valued by staff & prisoners
- Therapy’s explicit & open form “makes sense” to them.
- “Value the narrative formulation and level of detail about their lives”
- “Enjoy behavioural experiments and level of involvement and challenging of beliefs and behaviours with each other surprised staff”
- Success of DSPD will be determined in the longterm
• There are helpful treatments for PD
• Good structured clinical care also helpful
• Even short term treatments are helpful
• The therapeutic relationship is key in all therapies
• Understanding common mechanisms in therapies will be helpful in the future
Thank you

Email: kate.davidson@glasgow.ac.uk