Basal Exposure Therapy (BET)
A new treatment model or a cybernetic version of ACT?

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Themes
1) Introduction: the history and background of BET
2) The BET patients: characteristics, examples
3) Pilot data: BET time-series (aggregates)
4) The BET model: principles, the treatment process
5) A new treatment model – or a cybernetic version of ACT?
   a. Differences and Resemblances – theory and practice
   b. A question of translation, or genuine elements in BET?
6) Questions and discussion

Definition of basal phobia
An impending fear of dissolving, falling to pieces or being engulfed in eternal emptiness or pain

(definition by Didrik Heggdal, 2008)
AAQ-BET items

2 items added to the AAQ I

➔ I am confident that none of my feelings or inner experiences will be able to hurt or destroy me.
➔ If I really were to allow my innermost fear to surface, then I would be stuck or fall to pieces and would never be able to be myself again.

The BET patients: Characteristics

 Severe generalised, psychological and psychosocial dysfunction (GAF < 30)
 Self-harm and suicide attempts
 A wide range of severe symptoms associated with both Axis I and Axis II disorders
 Delusions, hallucinations and dissociation
 Extreme levels of pathology and fluctuating symptoms with several and shifting diagnoses
 They use a cocktail of various medications
 Despite cost-intensive treatment efforts they remain low functioning – some of them even get worse
 There is no research on treatment effects related to this group of patients
 There are no other treatment models that are used systematically for treating this group of patients

CASE 1: Female, age 28

Diagnoses prior to BET
• 307.51 Bulimia nervosa
• 309.81 Posttraumatic stress disorder
• 298.4 Psychogenic paranoid psychosis
• 300.15 Dissociative disorder or reaction, unspecified
• 298.9 Unspecified psychosis
• F 25.2 Schizoaffective disorder, mixed type
• F 43.1 Post-traumatic stress disorder

Diagnoses when transferred to the BET ward
• F 25.2 Schizoaffective disorder, mixed type
• F 63.3 Emotionally unstable personality disorder
CASE 2: Female, age 23

- F 25.1 Schizoaffective disorder, depressive type
- 2 years of hospital treatment prior to BET
- 7 months of in-patient BET treatment
- Discharged April 2010

CASE 2: psychometric screening

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Admission</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI (SCL-53)</td>
<td>133</td>
<td>59</td>
</tr>
<tr>
<td>PANSS Delusions</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>PANSS Hallucinations</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>PANSS Passim/ apathetic withdrawal</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>PANSS Impulse control</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Scid II Dependent PD (8)</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Scid II Paranoid PD (7)</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Scid II Borderline PD (9)</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

CASE 2: Medication (regular and "when needed")

<table>
<thead>
<tr>
<th>Medicament</th>
<th>Admission Dosage</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aripiprazol tbl</td>
<td>10 mg</td>
<td>No regular medications</td>
</tr>
<tr>
<td>Lamotrigin tbl</td>
<td>250+250 mg</td>
<td></td>
</tr>
<tr>
<td>Escitalopram tbl</td>
<td>40 mg</td>
<td></td>
</tr>
<tr>
<td>Chlorprothixen tbl</td>
<td>50+25 mg</td>
<td></td>
</tr>
<tr>
<td>Zopiclon tbl</td>
<td>7.5 mg</td>
<td></td>
</tr>
<tr>
<td>Zuclopenthixol im</td>
<td>75 mg</td>
<td></td>
</tr>
<tr>
<td>Chlorprothixen tbl</td>
<td>100 mg</td>
<td></td>
</tr>
<tr>
<td>Clonazepam tbl</td>
<td>4 mg</td>
<td></td>
</tr>
<tr>
<td>Almemazin tbl</td>
<td>40 mg</td>
<td></td>
</tr>
</tbody>
</table>
Figure 1: GAF time-series

GAF scores for 12 patients prior to BET, at BET start, and at BET discharge. 2 of these 12 chose to discharge themselves before completing the BET program. Follow-up GAF scores for 8 of the 10 who completed the program. Standard deviation for the 5 measuring points varied from 6.5 to 13.8.

Table 1: Changes in GAF – repeated measure ANOVA with contrast analyses

<table>
<thead>
<tr>
<th>Group</th>
<th>F</th>
<th>p</th>
<th>Contrast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior 24-30 m</td>
<td>12</td>
<td>36.1</td>
<td>discharge &gt; prior 6-12 m</td>
</tr>
<tr>
<td>Prior 6-12 m</td>
<td>6</td>
<td>32.4</td>
<td>discharge &gt; prior 24-30 m</td>
</tr>
<tr>
<td>Start BET</td>
<td>12</td>
<td>32.4</td>
<td>discharge &gt; prior 6-12 m</td>
</tr>
<tr>
<td>End BET</td>
<td>6</td>
<td>37.5</td>
<td>discharge &gt; prior 24-30 m</td>
</tr>
</tbody>
</table>

* P < .05

Figure 2: Dissociation at treatment start and at discharge

DES-data for 9 patients. Average scores were 28.8 (SD = 11.6) and 11.1 (SD = 8.5) respectively. Changes were evaluated with a t-test for dependent samples. The test showed significant reductions of dissociation from treatment start to discharge, t(1, 8) = 4.3, p = .002.
Global Severity Index (GSI)

Figure 3: Global Severity Index (GSI from BSI) at treatment start and at discharge

GSI-data for 9 patients. Average scores were 2.86 (SD = 0.38) and 1.84 (SD = 0.37), respectively. Changes were evaluated with a t-test for dependent samples. The test showed significant reductions in GSI-scores in the population from treatment start to discharge, t(1, 8) = 5.6, p = .001.

Acceptance and Action Questionnaire (AAQ)

Figure 5: AAQ-scores at treatment start and at discharge

AAQ-data for 9 patients. Average scores were 48.9 (SD = 6.3) and 37.2 (SD = 10.7), respectively. Changes from treatment start to discharge were significant in a t-test for dependent samples, t(1, 8) = 4.7, p = .001.

AAQ-BET items

Figure 6: AAQ-BET items scores at treatment start and at discharge

AAQ-BET items for 9 patients. Average scores for these two questions were 12.3 (SD = 2.3) at treatment start and 6.2 (SD = 4.0) at discharge. Scores at discharge were significantly reduced when compared to treatment start for the patient population, t(1, 8) = 4.1, p = .003.
Table 2. Changes in suicidal behaviors and violence

<table>
<thead>
<tr>
<th>N</th>
<th>TAU Mean per year (SD)</th>
<th>FU Mean per year (SD)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Suicide attempts</td>
<td>2.9 (1.5)</td>
<td>0.16 (0.89)</td>
</tr>
<tr>
<td></td>
<td>Self injury</td>
<td>8.4 (7.2)</td>
<td>0.56 (0.99)</td>
</tr>
<tr>
<td></td>
<td>Violence objects</td>
<td>2.7 (5.0)</td>
<td>0.18 (0.8)</td>
</tr>
<tr>
<td></td>
<td>Violence - humans</td>
<td>0.78 (1.4)</td>
<td>0.18 (0.8)</td>
</tr>
</tbody>
</table>

Data on suicide attempts, self injury, violence towards objects and violence towards humans for 9 patients. Number of incidences per year of each type of behavior during the two time periods. TAU (based on hospital records) prior to BET and Follow up (interview) after discharge. Changes from TAU to FU were significant (p < .05) for each of the 4 variables, Wilcoxon signed rank test (non-parametric) for related samples.

Figure 4. Number of regular medications at treatment start and at discharge

<table>
<thead>
<tr>
<th>Case Number</th>
<th>Medication start</th>
<th>Medication discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.3 (0.98)</td>
<td>0.75 (1.06)</td>
</tr>
</tbody>
</table>

Use of regular medication

Data for 12 patients. Average number of regular medications 4.3 (SD = 0.98) and 0.75 (SD = 1.06), respectively. Changes were evaluated with a t-test for dependent samples. The test showed significant reduction in the population from treatment start to discharge, t(1, 11) = 9.5, p < .001.

WHO’s definition of health

- Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity
- The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition
The basic principles of BET

- Life is a painful condition
- Life has always been painful
- Life is painful
- Life will continue to be painful
- Avoidance of pain leads to suffering and mental disorders
- Human beings create their lives by the choices they make
- Exposure and mindfulness enable us to cope with the challenges of life

The BET model - 5 phases

1. Attachment
2. Secure Base
3. Working Alliance
4. Focusing
5. Exposure
6. Solution
7. Focused Consolidation

Marginalized inpatients: Specific therapeutic challenges

- Hospitalization of demoralized and de-motivated patients with complex disorders may lead to
  - Escalating behavior disturbances
  - Excessive use of mechanical restraints
  - Forced medication
  - Poly-pharmacy
  - Pathological dependency and prolonged hospitalization
  - Premature discharge and the experience of rejection that re-traumatizes the patient
  - Burn out syndromes in staff and therapists
- Cybernetic theory offers a useful set of concepts to meet these challenges
- BET contains strategies based on cybernetics for preventing and reversing pathological processes and pathology-maintaining interaction
FACTORS CAUSING POSITIVE FEEDBACK LOOP TOWARDS MARGINALIZATION:
1. The medical model, which is based on external regulation (de-powerment)
2. The “step-by-step” ideology of health care institutions (demotivation)
3. Positive reinforcement to appeals, demands and threats (escalation of dysfunctional behaviors)
4. Acting out of counter transferences (leads to symbiosis and/or rejection)

BET strategies for minimization of behavioral disturbances and counteraction of regression

Secure base
"I see you"

Solution-focused consolidation
Supporting functional coping strategies

SWITCHING REGIMES

Level of functioning

OVER-REGULATION
→ The patient gets bored
→ and motivated for making new efforts

UNDER-REGULATION
→ Resources are mobilized
→ and the patient is empowered
Phobia

Phobias are maintained by avoidance

Biological switch automatic avoidance response

Affective arousal

Panic

Fear

Uneasiness

Discomfort

Wellbeing

TIME

CATASTROPHE !!!

Phobia

The anxiety curve and desensitization

Affective arousal

Panic

Fear

Uneasiness

Discomfort

Wellbeing

TIME

EXISTENTIAL CATASTROPHE !!!

Fear and anxiety become less frequent and the episodes last for shorter periods of time

I'm dissolving!

I'm falling to pieces!

I'm becoming engulfed in total emptiness!

I'll be overwhelmed by eternal pain!

TIME

The anxiety curve and flooding

Affective arousal

Panic

Fear

Uneasiness

Discomfort

Wellbeing

TIME

EXISTENTIAL CATASTROPHE !!!

Extinction of avoidant responses to dysphoric affects

Reduction of affective arousal
Summary - a comparison of BET and ACT

<table>
<thead>
<tr>
<th>Domain</th>
<th>BET and ACT</th>
<th>BET</th>
<th>ACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual level</td>
<td>Philosophical basis</td>
<td>Existentialism</td>
<td>Functional existentialism</td>
</tr>
<tr>
<td>Theoretical basis</td>
<td>Theories emphasizing the function of behaviors in context</td>
<td>Cybernetics</td>
<td>Relational frame theory</td>
</tr>
<tr>
<td>Operational level</td>
<td>Acceptance</td>
<td>Acceptance of effective arrest in connection with the experience of existential understanding</td>
<td></td>
</tr>
<tr>
<td>Therapeutic goal</td>
<td>Acceptance of life as it is</td>
<td>Functional self-regulation</td>
<td></td>
</tr>
<tr>
<td>Therapeutic turning point</td>
<td>The realization that avoidance doesn’t solve the problem</td>
<td>Non-avoidance of affective arousal associated with the experience of existential catastrophe</td>
<td></td>
</tr>
<tr>
<td>Clinical level</td>
<td>Target population</td>
<td>Marginalized inpatients with severe Axis I and Axis II disorder</td>
<td>People in general and a wide variety of clinical groups</td>
</tr>
<tr>
<td>Therapeutic relationship</td>
<td>Empathy, respect, validation</td>
<td>Direct but non-earned in</td>
<td>Directive but non-corrective</td>
</tr>
<tr>
<td>Therapeutic regulation</td>
<td>Empathy, hopefulness, and external regulation</td>
<td>Emphasis on the therapeutic alliance and the development of external regulation</td>
<td></td>
</tr>
<tr>
<td>Process</td>
<td>Patient’s responsibility</td>
<td>Patient’s responsibility</td>
<td></td>
</tr>
<tr>
<td>Use of language</td>
<td>Explicit prescription for change</td>
<td>No explicit prescription for change</td>
<td></td>
</tr>
</tbody>
</table>

Contact information / literature, downloads

- Postal address: Section for Psychoses and Comorbid disorders (SPS) Dep. of Mental Health, Blakstad Vestre Viken Hospital Trust Box 83, 1309 RUD - NORWAY

- Literature

- Internet / BET-downloads, PDF: www.vestreviken.no
  - BET manual: Basic principles and guidelines (Norwegian / English)
  - BET Phase 2: Working alliance, version 1 (Norwegian)
  - The BET model’s theoretical foundation – part 1: CYBERNETICS (Norwegian / English)

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