Treatment of self-harm

A review of the present state of knowledge

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A review of the present state of knowledge

- **A review of treatment research and what it shows about the effects on self-harm (Lars-Gunnar Lundh)**
- **Conclusions from 25 years of clinical experience working with young women who self-harm (Therese Sterner)**
- **A survey of patients' experiences (Thérèse Eriksson och Sofia Åkerman)**
- **A review of clinical guidelines in the English-speaking world (Sophie Liljedahl)**
- **A review of other research that is relevant to the treatment of self-harm (Jonas Bjärehed)**

Disposition

- **The concept of self-harm, and prevalence among adolescents**

- **Review of treatment studies (DBT, MBT, etc.)**

- **What can we conclude from this research?**

- **What do effective treatments have in common?**

- **Some proposals for how to proceed?**

Some concepts

- Parasuicidal behaviour

= suicidal + non-suicidal self-harm

- Deliberate self-harm

(a) = suicidal + non-suicidal self-harm (e.g., Hawton)

(b) = non-suicidal self-injury (e.g., Gratz)

- Non-suicidal self-injury (NSSI)

- proposed as a new diagnosis in DSM-5

Prevalence of non-suicidal self-injury among adolescents

-Review by Muehlenkamp et al. (2012)

-International prevalence of NSSI: 18 %

- Large differences because of different research methods

- One question yes/no: Lower prevalences

- Checklist questionnaires: Higher percentages

- Swedish study (Zetterqvist et al., 2012)

- A randomly selected community sample of 3054 adolescents

- One question yes/no: 17.4 %

- Checklist questionnaire (FASM): 41.6 % life-time prevalence

- NSSI according to DSM-5 criteria: 5.4 %

Review of treatment studies

- **Aim: To review all treatment studies that report effects on**
  - **parasuicidal behaviour**
  - **deliberate self-harm**
  - **non-suicidal self-injury**

- **Excluding**
  - **studies that report effects only on suicidality or suicide attempts**
  - **studies where the majority of the patients do not report self-harm or self-injury before treatment**

- **Randomized controlled studies (RCT studies)**

The evidence hierarchy

Design elements

	Pre-test	Post-test	Control group	Randomi-zation
RCT studies	X	X	X	X
Quasi-experimental studies	X	X	X	
Cohort studies	X	X		
Retrospective studies		X		
Clinical experience				

Different kinds of control groups

-*Treatment as usual (TAU)*

- a vague, fuzzy concept – means different things in different studies

- controls for different factors, depending on its content

- *"Expert therapists" who use other methods*

- aims to control for therapist competence

- could supply evidence that the <u>method</u> is important

- *Another form of psychotherapy*

- the theoretically most interesting comparison

- but research so far shows that it is difficult to get significant effects in comparisons between different forms of psychotherapy

What kinds of treatments have been studied?

- *Dialectical behavior therapy (DBT): 7 RCTs*

- *Mentalization-based treatment (MBT): 2 RCTs*

- *Other long-term psychotherapies*
  - *Schema-focused therapy: 1 RCT*
  - *Gunderson's psychodynamic therapy: 1 RCT*
  - *Transference-focused psychotherapy: 2 RCTs*
  - *Cognitive-behaviour therapy for personality disorders: 1 RCT*

- *Shorter forms of psychotherapy*
  - *Gratz Emotion Regulation Group Therapy: 2 RCTs*
  - *Cognitive-behaviour therapy for self-harm: 1 RCT*
  - *Cognitive-analytic therapy: 1 RCT*
  - *Manual-assisted cognitive therapy: 3 RCTs*
  - *Developmental group therapy: 3 RCTs*

Dialectical behaviour therapy
(DBT; Linehan, 1993)

- **Primary target group: Women with borderline personality disorder**

- **Treatment theory**
  - **A dialectical combination of opposites: change AND acceptance**
  - **Chain analysis of events that lead to self-harm + problem solving**
  - **The importance of validating the client's experiences**
  - **Training of skills: mindfulness, emotion regulation, interpersonal skills, distress tolerance**

- **Treatment format**
  - **Individual therapy once a week**
  - **Skills training in group once a week**
  - **Telephone consultation between sessions**
  - **Consultation team**

Seven RCT studies of DBT

- **Three comparisons with Treatment as Usual (TAU)**
  - **The first Linehan study (1991, 1993; N = 44)**
  - **The Dutch study (Verheul et al., 2003; van den Bosch et al., 2005; N = 58)**
  - **The Australian study (Carter et al., 2010; N = 73)**

- **Four comparisons with other forms of psychotherapy**
  - **Client-centered therapy (Turner, 2000; N = 24)**
  - **Comprehensive validation therapy + 12-step model (Linehan et al., 2000; N = 23)**
  - **Non-behavioural ”expert therapists” (Linehan et al., 2006; N = 101)**
  - **General psychiatric management, psychodynamic (McMain et al., 2009, 2012; N = 180)**

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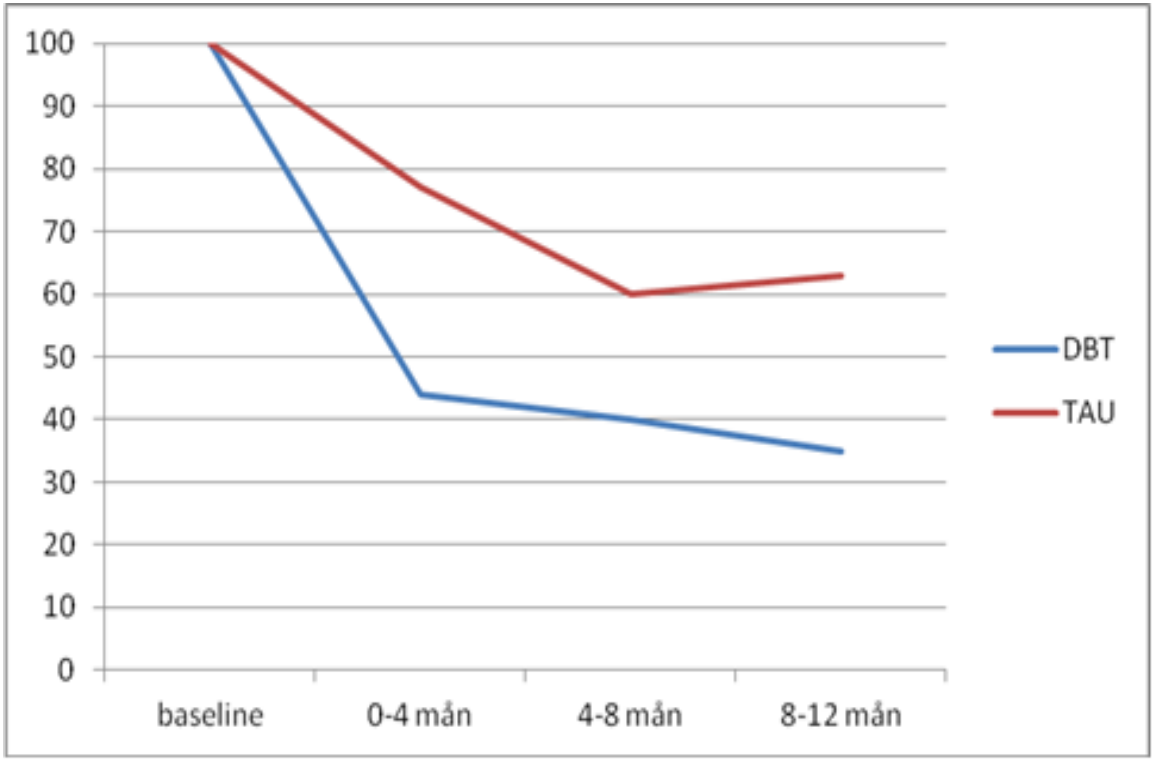
1. The first Linehan study (1991, 1993)

- Participants: 44 women with borderline personality disorder
- Randomized to DBT (N = 22) or Treatment as Usual (N = 22)
- DBT during 1 year
- Outcome measure: Parasuicide History Interview (PHI)

Figure 1. **Percentage of patients with parasuicidal behaviour**



DBT was significantly better than TAU at post-test

The effect remained at 6-month follow-up

At 1-year follow-up there was no significant difference beween DBT and TAU

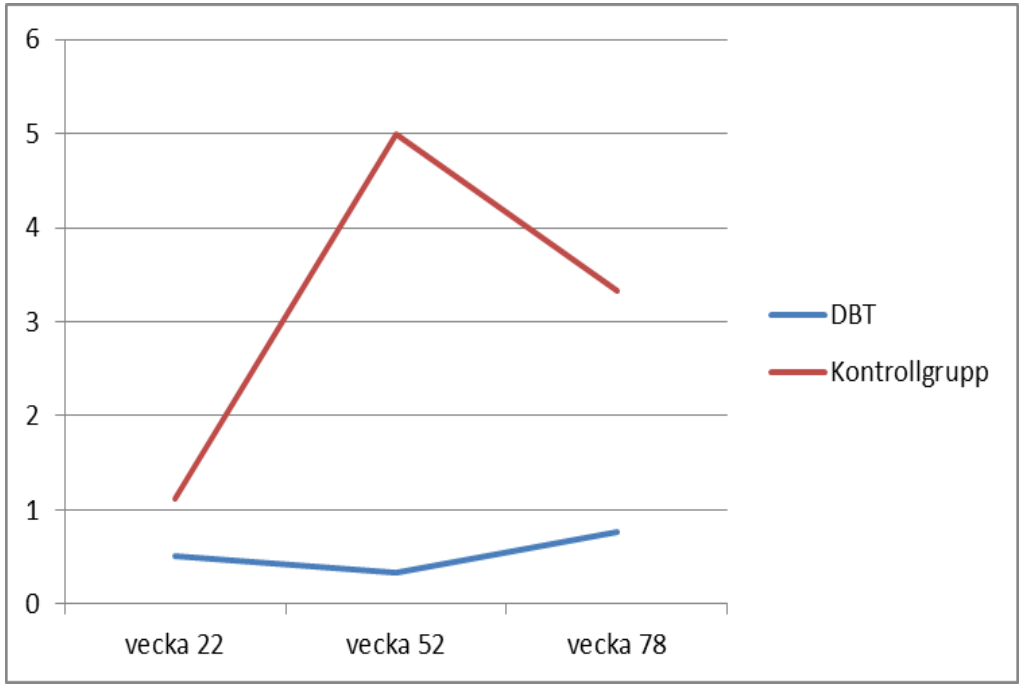
2. The Dutch study (Verheul et al., 2003; van den Bosch et al., 2005)

- ***Participants: 58 women with borderline personality disorder***
- ***Randomized to DBT (N = 27) or Treatment as Usual (N = 31)***
- ***DBT during 1 year***
- ***Outcome measure: Lifetime Parasuicide Count (LPC)***

Figure 2. **Average number of parasuicidal behaviours during three 3-months periods**

DBT was significantly better than TAU at post-test (week 52) and at 6-months follow-up (week 78)

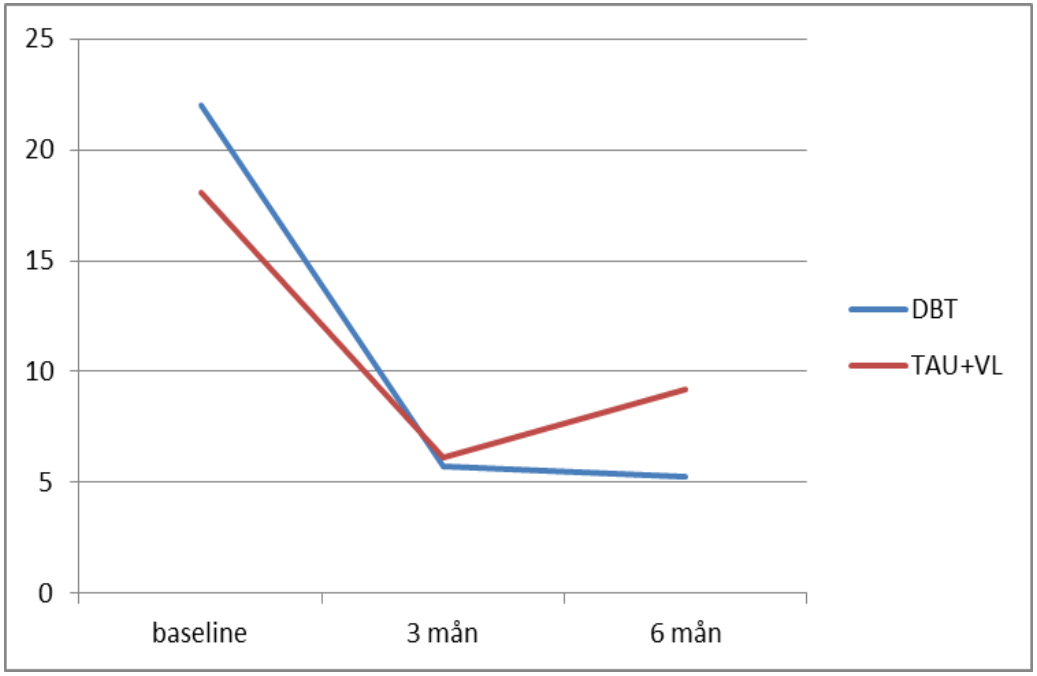
But this was due to a deterioration in the control group



3. The Australian study (Carter et al., 2010)

- Participants: 73 women with borderline personality disorder
- Randomized to DBT (N = 27) or Treatment as Usual (N = 31)
- DBT during 6 months
- Outcome measure: Lifetime Parasuicide Count (LPC) and Parasuicide History Interview (PHI-2)

Figure 3. **Average number of self-harm episodes during three 3-months periods**



Both groups improved; no significant differences between groups

4. Comparison with client-centered therapy (Turner, 2000)

- Participants: 24 patients (19 females and 5 males) with borderline personality disorder
- Randomized to DBT (N = 12) or CCT (N = 12)
- A modified form of DBT during 1 year
- The control group had an unstructured form of client-centered therapy
- Outcome measure: weekly logs of suicide and self-harm attempts
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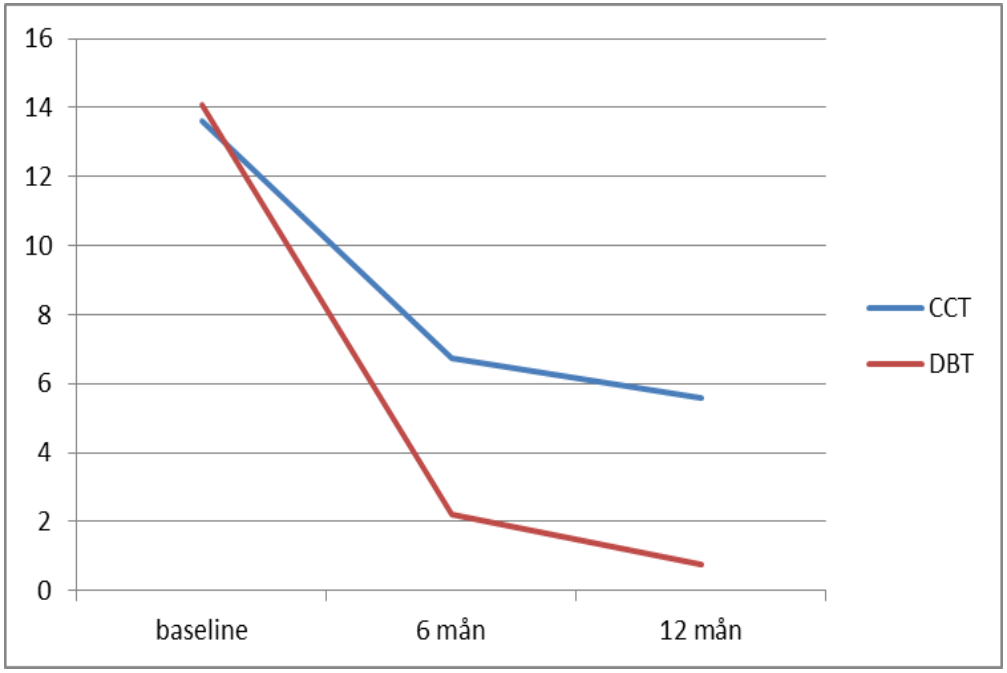
Figure 4. **Average number of self-harm episodes**

Both groups improved, but the DBT patients showed significantly greater gains at both 6 months and 12 months

Question: Should this treatment be categorized as DBT?

Suggests at least that <u>structure matters</u>



5. Comparison with Comprehensive validation therapy + 12-step model (Linehan et al., 2002)

- Participants: 23 heroine-dependent women with borderline personality disorder
- Randomized to DBT (N = 11) or CVT+12 (N = 12)
- Treatment during 1 year
- Outcome measure: Parasuicide History Interview (PHI)

- No significant difference between groups on parasuicidal behavior

- Very few other differences between these two treatment conditions

- One difference: No drop-out in the Comprehensive Validation therapy group

- The results of this study suggests that what is most important for keeping the patients in treatment is the validation part of DBT

6. Comparison with non-behavioural expert therapists (Linehan et al., 2006; Harned et al., 2008; Bedicks et al, 2012)

- Participants: 101 women with borderline personality disorder
- Randomized to DBT (N = 52) or non-behavioural expert therapists (N = 49)
- Treatment during 1 year
- Outcome measure: Suicide Attempt Self Injury Interview

- DBT improved more on most measures
- **Fewer suicide attempts**
- **Fewer hospitalizations, and emergency department visits**
- **Less drug and alcohol abuse**
- **Became more self-affirming and self-protective, and less self-attacking (SASB)**

- But there was no significant difference on non-suicidal self-harm
- **although the DBT group showed a non-significant tendency to improve more (effect size 0.47, p = .15)**

- The results of this study suggests that <u>method matters</u>, and that the results of DBT cannot be reduced to effects of therapist expertise/competence

7. Comparison with "General Psychiatric Management" [Gunderson's psychodynamic model] (McMain et al., 2009, 2012)

- Participants: 180 patients (165 females and 15 males) with borderline pers. disorder
- Randomized to DBT (N = 90) or GPM (N = 90)
- The control group had psychodynamic therapy one hour weekly
- Treatment during 1 year
- Outcome measure: Suicide Attempt Self Injury Interview

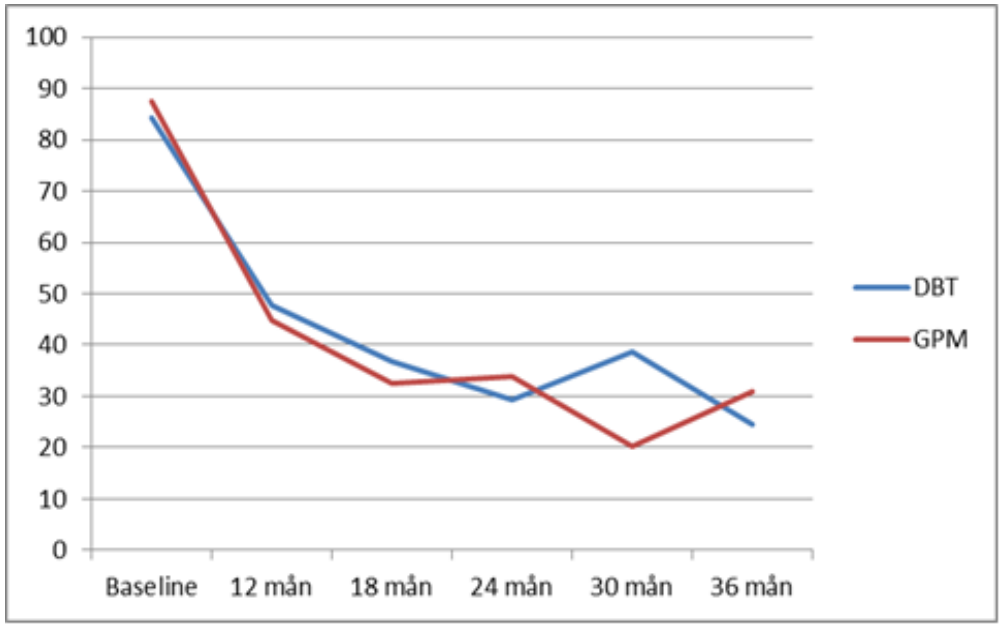


Figure 5. **Percentage of patients with non-suicidal self-injury**

Both groups improved, and there was no significant difference between the groups, neither at post-test (12 months) nor at follow-up on any measures

Seven RCT studies of DBT:

A summary of the effects on self-harm

-DBT was <u>significantly better</u> than the control group in 3 studies

- ***Linehan's first study (but the effect was no longer significant at 1-year follow-up)***
- ***The Dutch study – but the effect was due to increased self-harm in the control group***
- ***The comparison with client-centered therapy – but this was a modified form of DBT***

- DBT was <u>non-significantly better</u> than the control group in 2 further studies

- ***The comparison with non-behavioural expert therapists (Linehan et al., 2006)***
- ***The Australian study (Carter et al., 2010)***

- DBT <u>did not differ</u> from

- **Comprehensive Validation Therapy + 12-step model**
- **General Psychiatric Management (Gunderson's psychodynamic therapy) - the largest RCT study so far**

Meta-analysis of DBT (Kliem et al., 2011)

- Included eight RCT studies

- Effects on suicidality/self-harm (comparison with the control group)

0.23 when all studies were included – a small non-significant effect

0.60 when other borderline-specific (psychodynamic) treatments were excluded
a moderate, statistically significant effect

- Conclusion: DBT better than ”treatment as usual”, but not better than other borderline-specific treatments

Conclusions concerning DBT and self-harm

- **DBT is effective in the treatment of self-harm**
  - **At least among patients with borderline personality disorder**
  - **But the effects are not large**

- **It is unclear what is effective about DBT**

  - **The method probably matters**
    - **otherwise the results would not have been better than that of ”expert therapists”**

  - **There is no evidence that the effects are due to specific components of DBT (e.g., chain analysis, skills training)**
    - **equally good results with therapies that lack these components**

  - **There is no evidence that DBT is better than other long-term treatments designed for the treatment of borderline personality disorder**

Mentalization-based treatment
(MBT; Bateman & Fonagy, 2004)

- ***Primary target group: Patients with borderline personality disorder***

- ***Theoretical basis***

  - ***Attachment theory: Borderline patients have a hyperactive attachment system, and have difficulties maintaining mentalization in close emotional relationships***

  - ***Self-harm is the result of a breakdown of the ability to mentalize***

- ***Treatment structure***
  - **Individual therapy once a week**
  - **Group therapy weekly**
  - **Weekly supervision**

Two RCT studies on MBT

- ***Day hospital programme vs. Treatment as usual (Bateman & Fonagy, 1999, 2008)***

  - 38 patients (22 females, 16 males) with borderline personality disorder

  - 19 patients randomized to MBT, and 19 to TAU

  - MBT during 18 months

  - The TAU group did not receive any psychotherapy – the purpose was to control for spontaneous remission

- ***Outpatient programme vs. Structural Clinical Management (SCM) (Bateman & Fonagy, 2009)***

  - 134 patients (107 females, 27 males) with borderline personality disorder

  - 71 patients randomized to MBT, and 63 to SCM

  - MBT during 18 months

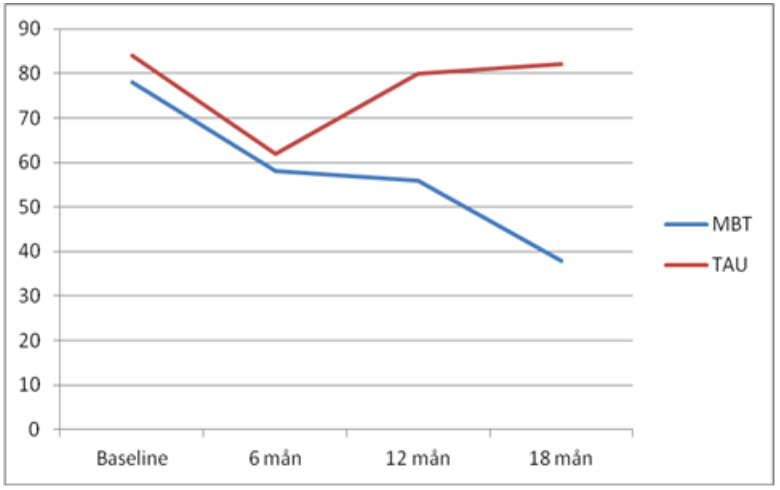
  - SCM was manualized in accordance with NICE guidelines, with the purpose to control for ”the nonspecific benefits of structured treatment”

1. MBT in a day hospital programme versus TAU

Figure 6. **Percentage of patients with self-mutilating behaviour**

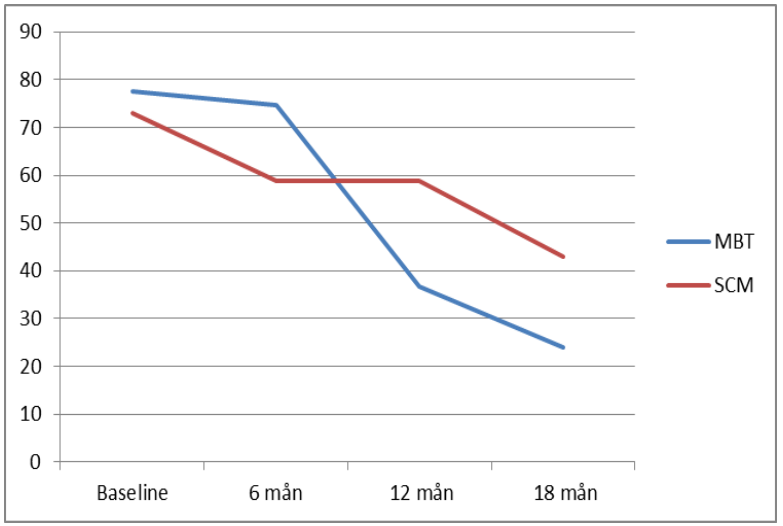
Outcome measure: the Suicide and Self-Harm Inventory (a semi-structured interview)

Good results at 5-year follow-up



2. Outpatient MBT versus Structural Clinical Management (SCM)

Figure 7. **Percentage of patients with severe self-injurious behaviour**



RCT studies of MBT: a summary

- MBT was significantly better than the control group in 2 of 2 studies

- An intensive day hospital programme produced better effects than a TAU condition, that was arranged to control for spontaneous remission

- An outpatient programme produced better effects than a Structural Clinical Mangement condition, that was designed to control for the benefits of structured treatment

- Most of the therapists in these studies are psychiatric nurses, without formal training in psychotherapy

- "reasonable outcomes may be achievable within the framework of mental health services without lengthy specialist training" (Bateman & Fonagy, 2009, p. 1363).

- No RCT studies of MBT are yet reported by independent research groups

- too early to draw any firm conclusions about its effects

Other long-term treatments

- Schema-focused therapy compared with psychodynamic transference-focused psychotherapy (Giesen-Bloo et al., 2006)

- **88 patients with borderline personality disorder**
- **randomized to 3 years of schema-focused therapy or transference-focused therapy**
- **significant better effects for schema therapy on most measures, including parasuicide**

- CBT for personality disorders (CBT-PD; Davidson et al., 2006, 2010)

- **106 patients with borderline personality disorder**
- **randomized to 30 sessions of CBT+TAU or TAU-only**
- **The CBT group improved more on suicidal attempts, but not on non-suicidal self-injury**

- Transference-focused psychotherapy (TFT; Doeren et al., 2010)

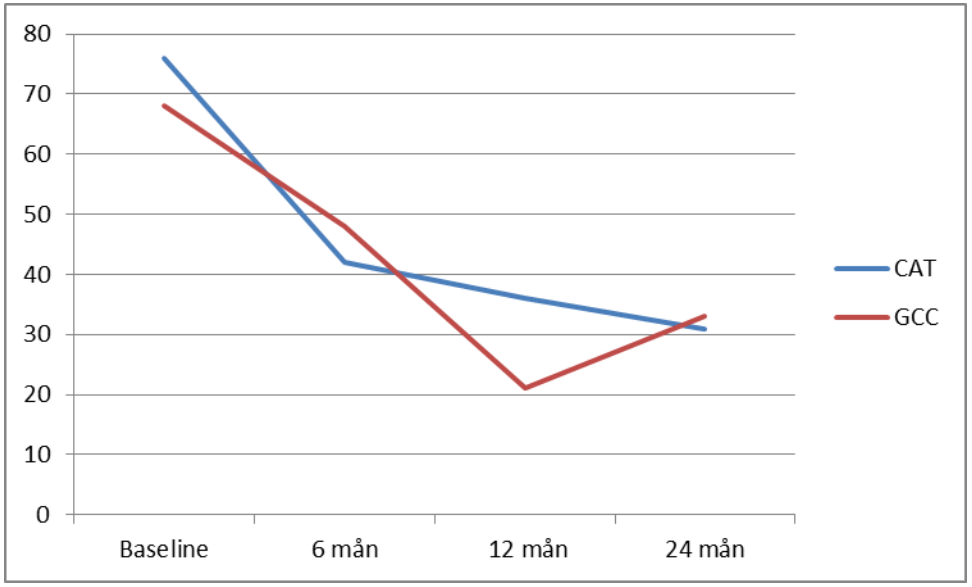
- **104 female patients with borderline personality disorder**
- **randomized to TFT or to ”experienced community therapists”**
- **The TFT improved more on most measures, including suicide attempts**
- **None of the groups improved on self-harm**

Cognitive-Analytic Therapy (CAT; Chanen et al., 2008)

- Participants: 78 adolescents (15-18 years old) who fulfilled at least two diagnostic criteria of borderline personality disorder
- Randomized to CAT (N = 41) or Good Clinical Care (N = 37)
- 24 sessions
- Good Clinical Care = An equal number of sessions (CBT-oriented)
- Outcome measure: semi-structured interview

Figure 8. **Percentage of patients with non-suicidal self-injury**

Both groups improved, and there was no significant difference between the groups,



Short-term CBT

- **No evidence for**
  - **Problem-solving therapy**
  - **STEPPS treatment (Blum et al., 2008)**

- **Manual-Assisted Cognitive Therapy (MACT)**
  - **6-7 sessions + bibliotherapy**
  - **Significant effects in 1 of 3 RCT studies (Weinberg et al., 2006)**

- **CBT for deliberate self-harm (Slee et al, 2007)**
  - **12 sessions**
  - **Significant effects at follow-up, although not immediately at post-test (Slee et al., 2008)**
  - **The effects were mediated by changes in emotion regulation**

Emotion Regulation Group Therapy (ERGT)

Pilot study (Gratz & Gunderson (2006)

- Participants: 22 women with borderline personality disorder

- Randomized to ERGT+TAU (N = 11) or TAU-only (N = 11)

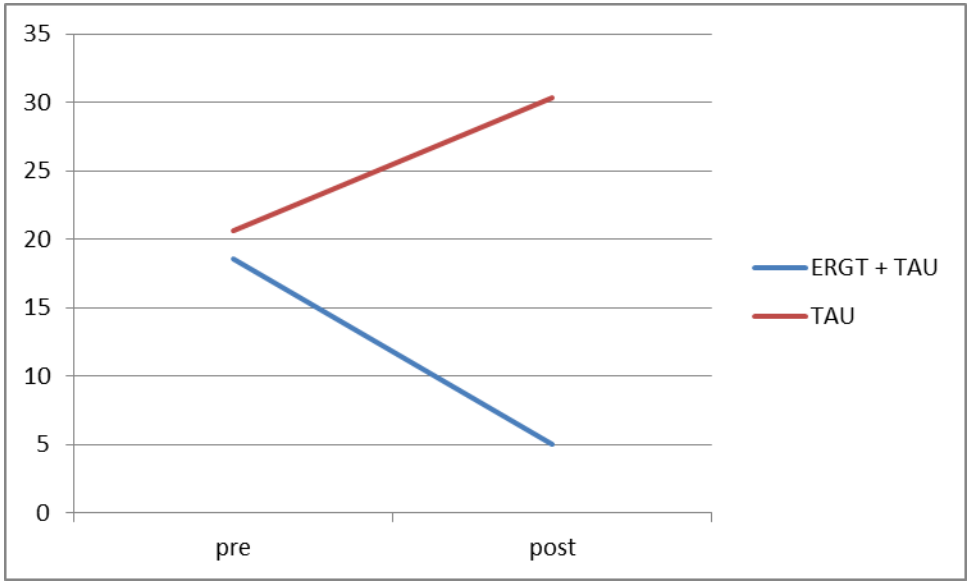
- 14 sessions of ERGT

- TAU included individual psychotherapy

- Outcome measure: Deliberate Self-Harm Inventory (DSHI; Gratz, 2001)

Figure 9. **Average number of non-suicidal self-injury episodes during the preceding 3,5 months**

The ERGT groups showed significantly better effects than the TAU-only group



Developmental Group Therapy for adolescents with deliberate self-harm (Wood et al., 2001)

- **Pilot study (Wood et al., 2001)**
  - **63 adolescents (12-16 years old)**
  - **randomized to group therapy+TAU (N =32) or TAU-only (N = 31)**
  - **the group therapy condition showed significantly better effects**

- **The Australian study (Hazell et al., 2009)**
  - **72 adolescents (12-16 years old)**
  - **randomized to group therapy (N = 36) or TAU (N = 36)**
  - **the group therapy condition showed significantly <u>worse</u> effects**

- **The large British study**
  - **366 adolescents (12-17 years old)**
  - **randomized to group therapy+TAU (N =183) or TAU-only (N = 183)**
  - **No significant effects of developmental group therapy**

Summary

- **Some long-term treatments seem to have good effect**
  - **Most evidence for Dialectical behaviour therapy (DBT)**
  - **Some evidence for Mentalization-based treatment (MBT)**
  - **Schema-focused therapy**
  - **”General psychiatric management” (Gunderson’s psychodynamic model)**

  - **There is no (or little) evidence that less than one year of treatment has effect**

- **Some short-term therapies may have good effect as <u>adjunctive</u> treatments**
  - **Gratz’ Emotion Regulation Group Therapy (ERGT)**

- **Some short-term therapies seem to have no effect on self-harm, and some may even make it worse**

What do the effective treatments have in common?

1. **A clear treatment structure, that creates predictability and continuity for the patient**

2. **A therapeutic attitude characterized by empathic exploration and validation of the patient's experiences**

3. **A methodological focus on increased emotional awareness and improved emotion regulation**

4. **Explicit strategies to prevent iatrogenic effects**

The need for a clear treatment structure

- **Bateman et al (2009): borderline patients are particularly vulnerable to uncertainty and lack of structure**

- **Gunderson and Links (2008): ”Structure is an impersonal holding, neither invasive nor neglectful.”**

- **Psychoeducation**

- **The only comparison where DBT has showed better results than another form of psychotherapy**
  - **Turner’s (2000) comparison with an unstructured client-centered therapy**

A therapeutic attitude characterized by empathic exploration and validation of the patient's experiences

- **DBT: Empathic listening, exploration of the client's experiences (e.g., chain analysis), and validation of these**

- **MBT: an active-curious, <u>not-knowing stance,</u> with small incremental steps of exploration**

- **Therese Sterner (25 years of clinical experiences with self-harming women)**
  - **Respectful curiosity, a willingness to listen, without judging**
  - **Wanting to know more about the self-injurious behaviour – not to get rid of it as fast as possible**
  - **Showing calm and patience in the face of upsetting events**

A methodological focus on increased emotional awareness and improved <u>emotion regulation</u>

- **DBT: self-harm as a result of emotional dysregulation**
  - **DBT skills training: emotion regulation skills**
- **MBT: mentalization of emotions, affect regulation**
- **Emotional awareness and emotion regulation central also to schema-focused therapy and Gunderson's psychodynamic therapy**
- **ERGT: focus on emotion awareness and emotion regulation**
  - **The effects of ERGT on self-harm are mediated by changes in emotional dysregulation**
- **The effects of CBT for self-harm (Slee et al, 2007) were mediated by changes in emotion regulation**

The risk for iatrogenic effects I

Some treatment methods may cause harm

- **Psychological treatments <u>can</u> cause harm (Lilienfeld, 2007)**

- **The prognosis for borderline patients has improved considerably. Why? (Fonagy & Bateman, 2006)**

  1. The development of new effective treatments (DBT and others)

  2. Some treatments that were practiced commonly in the past *"impeded the borderline patient's capacity to recover"* (Fonagy & Bateman, 2006, p. 2)

The risk for iatrogenic effects II

The difficulty of maintaining an empathic, validating and exploring attitude

"Of all disturbing behaviors, self-mutilation is the most difficult for clinicians to understand and treat. Most of us have a much greater immediate empathy for a patient's depression or anxiety, and even for violent impulses and psychotic thinking, than we do for the relief some patients feel when they hurt and scar themselves. The typical clinician (myself included) treating a patient who self-mutilates is often left feeling some combination of helpless, horrified, guilty, furious, betrayed, disgusted and sad." (Allen Frances, 1987, p. 316).

Explicit strategies to prevent iatrogenic effects

Example: the consultation team in DBT

"The task of the consultation group members is to apply DBT to one another, in order to help each therapist to stay within the DBT protocol." (Linehan, 1993, p. 118)

"All therapists are fallible."

One risk: The tendency to "blame the patient"

The importance of validating both the patient and the therapist:

When the therapist is unable to come up with an empathic interpretation of the patient's behavior, "other consultation group members agree to assist in doing so, meanwhile also validating the 'blame the victim' mentality of the therapist" (Linehan, 1993, p. 118).

The risk for iatrogenic effects III

The risk of overstimulating the patient's attachment system

"patients with borderline personality disorder are particularly vulnerable to side-effects of psychotherapeutic treatments that activate the attachment system... So, the mental health professional must tread a precarious path between stimulating a patient's attachment and involvement with treatment while helping them to maintain mentalisation. Treatment will only be effective to the extent that it is able to enhance the patient's mentalising capacities without generating too many negative iatrogenic effects as it stimulates the attachment system." (Fonagy & Bateman, 2006, s. 2)

The risk for iatrogenic effects IV

Social contagion effects

Empirically documented first by Walsh and Rosen (1985), who studied a group of 25 adolescents in a community-based group home over a 1-year period

”self-injury occurred in statistically significant clusters or bursts, whereas other problems, such as aggression, substance abuse, suicidal talk, and psychiatric hositalizations did not”

”Thus, treatment programs can be hotbeds for contagion in which iatrogenic effects emerge. Clients who go to such settings to receive help may instead acquire new problematic behaviors such as self-injury” (Walsh & Dorfler, p. 284)

SOME PROPOSALS FOR HOW TO PROCEED

- ***Assessment** of self-harm (and other related variables)*
  - *to **evaluate** changes in clinical management and treatment*

- ***Training programs** for staff in how to address patients who self-harm*
  - ***knowledge** about self-harm*
  - *training of **practical skills** in how to manage difficult situations*
  - *the development of **material** for such training courses*

- *The continued use of evidence-based **long-term therapies** locally, depending on available competence and interest (DBT, MBT, schema therapy, etc.)*

- ***Evaluation** of Emotion Regulation Group Therapy **in a Swedish context***
  - *Does it work equally well here?*