Improving the Identification and Treatment of Postpartum Depression in a Managed Care Organization

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Abstract

- **Objective:** To describe an initiative intended to improve the identification and treatment of postpartum depression (PPD), a condition that is often unrecognized and untreated.
- **Setting:** Health maintenance organization (HMO) in Texas.
- **Initiative:** All female members of the HMO who had a baby delivered between May and September 2003 received a screening packet that included an educational brochure and a self-administered depression assessment tool. Women who “screened positive” were called by a licensed behavioral health clinician. As part of the initiative, 297 obstetrician/gynecologists in the Dallas/Fort Worth area were surveyed regarding their attitudes and practices related to PPD.
- **Results:** Of 2034 women who received a screening packet, 280 (14%) returned a completed screening tool. Of these 280, 23 (8%) screened positive for depression and received an intervention call. Over half of the surveyed physicians reported screening patients for depression at postpartum visits but few used a specific screening tool. Respondents were comfortable with treating depression but said lack of time was the top barrier to treatment.
- **Conclusion:** A mail-based outreach program can successfully identify depression in postpartum women. Obstetrician/gynecologists have an important role to play in the early identification and treatment of PPD.

Postpartum depression (PPD) is a major health concern in women of childbearing age. Recent studies indicate that approximately 13% of all new mothers [1] and 26% to 32% of adolescent mothers [2] experience PPD. The majority of affected women suffer from depression for more than 6 months, and approximately 25% of untreated patients will be depressed up to a year later. The prevalence and impact of the disorder suggest that assessment for PPD should become standard practice among health care systems and professionals who treat women. In fact, a new Texas law (HB 341, September 2003) requires that health care professionals who render services prenatally or at delivery provide resource information regarding postpartum counseling for PPD and other emotional traumas associated with pregnancy and parenting [3]. Despite recent attention in the lay press [4,5], postpartum depression often goes unrecognized and untreated [6].

In 2003, Blue Cross and Blue Shield of Texas (BCBSTX) and Magellan Behavioral Health, the delegated provider of mental health services for HMO Blue Texas, embarked on a collaborative initiative to improve the identification and treatment of PPD among HMO Blue Texas enrollees. The 2-pronged effort involved targeted outreach to new mothers through a mailed screening packet plus a survey of community obstetrician/gynecologists to assess their attitudes and practices related to PPD.

Clinical Background on Postpartum Depression

PPD is considered a subcategory of major depression. It is defined as a sad mood lasting at least 2 weeks accompanied by at least 4 other symptoms (eg, change in appetite, sleep disturbance, decreased energy, difficulty concentrating) with onset of symptoms occurring within 4 weeks of delivery [7] (although many researchers consider onset within 3 to 6 months as consistent with PPD). Women with PPD may also experience thoughts of violence toward their children, lack of interest in their new infant, and profound guilt about their feelings.

A number of potential risk factors have been identified and include family or personal history of depression [8,9], stressful life events [10], lack of social supports [11], and having preterm infants [12] and multiple births [13]. In a meta-analysis of

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84 studies on PPD, Beck [14] identified 13 predictors of PPD including child care stressors, prenatal anxiety, poor marital relations, difficult infant temperament, single marital status, and unplanned/unwanted pregnancy.

The consequences of PPD on children are significant and have been linked to an increased incidence of emotional disturbance [15,16], behavioral problems [17], deficits in intellectual and cognitive functioning [18–20], as well as increased medical visits, hospitalizations, and prescriptions. Children of depressed mothers are at increased risk of being physically abused [21].

Initiative

The PPD initiative was developed and implemented under the aegis of the mental health/chemical dependency joint operating committee of BCBSTX and Magellan. This committee was created to foster good communication and collaboration between the 2 entities and to oversee quality improvement activities. The committee, whose members are key operations and quality management staff, is co-chaired by the medical director for each organization. Pfizer Pharmaceuticals actively participated in the practitioner survey portion of the study.

Education, Screening, and Treatment Referral Program

The PPD education, screening, and treatment referral program targets all female members of HMO Blue Texas who have had a baby delivered. Eligible members are identified through the claims system. Between 4 and 6 weeks after they have given birth, eligible members are mailed a packet that contains an introductory letter, an educational brochure about PPD, a PPD screening instrument (Edinburgh Depression Scale), and a demographic survey. The letter briefly describes the PPD program and asks the member to complete the screening tool and survey and to return them in the enclosed postage-paid envelope. The member is advised that she will be contacted if her answers on the screening tool indicate that she might be depressed, that only women whose answers indicate they need help are contacted, and that all information is kept confidential. The letter also tells the member that returning the completed survey lets Magellan know she would like to “hear about anything that might be important.” A Magellan telephone number is included for members to call with questions about PPD along with information about how to contact Magellan for emergency assistance.

The Edinburgh Depression Scale is a 10-item screening tool designed to uncover depression in women who are pregnant or postpartum. Unlike other depression screening instruments, it has no somatic-type questions that relate to such things as weight change or sleep impairment, which can be a normal part of pregnancy and postparturition. The Edinburgh Depression Scale has been validated for use in postpartum patients. Studies have shown it to be both sensitive and reliable for detecting PPD. The 10 items are easy to read and take only a few minutes to complete. Responses are categorized as 0, 1, 2, or 3 based on increasing severity of the symptom. The total score is calculated by adding up the scores for each of the 10 items. For the purposes of this program, a score of 13 or higher is considered a positive screen for PPD.

The 7-item demographic survey was designed specifically for this PPD prevention program and asks about marital status, age, ethnicity, and number of children in the home. It also asks the women to rate how much they learned from the PPD brochure.

All screening tools returned from members are scored at Magellan, which also aggregates data from the demographic surveys. A woman who “screens positive” for depression is called by a Magellan care manager, who is a licensed behavioral health clinician. The care manager discusses the findings from the screening tool and, when appropriate, offers a specific visit appointment with a behavioral health practitioner. If materials are not received after 6 weeks, a follow-up reminder letter is sent.

Survey of Obstetrician/Gynecologists

In the fall of 2002, BCBSTX, Magellan, and Pfizer began a collaboration with the aim of increasing the diagnosis and treatment of PPD. This partnership was stimulated by research findings that only a small percentage of postpartum patients were being treated for depression. Moreover, initial results from an earlier informal PPD screening and referral program suggested that a consumer outreach effort alone was insufficient to reach as many postpartum women with depression as would be anticipated. To learn how to better involve ob/gyn physicians in the diagnosis and treatment of patients with PPD, including identifying their preferred methods of receiving information (eg, educational information, guidelines, tools), the group developed a survey. The draft survey was revised based on input from ob/gyn thought leaders in the Dallas/Fort Worth area at a focus group dinner meeting organized for this purpose. Their input included expanding the survey to cover other conditions they commonly see in their practices that might be associated with depression, such as infertility.

The 13-question survey captured demographics (years in practice, beginning year of obstetric practice, estimated percentage of patients who use the ob/gyn as a primary care provider) and asked about screening and treatment practices (frequency of screening and at what type of visit, tools used for screening and diagnosis, comfort level with diagnosis and treatment, barriers to treatment), sources of information on new treatment options, and willingness to learn more about PPD and its differential diagnosis. To administer the survey,
Pfizer Women’s Healthcare sales force representatives distributed surveys directly to selected ob/gyn physicians in their sales areas. Each of 6 representatives presented the survey to 50 key physicians in his or her territory, briefly explaining the purpose of the study. They waited in the office for the physician to complete the survey. During December 2002 and January 2003, 300 surveys were distributed in this manner in the 5-county Dallas/Fort Worth area (Dallas, Tarrant, Collin, Denton, and Rockwall counties). The Texas State Board of Medical Examiners Web site lists 615 ob/gyn physicians practicing in the area where the surveys were distributed. Most physicians completed the survey in their office, but some physicians completed it while attending the Southwest Gynecologic Assembly held in Dallas from 5 to 7 December 2002. Of the 300 surveys distributed, 297 surveys were completed and returned for analysis. A Pfizer clinical education consultant collected and analyzed the results of the survey.

### Results

#### Outreach

For the period May through September 2003, out of 2034 new mothers who received a packet, 280 (14%) returned a completed screening tool. Of these 280, 23 (8%) screened positive for possible depression; following calls by a Magellan care manager, 5 of the 23 women accepted a referral and made an appointment with a behavioral health specialist for evaluation. An additional one woman said she was going to seek further evaluation and possible treatment from her ob/gyn. Another woman reported she had started treatment for depression prior to receiving the materials in the mail. Seven women reported that the packet helped them recognize their depression, and they had taken some action on their own; they were starting to feel better but declined a referral for treatment services. Nine women who scored positive for depression did not respond to care manager phone calls or follow-up letters. Both nondepressed (85%) and depressed respondents (87%) reported learning from the educational brochure that was included in the mailed packet.

Table 1 shows the demographic characteristics of all the women who returned the survey and those women who scored positive for depression. The age of the women who scored positive for depression ranged from 17 to 41 years, and the age of those who scored negative for depression ranged from 15 to 44 years.

#### Physician Survey

The ob/gyn physicians who responded to the survey were in practice an average of 16 years (range, 1–52 years). They estimated that they served as a primary care physician (PCP) for an average of 45.5% of their patients (range, 0%–100%). Over half the physicians reported screening patients for depression routinely at postpartum visits (Table 2). Few respondents (22%) reported using a specific depression screening tool to screen. Most commonly used methods to screen were asking about previous depressive episodes and asking about family psychiatric history (Table 3). Respondents said they were comfortable with treating depression but identified “lack of time” as the top barrier to treatment (Table 4).

#### Discussion

The results of our PPD education, screening, and treatment referral program demonstrate that a mail-based outreach program to postpartum women can successfully identify depression in this group. The program also assisted some of the women identified as depressed in obtaining mental health treatment. We recognize that unsolicited outreach through a mail-based program is potentially controversial.
because depression is a highly personal issue and also because the program steps into an area usually reserved for the doctor-patient relationship. We have received no complaints about the program and have received many positive comments from the women we contacted.

Despite the modest success in identifying PPD and increasing treatment referrals, the 14% return rate was low. It is likely that there are unidentified depressed women among the 86% who did not complete and return the questionnaire. Of the women that were identified with depression, less than one quarter accepted a mental health treatment referral. This was partly because our clinical staff was unable to contact all the women who scored positive. Nevertheless, it suggests that many women suffering from PPD are not being reached through our program.

It appears that there is room for improvement for ob/gyn identification and treatment of PPD. Our survey results showed that while ob/gyn physicians consider depression important, they only screen for PPD in slightly more than half of their postpartum visits. At non–postpartum visits, these physicians report that they routinely screen for depression between 23% and 45% of the time. Furthermore, the screening method used by these ob/gyn physicians appears cursory and frequently only included questions concerning family history and previous depressive episodes. Formal mental status examination and depression screening tools are not typically utilized. Although these physicians reported serving as PCP for 45.5% of their patients, the range of 0% to 100% shows an extreme variation between practices. It is possible that ob/gyn specialists who assume a PCP-like role are more likely to explore and treat mental health issues.

Our results are slightly different from those reported in a recent study by LaRocco-Cockburn et al [22]. A total of 282 ob/gyn physicians in Washington State were surveyed to determine their attitudes and practice patterns related to depression screening and treatment. More than 40% stated that they often or always screen patients for depression. They were not asked about screening at particular patient visits (eg, postpartum, prenatal). Of the respondents, 32% reported using a short validated tool to screen patients; the majority (81%) used their own questions regarding the patient’s mental health or mood. Although the majority of respondent physicians (90%) in the study agreed that depression screening would “improve the detection rate” of patients with depression, only 58% agreed that screening leads to improved treatment outcomes. Over half of respondents (56%) stated that treating psychosocial problems would “require more effort than I have to give.” Our survey did not ask respondents whether or not they were aware of screening tools or if increased screening leads to improved diagnosis.

Early identification and treatment of PPD is important, and obstetricians in particular are in a key position to identify PPD. For example, during the prenatal period, an obstetrician can identify new mothers who have suffered prior episodes of depression, have poor support, or have other risk factors for postpartum depression. An obstetrician can intervene prior to childbirth through education and planning. Since many women who suffer from PPD experience the onset of symptoms within the first 6 weeks after childbirth [23], the obstetrician can follow through with careful assessment, diagnosis, and treatment. Use of depression screening tools should be considered for adoption into the standard practice of ob/gyn physicians. Clearly, finding ways to promote greater involvement of obstetricians in screening and treatment of PPD is essential.

We presented the results of our survey to an ob/gyn focus group in North Texas. The group reviewed available screening tools and chose one they thought would be simple and quick to use in their offices. They expressed interest in incorporating new ways to detect depression among their patients and asked for development of a treatment algorithm designed for use by ob/gyn physicians. They elaborated on the barriers identified by our survey respondents, specifically noting that the global reimbursement schedule used by some managed care health plans was a barrier to the treatment. The global reimbursement fee includes all physician reimbursement up to and including the 6-week postpartum period. The additional time and effort required to identify and treat depression in postpartum women during this critical time period would go unreimbursed.

Our initial effort to impact ob/gyn practices in the identification and treatment of PPD has been the development of an educational sheet. The sheet includes our survey results as

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**Table 4. Comfort with and Barriers to Treating Depression Among Surveyed Physicians**

<table>
<thead>
<tr>
<th>Comfort level with treating depression</th>
<th>No. of Physicians*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very comfortable</td>
<td>39</td>
</tr>
<tr>
<td>Comfortable</td>
<td>158</td>
</tr>
<tr>
<td>Neutral</td>
<td>76</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>18</td>
</tr>
<tr>
<td>Very uncomfortable</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barriers to diagnosis and treatment</th>
<th>No. of Physicians*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of time</td>
<td>213</td>
</tr>
<tr>
<td>Lack of reimbursement</td>
<td>142</td>
</tr>
<tr>
<td>Stigmatize patient</td>
<td>133</td>
</tr>
<tr>
<td>Lack of systematic approaches</td>
<td>114</td>
</tr>
<tr>
<td>Lack of training/knowledge</td>
<td>98</td>
</tr>
<tr>
<td>Lack of clear risk factors</td>
<td>84</td>
</tr>
</tbody>
</table>

*For barriers question, shows number of physicians who ranked barrier among their top 3.
well as clinical information regarding PPD. It was distributed by the Pfizer representatives, along with the self-administered PRIME-MD Patient Health Questionnaire [24] for diagnosing mental disorders. These materials were made available to all ob/gyn physicians in the Dallas/Fort Worth area.

We have also created materials specifically to help HMO Blue Texas network ob/gyn physicians meet the requirements that the new Texas PPD legislation has imposed. The materials include information about diagnostic criteria, risk factors, morbidity, and treatment planning as well as resource information, including books and Web sites, for patients. This information will be published in the BCBSTX provider newsletter and posted on the BCBSTX provider Web site.

We are in the planning stages for several other interventions, including development of an antidepressant medication treatment algorithm and a set of office procedures for implementing the depression screening tool and treatment algorithm in practice. We plan to pilot these tools and evaluate whether they improve the detection and treatment of PPD in busy ob/gyn offices. We also plan to provide educational programs on the diagnosis and treatment of PPD, emphasizing the importance of routine screening for PPD with depression screening tools. We hope these approaches will not only increase awareness about PPD for ob/gyn physicians but also encourage them to be more proactive in both the diagnosis and treatment of this condition.

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References


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