The development and evaluation of a range of mentalizing interventions for adolescents with (emerging) borderline personality disorder

Dawn Bales & Joost Hutsebaut
Geneva, MBT Congress 2016
Thanks to:

MBT-Nederland:

MBT Onderzoekslijn & MBT Onderzoeksconsortium:

Thanks to the Viersprong

UNIT MBT Amsterdam

UNIT MBT Bergen op Zoom

MBT-Onderzoeksconsortium: Jan van Busschbach, Jan Henk Kamphuis, Patrick Luyten, Jack Dekker, Roel Verheul, Dawn Bales

MBT-Onderzoekslijn: Dineke Feenstra, Joost Hutsebaut, Maaike Smits, Hester van Eeren

Anna Freud Centre
The need for early intervention for mental disorders in adolescence
The need for early intervention for mental disorders in adolescence
Adolescence as a key period for intervention

- ‘Mental disorders are the chronic disorders of the young’ (Thomas Insel)
  - Half of the lifetime cases of mental disorders have their onset before the age of 14, 75% has its onset before the age of 24 (NIMH, National Co-morbidity Survey)
  - Past this ‘risk period’, new incidences of mental disorder are relatively rare
  - It takes an average of 10 years before people seek help for their mental problems
  - Duration of untreated mental illness profoundly affects prognosis and treatment response
  - Evidence that the first 2-5 years after onset are crucial

The likelihood that common mental disorders in adults first emerge in childhood and adolescence highlights the need for a transition from the common focus on treatment of U.S. youth to that of prevention and early intervention.
Early intervention and clinical staging

- Early intervention is a useful approach for severe disorders that tend to be chronic and that develop progressively.
- Clinical staging has proved to be a useful strategy in general medicine (cancer, diabetes) and in mental health care (psychotic disorders) (McGorry, Killackey & Yung, 2008)
- **Clinical staging**: detailed description of where an individual lies on a continuum of disorder progression from stage 0 (at risk or latency stage) to stage IV (late or end-stage disease) (Scott et al., 2013)
Early intervention and clinical staging

- **Stage 0**: pre-morbid vulnerability, without actual symptoms (non-specific)
- **Stage Ia**: mild or non-specific symptoms with mild functional impairment (‘distress disorder’)
- **Stage Ib**: development of specific symptoms (‘subthreshold’)
- **Stage II**: first episode of full (‘threshold’) diagnosis, with moderate to severe symptoms
- **Stage III**: recurrence or relapse, with stabilizing of severe functional impairment
- **Stage IV**: severe, persistent mental disorder, does not remit anymore, severe functional impairment
Borderline PD as a candidate for early intervention / clinical staging

Borderline PD is a severe mental disorder
- Highly prevalent (esp. when including subthreshold conditions)
- Associated with complex co-morbidity (throughout time)
- Predicting long-term social and professional disability (Zanarini et al., 2012)
- Impacting largely on quality of life (Soeteman et al., 2007)
- Costly (Feenstra et al., 2008)
- Predicting long histories of treatments (Bender et al., 2001; Zanarini et al., 2015)
Borderline PD as a candidate for clinical staging & early intervention

What kind of disorders lend themselves to clinical staging model

1. Disorders which *tend or may* progress without treatment
   a) BPD includes a range of impairments that
      a) might progressively affect social and professional life and
      b) may provide a risk factor for developing co-morbid disorders
   b) Namely:
      a) Increased risk for negative life events
      b) Reduced ability to realize adequate support
      c) Reduced ability to benefit from existing support systems
      d) Increased risk at dropping out from treatment
      e) Increased risk at hospitalization
      f) Increased risk at deviant peer bonding

2. Disorder needs to be capable of spontaneous remission or arrest, or be curable

3. Staging and early treatment should increase chances of cure or of reducing mortality and disability
Borderline PD as a candidate for clinical staging & early intervention

What kinds of disorders lend themselves to clinical staging model

1. Disorders which *tend or may* progress without treatment and can become chronic

2. Disorder needs to be capable of spontaneous remission or arrest, or be curable

3. Staging and early treatment should increase chances of cure or of reducing mortality and disability

→ Doesn’t it make sense to consider Borderline PD ‘as we know it’ as a possible, but not inevitable outcome on a continuum of disorder progression?
# Clinical Staging of BPD

<table>
<thead>
<tr>
<th>Stage</th>
<th>Clinical Description</th>
<th>Duration</th>
<th>Persistence</th>
<th>Social Functioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Irritability, unusual sensitivity, excessive self-soothing, relational aggression</td>
<td>Pre-morbid</td>
<td>Rather vague problems, no clinical diagnosis</td>
<td>Affects school functioning (difficulties concentrating, peer contact, social anxiety)</td>
</tr>
<tr>
<td>I</td>
<td>Subtreshold BPD, affective and self-destructive symptoms (self-injurious behavior, mood swings, temper outburst, low or unstable self esteem)</td>
<td>Duration of severe symptoms is limited</td>
<td>Possibly axis 1 clinical disorders, like ADHD, mood disorders, conduct disorder</td>
<td>Imminent developmental arrest (absence from school, destructive peer group); problems arise at different life areas (school, peers, home)</td>
</tr>
<tr>
<td>II</td>
<td>Full BPD, with significant problems in 4 areas (emotions, impulsivity, identity and self-esteem, interpersonal), resulting in diagnosis</td>
<td>First episode of threshold BPD, duration of full episode is limited to less than 5 years</td>
<td>Co-morbidity possible</td>
<td>Moderate to severe impact on social functioning and school functioning; severe arrest in development</td>
</tr>
<tr>
<td>III</td>
<td>Full BPD, often towards interpersonal dysfunctioning and emptiness; suicidality may be chronic</td>
<td>Chronic duration of total illness (&gt; 5 years), with remission and relapse in actual episode of threshold BPD</td>
<td>Co-morbidity as a rule</td>
<td>Severe and chronic impairment in social and professional functioning; no limited recovery</td>
</tr>
<tr>
<td>IV</td>
<td>Full BPD, with severe problems in all areas; chronic suicidality</td>
<td>Chronic duration, no remission</td>
<td>Multiple co-morbidity, possible psychosis; multiple somatic problems</td>
<td>Virtually no participation in social and professional life, irreversible</td>
</tr>
</tbody>
</table>
Fundamental assumptions of clinical staging

1. Patients in early stages have a better response to treatment and a better prognosis than those in later stages.

2. Treatments offered in early stages should be more benign as well as more effective (more favorable risk-benefit ratio).

3. The provision of stage-appropriate treatment modifies the individual’s risk of disease progression.

   ➜ Early intervention might enable safer and more cost-effective interventions.
A range of mentalizing interventions according to clinical stage: Assumptions

• Progression towards Borderline PD is not an inevitable outcome
  • Its development can be detected and predicted in a ‘stage of development’
  • Even in severe cases of chronic BPD, its development, severity and impact has been progressive
  • Its development can be changed (stabilized or reversed)

• The earlier the stage of Borderline PD, the more benign & more effective the interventions are: work toward matched care, a stage appropriate selection of treatment;
  • Short term
  • mono-modal
  • Early intervention might enable safer and more cost-effective interventions
A range of mentalizing interventions according to clinical stage: Assumptions

• Interventions should be tailored to the developmental needs of youngsters and families
  • Involving families according to developmental phase

• Interventions should be delivered in structured service model with framework including:
  • Client review and follow-up on the basis of the stage
  • Possibility for intermittent care during transition to young adulthood, spanning the whole developmental phase
Selection of stage appropriate mentalizing interventions: Challenges & Implications

- There is a need for **early detection** of Borderline PD
  - Clear ‘markers’, definition of earlier clinical phenotypes which indicate an enhanced risk
  - Biological, social and psychological risk and protective factors
  - Avoiding vague and obscuring diagnoses like ‘delayed diagnosis’

- There is a need for **early intervention** of Borderline PD
  - Tailored to the stage of development of BPD
  - Tailored to the developmental needs of young people

- Example: Headspace Program in Melbourne
A range of mentalizing interventions according to clinical stage

<table>
<thead>
<tr>
<th>Stage</th>
<th>Spectrum</th>
<th>Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 0</td>
<td>Selective prevention</td>
<td>MBT-F, MBT-i (A/P)</td>
</tr>
<tr>
<td>Stage I</td>
<td>Indicated Prevention</td>
<td>MBT-F/MBT-i (A/P)/MBT-early</td>
</tr>
<tr>
<td>Stage II</td>
<td>Early intervention</td>
<td>MBT-i (A/P)/MBT-early / MBT-A IOP</td>
</tr>
<tr>
<td>Stage III</td>
<td>Standard treatment</td>
<td>MBT-A IOP / MBT</td>
</tr>
<tr>
<td>Stage IV</td>
<td>Long term treatment</td>
<td>MBT</td>
</tr>
</tbody>
</table>
MENTALIZATION-BASED TREATMENT- EARLY (MBT-EARLY)

An early intervention program for adolescents with (emerging) borderline PD
MBT-EARLY: IN- AND EXCLUSION

• Inclusion criteria
  • 14-18 years of age
  • Subclinical Borderline PD (3-4 traits, stage I intervention) OR
  • Full syndrome BPD (recent onset, stage II intervention)
  • Moderate to severe impact on social and school functioning

• Exclusion criteria (in terms of severity)
  • Severe and repeated suicidality
  • Complete developmental arrest in several life areas
### MBT-EARLY: PRELIMINARY PILOT DATA (SOCIO-DEMOGRAPHICAL AND DIAGNOSTIC INFORMATION)

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>28</td>
<td>100</td>
</tr>
<tr>
<td>Age (M, SD)</td>
<td>14,8</td>
<td>1,2</td>
</tr>
<tr>
<td>In school</td>
<td>23</td>
<td>82,1</td>
</tr>
<tr>
<td>Living situation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional family</td>
<td>12</td>
<td>42,9</td>
</tr>
<tr>
<td>Newly reconstituted family</td>
<td>3</td>
<td>10,7</td>
</tr>
<tr>
<td>Living with one parent</td>
<td>11</td>
<td>39,3</td>
</tr>
<tr>
<td>Institution</td>
<td>2</td>
<td>7,1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinical variables</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Axis I diagnoses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>4</td>
<td>14,3</td>
</tr>
<tr>
<td>Mood Disorders</td>
<td>10</td>
<td>38,5</td>
</tr>
<tr>
<td>Substance Use Disorders</td>
<td>1</td>
<td>3,6</td>
</tr>
<tr>
<td>Eating Disorders</td>
<td>4</td>
<td>15,4</td>
</tr>
<tr>
<td>Any Axis I diagnosis</td>
<td>14</td>
<td>50</td>
</tr>
<tr>
<td><strong>Axis II diagnoses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borderline PD</td>
<td>15</td>
<td>53,6</td>
</tr>
<tr>
<td>PD not otherwise specified</td>
<td>6</td>
<td>21,4</td>
</tr>
<tr>
<td>Any PD</td>
<td>16</td>
<td>75,0</td>
</tr>
</tbody>
</table>

- Mean number of BPD traits: 4,6 (SD=1,2; range 1-8)
## MBT-EARLY: PRELIMINARY PILOT DATA

<table>
<thead>
<tr>
<th>Outcome variables</th>
<th>T-scores M (SD)</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>YSR Internalizing</td>
<td>67,4 (10,9)</td>
<td>Clinical</td>
</tr>
<tr>
<td>YSR Externalizing</td>
<td>60,2 (8,7)</td>
<td>Borderline-clinical</td>
</tr>
<tr>
<td>YSR total behavioural problems</td>
<td>65,1 (8,5)</td>
<td>Clinical</td>
</tr>
<tr>
<td>CBCL Internalizing (mother’s report)</td>
<td>73,7 (7,1)</td>
<td>Clinical</td>
</tr>
<tr>
<td>CBCL Externalizing (mother’s report)</td>
<td>68,92 (7)</td>
<td>Clinical</td>
</tr>
<tr>
<td>CBCL total behavioral problems</td>
<td>72,8 (6)</td>
<td>Clinical</td>
</tr>
<tr>
<td>CBCL Internalizing (father’s report)</td>
<td>70,7 (10)</td>
<td>Clinical</td>
</tr>
<tr>
<td>CBCL Externalizing (father’s report)</td>
<td>66,3 (7,8)</td>
<td>Clinical</td>
</tr>
<tr>
<td>CBCL total behavioral problems</td>
<td>69,7 (8,8)</td>
<td>Clinical</td>
</tr>
<tr>
<td>SIPP Self-control (M, SD)</td>
<td>31,3 (11,6)</td>
<td>Low</td>
</tr>
<tr>
<td>SIPP Social concordance</td>
<td>40,9 (12,2)</td>
<td>Average</td>
</tr>
<tr>
<td>SIPP Identity Integration (M, SD)</td>
<td>31,7 (13,3)</td>
<td>Low</td>
</tr>
<tr>
<td>SIPP Relational capacities (M, SD)</td>
<td>41,4 (7,7)</td>
<td>Average</td>
</tr>
<tr>
<td>SIPP Responsibility (M, SD)</td>
<td>38 (12,3)</td>
<td>Low</td>
</tr>
</tbody>
</table>
An early intervention program, based on MBT, integrating elements from

- HYPE – CAT (Chanen)
- Dynamic Interpersonal Therapy (Lemma & Fonagy)

Essential features:

- Time-limited (16 weeks of ‘intensive’ treatment’)
- Integrating psychotherapy, family sessions, case management and pharmacotherapy
- Highly structured (strictly manualized) and goal oriented
- Evidence informed (weekly ROM)
- Team based
- Intermittent / episodic
MBT-EARLY: AIMS

- To prevent progression of Borderline PD
- To facilitate a healthy development
- To empower young people and their families
- To offer ‘as much care as needed, as little as possible’
MBT-EARLY: FORMAT

Main phase
16 weeks

Booster phase
6 months

1 psycho-education session
16 weekly individual sessions
2 family sessions
2 treatment review sessions

4 booster sessions
1 family session

MBT-EARLY format

Case management
Psychiatric management
Telephone and email consult
MBT-EARLY: STRUCTURE OF MAIN PHASE

3 weeks: 3 assessment sessions

- Assessments of youngster’s goals: what changes would make the most difference?
- Mentalizing functional analysis of self-destructive behaviour
- Assessment of relationships

10 weeks: 10 sessions individual therapy (middle phase)

- Goal oriented (treatment plan with 2 goals)
- ROM informed (PHQ-9 and GAD-7)
- Reflect upon changes in target symptoms (‘Let’s try to understand what made you feel more depressed (made you harm yourself less etc) last week? And what’s different compared to the weeks before’)

3 weeks: 3 termination / relapse prevention sessions

- End letter
- Relapse Prevention plan
MBT-EARLY: STRUCTURE OF TREATMENT

• Structure intensive treatment:
  • 3 assessment sessions
    • Assessments of youngster’s goals: what changes would make the most difference?
    • Assessment of crisis (+ extra crisis plan session)
    • Assessment of relationships
      ➔ Leads to start letter and treatment plan including 2 goals
  
• 10 work sessions (middle phase)
  • Goal oriented
  • ROM informed (PHQ-9 and GAD-7)
  • Reflect upon changes in target symptoms (‘Let’s try to understand what made you feel more depressed (made you harm yourself less etc) last week as compared to the weeks before’)

• 3 termination / relapse prevention sessions
  • End letter
  • Relapse Prevention plan
**MBT-EARLY: STRUCTURE OF BOOSTER PERIOD**

- **Aims**
  - Promote treatment independency
  - Support the use of relapse prevention plan

- **Structure**
  - 4 sessions (1, 2, 4 and 6 months after intensive phase)
  - Last session is used as an evaluation session with family
    - What has and has not changed?
    - Normal or clinical range?
    - How self-confident is the family they can progress towards the normal range (or prevent relapse)?
    - When should you come back (and when not)?
MBT-EARLY: FORMAT

Main phase
16 weeks

Booster phase
6 months

1 psycho-education session
16 weekly individual sessions
2 family sessions
2 treatment review sessions

4 booster sessions
1 family session

MBT-EARLY format

Case management
Psychiatric management
Telephone and email consult
MBT-EARLY: BOOSTER PERIOD

- **Aims**
  - Promote treatment independency
  - Support the use of relapse prevention plan

- **4 sessions (1, 2, 4 and 6 months after main phase)**
  - Last session is used as an evaluation session with family
    - What has and has not changed?
    - Normal or clinical range?
    - How self-confident is the family they can progress towards the normal range (or prevent relapse)?
    - When should you come back (and when not)?
MBT-EARLY: PRELIMINARY PILOT DATA

Patients referred to MBT-early
\[N=28\]

\[\downarrow\]

Patients in pre-treatment phase
\[N=4\]

\[\downarrow\]

Patients in main treatment phase
\[N=9\]

\[\downarrow\]

Patients in booster phase
\[N=5\]

\[\downarrow\]

Patients completed treatment
\[N=8\]

\[\rightarrow\]

Dropout of treatment
\[N=2\]
MBT-EARLY: PRELIMINARY OUTCOME DATA

- Average time spent during 16 weeks for completed treatments: +/- 1600 minutes (about 26-27 hours) (direct patient/family contact, including psychotherapy, case management, psychiatric consults, family sessions, ...)

- Almost no non-attendance
# MBT-EARLY: PRELIMINARY OUTCOME DATA

<table>
<thead>
<tr>
<th></th>
<th>Start of treatment</th>
<th>End of main treatment</th>
<th>t</th>
<th>p</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHQ-9</td>
<td>13,7 (6,7)</td>
<td>5,5 (5,3)</td>
<td>4,7</td>
<td>&lt;.001</td>
<td>1,41</td>
</tr>
<tr>
<td>GAD-7</td>
<td>11 (4,1)</td>
<td>3,4 (3,7)</td>
<td>5,2</td>
<td>&lt;.001</td>
<td>2</td>
</tr>
</tbody>
</table>
### MBT-EARLY: QUALITATIVE DATA

<table>
<thead>
<tr>
<th></th>
<th>Youngsters (%)</th>
<th>Parents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPD symptoms reduced significantly</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Some BPD problems remain</td>
<td>66,7</td>
<td>57,1</td>
</tr>
<tr>
<td>Significant BPD problems remain</td>
<td>0</td>
<td>14,3</td>
</tr>
<tr>
<td>No BPD problems left</td>
<td>33,3</td>
<td>28,6</td>
</tr>
<tr>
<td>Treatment length okay?</td>
<td>42,9</td>
<td>71,4</td>
</tr>
<tr>
<td>Booster period was useful</td>
<td>83,3</td>
<td>83,3</td>
</tr>
<tr>
<td>I would recommend this treatment</td>
<td>83,3</td>
<td>85,7</td>
</tr>
</tbody>
</table>
MENTALIZATION-BASED TREATMENT FOR ADOLESCENTS (MBT-A IOP)

A ‘standard treatment’ program for adolescents with severe Borderline PD
MBT-A: FEATURES

- Multimodal treatment
  - Individual therapy (1 x per week)
  - Group therapy (1 x per week)
  - Family therapy (1 x per 2 weeks)
  - Farmacotherapy
- Intensive and long term trajectory (+/- 12 mths)
- Post-treatment (stepped-down individual therapy)
- Team-based & multidisciplinary
MBT-A IOP: INCLUSION CRITERIA & AIMS

Inclusion criteria

• Full syndrome Borderline PD (at least stage II intervention)
• Severe to very severe impact on school, social and family functioning (including stage III & IV intervention)

• Virtually no exclusion criteria (in terms of severity): 1 hour traveling distance

• Aims
  • To stabilize (family) crisis and commit to treatment
  • To reduce personality pathology and enhance adaptive developmental functioning
MBT-A: STRUCTURE

12 weeks
- **Pre-treatment trajectory**
  - MBT-i A & MBT-i Parents
  - Mentalizing functional analysis destructive behaviour & crisis management
  - Treatment planning

1 year
- **Main phase format** *(Viersprong)*
  - Weekly MBT group therapy
  - Weekly MBT individual therapy
  - Bi-weekly family therapy *(MBT-F based)*
  - Extensive case management and psychiatric consults
  - Focus on commitment, (self-) destructive symptoms, interpersonal functioning, co-morbid disorders and developmental arrest

0-18 months
- **Post-treatment**
  - Relapse prevention *(mentalizing maintenance sessions)*
  - Stepped-down:
    - Individual and/or family sessions
MBT-A: EVIDENCE

Rossouw and Fonagy trial (2012)

• At random allocation of adolescents with SIB to MBT-A or TAU (a mixture of regular psychotherapy, family therapy, psychiatric consults etc)
• N = 80 (predominantly girls), aged 15.4 (MBT-A) and 14.8 (TAU)
• Results
  • No differences in realized dose of treatment
  • Significant reduction of SIB, risk behavior, depression and BPD symptoms in both groups
  • Reduction MBT-A > TAU
  • Superior effect of MBT-A due to improvement in mentalizing and reduction in attachment avoidance
MBT-A: EVIDENCE (FORMER INPATIENT PROGRAM)

- Laurensen et al. (2013)
  - Small-scale feasibility study of inpatient MBT-A
  - N = 11, all female
  - Medium (.58) to very large (1.46) effect sizes on several measures (personality functioning, quality of life and symptom stress)
  - Reliable change: 91%; 18% transition to normative range; no deterioration
MBT-A: EVIDENCE (INTENSIVE OUTPATIENT PROGRAM)

Patients referred to MBT-A (n = 56)

Patients starting MBT-A (n = 39)

Included in analyses (n = 9)

Did not complete questionnaires 12 months after start of treatment (n = 30)

Did not complete questionnaires at start of treatment (n = 17)
<table>
<thead>
<tr>
<th>Measure</th>
<th>Start</th>
<th>12 months</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSI (symptom distress)</td>
<td>2.5 (0.6)</td>
<td>1.5 (0.8)</td>
<td>1.55</td>
</tr>
<tr>
<td>PAI-BOR (borderline features)</td>
<td>43.8 (13.0)</td>
<td>36.6 (11.5)</td>
<td>0.62</td>
</tr>
<tr>
<td>EQ-5D (quality of life)</td>
<td>0.52 (0.2)</td>
<td>0.66 (0.2)</td>
<td>0.64</td>
</tr>
<tr>
<td>SIPP Self-control</td>
<td>2.4 (0.5)</td>
<td>2.9 (0.7)</td>
<td>0.85</td>
</tr>
<tr>
<td>SIPP Social concordance</td>
<td>2.5 (0.6)</td>
<td>2.8 (0.6)</td>
<td>0.64</td>
</tr>
<tr>
<td>SIPP Identity integration</td>
<td>2.4 (0.8)</td>
<td>2.5 (1.1)</td>
<td>0.03</td>
</tr>
<tr>
<td>SIPP Relational capacities</td>
<td>2.3 (0.8)</td>
<td>2.6 (0.9)</td>
<td>0.36</td>
</tr>
<tr>
<td>SIPP Responsibility</td>
<td>2.4 (0.7)</td>
<td>3.1 (0.6)</td>
<td>1.15</td>
</tr>
</tbody>
</table>
CONCLUSION

• Early detection and early intervention for BPD is feasible

• Interventions should be tailored to the specific stage of progression of BPD and to the developmental needs of adolescents and their families, offering the best ratio between costs and benefits

• Mentalization-Based Interventions are feasible for adolescents in several stages of progression of Borderline PD

• MBT-early is a safe time-limited, highly structured treatment program for young adolescents with (emerging) BPD with promising results (in short term)

• MBT-A is an effective intervention that can be applied for severe BPD adolescents and their families
CONCLUSION

MORTALITY FROM MEDICAL CAUSES

Peak
1965–1995

Current
2009–2012

Suicide

Stroke
(−20,000)

AIDS
(−30,000)

Heart Disease
(−1.1 Million)

ALL (Leukemia)
(−6,000)
CONCLUSION

• More research needed:
  • Long term outcomes for early intervention programs, not only with respect to syndromal remission, but with respect to social and academic functioning
  • Benefits of early detection and structured intervention as compared to usual treatment for these youngsters?
  • Treatment assignment
    • Amount and severity of BPD symptoms are only partially informative for assigning youngsters and families to treatment
    • How can we decide who can benefit from time-limited early intervention programs and who needs more ‘standard treatment’?
CONTACT

• Dawn.Bales@mbtnederland.nl

• Joost.Hutsebaut@deviersprong.nl