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An Emerging Best Practice Model for Perinatal Depression Care

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Abstract

Perinatal depression is a significant health problem, especially among inner-city women. The authors explored the feasibility of an innovative model that integrated depression screening and treatment within an agency for maternal-child health. The team conducted depression screening with the Edinburgh Postnatal Depression Scale; they confirmed the primary diagnosis with the PRIME-MD instrument for 29 women with positive screens. Most participants had moderate or severe major depressive disorder. Women contended with multiple treatment barriers. Colocated depression care was highly acceptable and enabled evidence-based care delivery for at-risk mothers.

Perinatal depression is a major public health problem. A striking 14.5% of women experience a new episode of depression during pregnancy or the first three months after delivery (1). Higher rates occur among inner-city women in low-income households (2). Perinatal depression—that is, major depressive disorder with onset during pregnancy or the first postpartum months—is characterized by low recognition and treatment rates. It is impossible to diagnose depression without a clinical examination. In fact, the theme of the Perinatal Depression Awareness Campaign (www.perinatalweb.org) is “You can’t tell without looking.” Low rates of recognizing and treating perinatal depression may be attributed to the failure to screen new mothers for depression.

Maternal mental health care remains a major unmet need. The annual report of Healthy Start, Inc., of Pittsburgh reported that 40% of mothers whose children were in the program were considered to be at high risk for major depression, but only 16% of women who were referred for treatment attended the initial appointment. The current fragmented system of health care makes it difficult to identify the appropriate locus of care for an affected patient. Therefore, interventions that combine case identification, activation of the patient to seek care, physician education, and system-level efforts to support coordination of care are critical to improve outcomes of depressed mothers.

Collaborative care, which involves a multispecialty team based in the primary care setting, is one strategy to improve depression management and increase the likelihood of recovery. This model of one-stop intervention appeals to perinatal patients because it is affordable and

practical (3). In this column we describe a pilot program to explore the feasibility of a collaborative model for colocated perinatal depression care.

Description of the CARES Program

Healthy Start, Inc. (HS), is a federally funded initiative that promotes maternal-child health interventions for positive health behaviors, psychosocial resources, and self-empowerment. Women's Behavioral Health-CARE (WBHC) is a university-based research clinic with a focus on perinatal mood disorders. HS and WBHC colleagues together created a hybrid team that delivered colocated perinatal depression care from April to September 2008. [A table that outlines the contributions of each organization is available as an online supplement at ps.psychiatryonline.org.] The name of the program was HS CARES (Collaboration for Assessment, Referral, Evaluation, and Stabilization). Key informant and focus group interviews with HS administrators and clinicians informed program development.

Potential participants included pregnant women and new mothers with infants less than one year old. The Edinburgh Postnatal Depression Scale (4) (EPDS) is a widely validated and common measure to screen for major depressive disorder during pregnancy and after delivery. The hybrid team conducted routine depression screening of HS clients. An EPDS score of ≥ 10 was used as the cutoff point to identify potential participants with depression risk. [A flowchart of the perinatal depression care program and additional references to useful articles are available in the online supplement at ps.psychiatryonline.org.]

WBHC provided the validated tools to confirm diagnosis and measure mood levels. They developed the Likert scale to measure participant satisfaction and extended malpractice insurance coverage for the colocation site. At a weekly clinic, WBHC clinicians completed psychiatric evaluations of HS participants who screened positive for depression. They reviewed the diagnosis and suggested medical work-up with the participant, discussed treatment options, initiated pharmacotherapy or helped the client develop a skill set to manage depression and stress, depending on the participant's preference, and provided ongoing consultation and training materials for the HS staff.

To frame the treatment focus, each participant defined her goals. For example, one mother specified, "I want to enjoy spending time with my daughter" rather than "I want to have my depressed mood treated." Skills training focused on "mindfulness" parenting exercises based on dialectical behavior therapy (5) and cognitive-behavioral skills to manage depression, anxiety, and traumatic grief symptoms. The HS team triaged referrals, screened and prepared participants for depression care, monitored adverse effects and adherence, assisted with prescription coverage problems, helped consolidate skills training, and provided administrative support (secure record keeping, contract agreements, and salary support). Primary care physicians were enlisted to advise the team about the extensive array of medical disorders experienced by participants.

Evaluation of outcomes

Psychiatric episodes, depression levels, medication side effects, and concomitant drug therapy were recorded at each visit. The PRIME-MD Patient Health Questionnaire (6) was used to confirm the primary diagnosis. Depression severity was assessed with the Structured Interview Guide for the Hamilton Depression Rating Scale, Atypical Depression Symptoms Version (SIGH-ADS) (7). The SIGH-ADS comprises the 21-item Hamilton Rating Scale for Depression (8) and an additional set of eight questions to probe for neurovegetative symptoms, which are commonly reported by women with depression. A SIGH-ADS score of ≤ 8 indicates a euthymic mood state, and a score of ≥ 18 indicates a higher level of depression severity that may be accompanied by impaired functioning. The team developed a client satisfaction survey

—a self-report tool to assess a participant's experience. On a 5-point Likert scale, women rate the quality of time spent with the staff, the explanations about their health concerns, their inclusion in the treatment decision-making process, the instructions they received for follow-up, and their overall care.

The depression screening identified 29 women with increased depression risk (EPDS ≥ 10), and all agreed to enter the CARES program. Sixteen women arrived for initial evaluations, and thus the evaluation participation rate was 55%. The average age of participants was 25 years (range 18–36 years). Fourteen were African American, and two were white. Twelve were single, and four were married. Twelve had no insurance, and four were covered by Medicaid (which expires for mothers at six weeks after delivery). Each participant had a primary diagnosis of major depressive disorder—15 had unipolar disorder, and one had bipolar disorder. Eleven had moderate or severe depression symptoms. Six women had comorbid posttraumatic stress disorder, three had comorbid alcohol or cannabis abuse disorders, and 12 had two or more comorbid medical disorders.

At baseline and the first and second follow-up visits, the mean $\pm$ SD SIGH-ADS scores were 18 $\pm$ 8 (range 8–33), 17 $\pm$ 9 (range 0–28), and 11 $\pm$ 8 (range 4–19), respectively. Eight participants returned for at least one follow-up visit after the evaluation (drop-out rate of 50%). Participants reported high levels of satisfaction (mean score 33 $\pm$ 3; range 28–35; possible range of 0 to 35, with higher scores indicating greater satisfaction.)

The eight participants who began receiving treatment and returned for follow-up care reported that the combined treatment (medication and skills training) reduced their symptoms and improved their functioning at home and work. They found that the skills enriched their moment-to-moment mother-infant interactions.

Six of the sixteen participants required treatment for sustained traumatic grief related to environmental stressors from violence. They reported sadness, nightmares, hyperarousal, and feelings of unresolved loss related to the death of beloved family members. One woman's three-year-old son had died after accidentally shooting himself with his father's gun. One woman's adult son died as the result of a drive-by shooting. One woman witnessed the murder of her husband on her doorstep. Inventory tools to assess the intensity of symptoms related to grief and bereavement-specific symptoms (yearning for the deceased, disbelief, and not accepting the death) allowed clinicians to help participants define goals to reduce the intensity of their grief, improve recall of fond memories, and reintegrate with the community (9).

Case example

When a 32-year-old, married white woman with a 22-month-old daughter came to the clinic, she said, "I want to stop having thoughts to hurt my daughter." She had developed postpartum depression four months after delivery. After receiving sequential antidepressant trials without response, she abandoned treatment. She contended with chronic anxiety and a set of new symptoms—unwanted intrusive thoughts about harming her daughter without specific plans to do so or incidents of harmful behaviors. The diagnostic interview suggested obsessive-compulsive disorder and comorbid major depression.

Individualized treatment involved fluoxetine therapy (starting dosage of 10 mg daily; treatment response at 30 mg daily) and cognitive restructuring and behavioral modification skills. Between appointments, she completed skills exercises from an instructional workbook (10), and she received telephone booster sessions to reinforce skills development. Her anxiety symptoms and her functioning improved tremendously over the course of six months. Eventually, she was hired as a playground attendant. At the final visit, she agreed to ongoing monitoring and medication management by her primary care physician.

Implications

This pilot study of a model for collaborative depression care appeared to benefit high-risk women and their families. CARES highlighted the feasibility of a hybrid model for perinatal depression treatment. There was a high rate of participation (55%) in the subsequent diagnostic evaluation among the women who screened positive. This is a higher rate than the 16% participation rate after referral to conventional services that was reported in the 2007 HS annual report and the 42% participation rate (427 of 1,017) among young low-income mothers who were referred for treatment of depression (11).

There are several reasons for the clinic's appeal. The colocation site was embedded in an existing services agency with a trusted relationship in the community. Clinicians developed individualized treatment plans that were based on a participant's personal values (12). Treatment accessibility was optimized. The key elements of this model—trust (11), attention to preferences (13), affordability, satisfaction, patient and provider education, enhanced case management, and evidence-based care—contribute to improved depression outcomes and increased employment rates and support recovery. The CARES program optimized outcomes by offering multimodal treatments and services to address comorbid medical disorders and complex psychosocial needs. This collaborative approach incorporated the range of services necessary to promote recovery and a return to earlier or new levels of functioning.

Even a free clinic at a familiar setting did not entice some women to enter treatment. Women with depression who refuse treatment may struggle with a high level of illness severity, chronic diseases, minimal supports, poor insurance coverage, and the personal burdens of low income and poor education (high school or less) (14). Most of the participants who left treatment early lived in single-parent households with very limited family and financial support. Despite strong efforts to engage participants, mothers with the greatest need were unable to access depression care.

Further study of the effectiveness of a hybrid service delivery model with a larger expanded population of urban women is indicated. Such programs must provide information about the benefits of depression care to which women can relate; integrate into the community; utilize multimedia tools, such as television, Web sites, and local events, to disseminate information and dispel myths about mental disorders; and offer convenient one-stop mental health and medical care.

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