Impact of Community Based Therapy on Children With Mental Health Disorders: A Health Technology Assessment

INTRODUCTION
- The prevalence of mental health disorders among Indian children is increasing: this is a growing concern in India.
- As of 2014, the prevalence of child and adolescent psychiatric disorders in India is:
  - Community: 6.46% [95% CI: 6.00% - 6.92%]
  - In School children: 23.33% [95% CI: 21.35% - 24.45%]
- Depression is one of the major mental health disorders affecting children.
- Community based therapy, such as school-based therapy (SBT) and psychotherapy (PT) is used in the management of this condition.
- School Based Therapy (SBT) is a form of occupational therapy that is given to children based on the nature of the mental health disorder that the child is suffering from.
- PT is offered within a school setup to children in groups by a set of teachers and special educators.
- It involves a varied range of activities which mentally and physically encourage and enhance the daily life functioning skills in the children with mental health disorders.
- Clinical effectiveness of school based therapy

OBJECTIVE
- To investigate disease burden of mental health disorders in India.
- To assess the clinical and economic impact (by cost-effectiveness analysis) of SBT and PT on the symptoms of depression in Indian children aged below 15 years.

MATERIALS AND METHODS
- Literature Search: performed in Cochrane Review, Elsevier, PubMed and Medline databases for randomised controlled trials and cohort studies pertaining to community based therapies, particularly SBT and PT, in Indian children aged below 15 years suffering from depression.
- Key Words:
  - Community based intervention
  - Children with mental health disorders
  - Clinical effectiveness

RESULTS
- 19 full-text studies were identified through Cochrane Collaboration, PubMed, Medline, Elsevier database
- 19 full-text studies were included in the analysis
- 6 studies included in the analysis of Clinical effectiveness of school based therapy
- 10 studies included in the analysis of Clinical effectiveness of Psychotherapy
- 10 studies included in the analysis of Cost effectiveness

Clinical effectiveness of school based therapy

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Year</th>
<th>Mean SMD (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBT</td>
<td>2008</td>
<td>-0.20 (-0.35, -0.04)</td>
</tr>
<tr>
<td>PT</td>
<td>2006</td>
<td>-0.41 (-0.63, -0.18)</td>
</tr>
</tbody>
</table>

In comparison with no therapy, school based therapy significantly reduced symptoms of depression: standard mean difference (SMD) -0.20 (95% confidence interval (CI) -0.35 to -0.04)

Clinical effectiveness of Psychotherapy

<table>
<thead>
<tr>
<th>Study or Subgroup</th>
<th>Year</th>
<th>Mean SMD (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBT</td>
<td>2008</td>
<td>-0.20 (-0.35, -0.04)</td>
</tr>
<tr>
<td>PT</td>
<td>2006</td>
<td>-0.41 (-0.63, -0.18)</td>
</tr>
</tbody>
</table>

In comparison with no therapy, psychotherapy significantly reduced symptoms of depression: SMD -0.41 (95% CI -0.63 to -0.18)

Disease burden of mental health disorder in children
- According to WHO, total number of children in India (2014) aged 0-15 years: 364 million
- Total DALY lost for children with mental health disorder: 23.5 M x 0.004055 = 95,295.50 DALY/year

Cost effectiveness

- Clinical effectiveness of school based therapy
- Clinical effectiveness of Psychotherapy
- Cost effectiveness

CONCLUSIONS
- School based therapy and Psychotherapy are clinically and economically effective in reducing the symptoms of depression in Indian children aged below 15 years suffering from depression.
- By reducing the cost of each session to INR 50 (US$ 0.80), PT can be made more cost-effective.

REFERENCES
8. Trivedi PH, JAMA 2008; 300(5): 519-27

Poster presented at ISPOR 20th Annual International Meeting, May 16-20, 2015 Philadelphia, PA, USA