Moving Beyond Depression

Moving Beyond Depression™ Description

Overview

Moving Beyond Depression (MBD) is a comprehensive approach to identifying and treating depression in mothers participating in home visitation. Research has demonstrated that depression in the postpartum period occurs in about 26% of high risk mothers. In populations served by home visitation, prevalence is up to 50%. Depression undermines effective and nurturant parenting, interferes with normal child development, and negatively impacts home visitation outcomes. Research has also shown that home visitors often do not identify clinically significant depression. Even when depression is recognized, few mothers access effective, evidence-based treatments in the community. MBD was developed to address these needs through (1) establishment of a screening process to identify mothers in need of treatment, (2) provide an evidence-based treatment for depression that has been adapted for home visitation in order to optimize outcomes.

Identification, Screening, and Eligibility

The first phase of MBD is identification of potentially eligible mothers through screening. Mothers are screened using standardized depression measures (e.g., Beck Depression Inventory-II, Edinburgh Postnatal Depression Scale) administered at pre-determined time points by home visitors. Currently, ECS screens for depression at enrollment, and 3, 9, 12, 24, and 36 months postpartum. Other screening schedules are permissible so long as they capture the full range of service intervals. Using standard clinical cutoffs, mothers with elevated scores are identified as potentially eligible. The program is briefly presented to them by home visitors, and if interested they receive an eligibility assessment. The eligibility assessment is designed to confirm that the mother meets diagnostic criteria for major depressive disorder, and to establish baseline levels of maternal functioning. The eligibility assessment is conducted by a separate assessor, but it can also be conducted by the therapist. Determination of diagnostic status is made using a brief semi-structured psychiatric interview (e.g., PRIME-MD). Mothers are eligible if they meet criteria for major depressive disorder, and if they do not have a reason for exclusion. Mothers are ineligible if they have a condition that is not responsive to In-Home Cognitive Behavior Therapy, or if clinical needs require more rapid treatment. Reasons for exclusion are psychosis, bipolar disorder, schizophrenia, substance dependence, mental retardation, or acute clinical need (suicidal with intent).

Treatment Strategy

In-Home Cognitive Behavior Therapy (IH-CBT) is grounded in the core principles and established procedures of CBT for depression originally articulated by Beck and colleagues. IH-CBT is delivered in the home by a licensed master's level social worker. The therapist has training in CBT at the graduate level, participates in a visitor's training program at the Beck Institute for Cognitive Therapy and Research, and is further trained and regularly supervised by the developers. Treatment consists of 15 weekly sessions that last 50-60 minutes. Standard CBT treatment is augmented with clinical tools that were developed to facilitate adaptation to the unique needs of young, low income mothers. The Therapy Summary and Planning for the Future

is provided at the last session. It describes the treatment, lists what the mother had learned and goals that have been met, and delineates steps to take if symptoms recur.

IH-CBT is an adapted treatment that was designed to address and overcome barriers and impediments to implementation that are typically encountered when treatments originally developed under highly controlled conditions are applied in real-world settings. Accordingly, IH-CBT preserves the core features of CBT that are essential to its effectiveness while modifying elements of treatment content and delivery in order to enhance feasibility, engagement, and impact. In IH-CBT, adaptations were made to address setting, population, and context. In terms of setting, IH-CBT is delivered in the home environment. Creative solutions and accommodations are made to ensure treatment delivery in home environments where privacy is sometimes difficult to ensure, the child is present, and unexpected interruptions occur. However, providing treatment in the home offers advantages in that (1) many of the clinical issues that are addressed in treatment occur in the home setting, (2) the therapist is able to observe elements of the home that may be contributory to psychopathology. The second adaptation involves the population of young, low income, first-time mothers who are socially isolated. Treatment content focuses on issues relevant to this population, including transition to adulthood, parenting efficacy, relationship maladjustment, and trauma history. The third adaptation seeks to leverage participation in home visitation in order to optimize outcomes through close collaboration with home visitors. Collaboration occurs through frequent written communication between therapist and home visitor utilizing a web-based clinical documentation system, and telephone contact as needed. Time spent by home visitors in communicating with the therapist is variable and at the discretion of the home visitor. This close working alliance ensured that both practitioners are working towards the same objectives. In addition, the home visitor attends the 15th session with the mother and therapist, typically for 30 minutes. During this session the Therapy Summary is presented and the home visitor is instructed as to how to support the mother in utilizing learned skills and to maintain gains and prevent recurrence of depression.

Efficacy

Findings from a clinical trial indicate that IH-CBT is highly effective in reducing depressive symptoms, facilitating remission of Major Depression, increasing social support, reducing overall psychopathology, and increasing functional ability relative to mothers who receive home visitation alone. Mothers who recovered from Major Depression reported improvements in parenting stress, mother-child relationship, and nurturing parenting. Among mothers who received home visitation alone, there were no differences in outcomes between those who did or did not receive treatment in the community. Both mothers and home visitors reported high levels of satisfaction with IH-CBT. Mothers receiving IH-CBT had 44.3% more home visits during the treatment interval than their counterparts who received home visitation alone (note—statistical analyses show that these additional home visits do not account for the broad improvements found in mothers who receive IH-CBT or who recover from Major Depression).

Implementation, Training, and Support

Adoption of MBD involves three phases. In Phase I, *Implementation*, we work with home visiting sites to construct the infrastructure and prepare sites to implement the MBD correctly. This includes training home visitors and supervisors in identification and response to maternal depression, establishment of referral procedures, data collection and management, and how to work with the therapists to optimize outcomes for mothers and children. This includes both on-site review and training. An implementation plan is developed that maps out elements necessary for successful launching and maintenance of MBD, with particular attention to unique organizational and site characteristics that facilitate or impede implementation. Phase II is *Training*. In this phase, therapists and on-site doctoral-level supervisors come to Cincinnati for a two-day training in IH-CBT. Training includes didactics, observation of videotapes, interface with a home visitor and home visiting management, role-playing, and in-depth review of IH-CBT elements and use of the manual. In Phase III, ongoing *Consultation and Support* is provided to therapists, the on-site supervisor, and sites. This includes regularly schedules site visits and telephone calls to discuss issues related to treatment implementation challenges, and to compare and contrast the site's performance relative to the Cincinnati experiences. The time period from start to finish is two years.

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Return on Investment: The Economic Case for Moving Beyond Depression

Moving Beyond Depression (MBD) seeks to assist new mothers with clinical depression in recovering from the disorder. In addition to a decrease in debilitating symptoms, effective treatment should lead to better outcomes for mothers and their offspring in a number of areas. Many of these outcomes have cost implications, and as such to the extent that MBD is successful it should result in considerable cost savings to a number of entities.

A number of clinical and economic studies have documented the negative impacts of depression on mothers and their children. These impacts are presented in Table 1. In terms of economic costs, these primarily involve employers (lost work, lower productivity, increased disability); health care (expensive treatments particularly for acute care, long term treatment for mothers and children, poor birth outcomes); early intervention and educational services for children (cognitive and language delays); juvenile justice and child protective services (delinquency, child abuse and neglect, foster care placement); and public welfare (decreased payment of taxes). In addition, there is significant loss of income associated with diminished educational achievement, fewer high quality job opportunities, and income lost to disability. Of particular importance to home visiting, depression undermines the investment made in home visiting services by utilizing additional program resources and contributing to poorer outcomes.

Table 1. Effects of depression on mothers and children.

Effects of Depression with Economic Costs	
Mother	**Child**
Less likely to be employed Lower educational achievement leads to lower paying job If employed, more absenteeism If employed, more presenteeism More likely to have disability days Decreased lifetime earnings Decreased payment of taxes Increased use of public assistance Loss of future earnings due to death Increased health care costs—treatment of depression, expensive acute treatment (hospitalization), higher use of health care generally, greater use of emergency room, other psychiatric and health conditions requiring treatment, increased prenatal & birth complications	Increased risk for preterm birth Cognitive delays and/or impairments may lead to early intervention services and later special education services Psychiatric conditions (ADHD, depression, conduct problems) require treatment, lead to lower academic, achievement, and have long term implications for employment and lifetime income Increased risk for injury Increased risk for physical health problems due to inadequate preventive care, late identification of illness, non-adherence to treatment Increased risk for child maltreatment and CPS Involvement Increased risk for foster placement Increased risk for delinquency
Effects of Depression with Human Costs	
Mother	**Child**
Insecure attachment with child Dissatisfaction with parenting role Poor coping with stress Poor relationships with child and others Chronic sadness Hopelessness Low self-esteem Suicidality Domestic violence Anxiety Increased risk for substance abuse Social isolation and decreased community engagement Poor quality of life	Basic physical and emotional needs unmet Failure to learn self-regulation skills Unhappiness Harsh and non-nurturing environment Unstimulating environment undermines learning Cognitive delays Poor social skills Poor relationships with peers Biological over-reactivity to stress School underachievement Poor physical health

Some of the economic costs of these outcomes have been identified. Depression in adults costs $83.1 billion annually. This breaks out to 31% for direct medical care, 62% for workplace costs, and 7% for suicide/mortality costs. In a year, depressed employees miss 27.2 days due to their illness. Depression is associated with 2.5 fold increase in probability of missing work and 50% increase in lost work time. Depressed employees have total annual claims that are 70% larger than non-depressed counterparts. Maternal depression is associated with an increase in preterm births, which cost $51,600 each on average. In terms of parent and child outcomes, across the lifespan a family with a child with psychological disorders will earn $300,000 less than their counterparts unaffected by mental health problems.

Other studies have documented cost savings associated with successful treatment of depression. In a study of a program to treat to maternal depression in low income women, it was found that $5.21 was saved for each $1 spent. This study looked at only four sources of cost (program, child abuse and neglect, workplace productivity, and high school graduation), suggesting that the ROI is substantially underestimated. Another study found that a cost effectiveness ration of $17,624 per Quality Adjusted Life Year (QALY), a rate that is well within the range justifying public health investment. Another study looked at the cost effectiveness of CBT for adult depression and concluded “the benefits (of treatment) to the whole economy are great…because the cost of the therapy is so small , the recovery rates are so high and the (public) cost of a person is so large.”

Collectively, the research on costs of depression and benefits of effective treatment clearly points to a highly favorable cost-benefit ratio. However, no single study has documented all of the potential costs of depression to mothers and children. Two studies have affixed a specific cost number. One (as noted) found a family income loss of $300,000 over the lifetime due to childhood onset psychological problems. A second found that a depressed new mother cost $22,647, although this calculation relied almost exclusively on costs related to risk for having a low birth weight infant and overlooked the many other potential costs of depression to mothers and children. It would seem reasonable to total these two numbers and add $150,000 to cover other costs, yielding a total cost of $500,000 per depressed mother. This, too, is likely to be an underestimate, but it provides a conservative metric with which to examine the ROI of Moving Beyond Depression. Using program process statistics derived from the clinical trial of In-Home Cognitive Behavioral Therapy, the following emerges:

<table>
<tr><th>Community Group: n = 1,000 mothers</th><th>Group with MBD: n=1,000 mothers</th></tr>
<tr><td>• 30% with depression
  ○ n=300
• 15% receive treatment
  ○ n=45
• Costs saved
  ○ 45 x $500,00
  ○ $22.5 million</td><td>• 30% with depression
  ○ n=300
• 53% receive treatment
  ○ n=160
• Costs saved
  ○ 160 x $500,000
  ○ $80 million</td></tr>
<tr><td colspan="2">Costs Saved in MBD vs. Community Treatment = $57.5 million</td></tr>
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