A Controlled Clinical Treatment Trial of Interpersonal Psychotherapy for Depressed Pregnant Women at 3 New York City Sites

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ABSTRACT

Objective: While treatment decisions for antepartum depression must be personalized to each woman and her illness, guidelines from the American Psychiatric Association and the American College of Obstetrics and Gynecology include the recommendation of psychotherapy for mild-to-moderate depression in pregnant women. Although we previously demonstrated the efficacy of interpersonal psychotherapy for antepartum depression in a sample of Hispanic women, this study provides a larger, more diverse sample of African American, Hispanic, and white pregnant women from 3 New York City sites in order to provide greater generalizability.

Method: A 12-week bilingual, parallel-design, controlled clinical treatment trial compared interpersonal psychotherapy for antepartum depression to a parenting education program control group. An outpatient sample of 142 women who met *DSM-IV* criteria for major depressive disorder was randomly assigned to interpersonal psychotherapy or the parenting education program from September 2005 to May 2011. The 17-item Hamilton Depression Rating Scale (HDRS-17) was the primary outcome measure of mood. Other outcome scales included the Edinburgh Postnatal Depression Scale (EPDS) and the Clinical Global Impressions scale (CGI). The Maternal Fetal Attachment Scale (MFAS) assessed mother's interaction with the fetus.

Results: Although this study replicated previous findings that interpersonal psychotherapy is a beneficial treatment for antepartum depression, the parenting education program control condition showed equal benefit as measured by the HDRS-17, EPDS, CGI, and MFAS.

Conclusions: This study supports the recommendation for the use of interpersonal psychotherapy for mild-to-moderate major depressive disorder in pregnancy. The parenting education program may be an alternative treatment that requires further study.

Trial Registration: ClinicalTrials.gov identifier: NCT00251043

J Clin Psychiatry 2013;74(4):393–399

Submitted: *May 25, 2012; accepted October 29, 2012 (doi:10.4088/JCP.12m07909).*
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The prevalence of depression during pregnancy is 11.0% in the first trimester and 8.5% in the second and third trimesters.[1] Higher rates have been reported in minority women[2] and women with low socioeconomic status.[3] Depression during pregnancy can have unfavorable consequences for women, children, and the family unit. Recommendations by the American Psychiatric Association (APA) and the American College of Obstetrics and Gynecology (ACOG) include the use of psychotherapy for mild-to-moderate depression.[4]

We have previously described the first controlled clinical treatment trial of interpersonal psychotherapy for antepartum depression versus a parenting education program control condition in 36 pregnant depressed women.[5] Others have described the efficacy of interpersonal psychotherapy in the perinatal period. Using a waiting list as the control condition, O'Hara et al demonstrated the benefit of interpersonal psychotherapy for postpartum depression.[6] Other smaller pilot trials for peripartum depression have demonstrated the advantages of group interpersonal psychotherapy,[7,8] interpersonal psychotherapy with pregnant adolescents,[9] culturally relevant interpersonal psychotherapy,[10] and group interpersonal psychotherapy versus massage therapy.[11] Most used controls such as a waiting list,[6] care as usual,[10] or no control groups.[7,8] In our studies, we have used a parenting education control group.

This work is an attempt to replicate our previous study in which antepartum interpersonal psychotherapy was found to be more effective than a parenting education program using a larger, more diverse sample to provide greater generalizability. Our previous trial consisted of 36 primarily impoverished Hispanic women from our catchment area who were evaluated weekly by treating clinicians who were not blind to the 16-week treatment. In this study, we endeavored to conduct a larger more heterogeneous 12-week clinical trial with equal numbers of Hispanic, African American, and white pregnant depressed women. Blinded independent evaluators performed assessments. We hypothesized that interpersonal psychotherapy would be more effective than a parenting education program for antepartum depression.

METHOD

Study Design

We conducted a 3-site randomized, controlled, parallel-designed, bilingual (Spanish and English) treatment trial from September 2005 to May 2011 to examine the comparative effectiveness of interpersonal psychotherapy for antepartum depression compared to a parenting education program control for women who met *Diagnostic and Statistical Manual of Mental Disorders*,

Clinical Points

- Treating antepartum depression continues to be a controversial and complicated matter in psychiatry.
- Current guidelines recommend the use of psychotherapy for mild-to-moderate depression.
- Interpersonal psychotherapy is beneficial for the treatment of depressive symptoms in the antepartum period.
- Clinicians should also consider other behavioral models.

Fourth Edition (*DSM-IV*) criteria for major depressive disorder. More than 479 prospective research participants were referred to the Maternal Mental Health Program at the New York State Psychiatric Institute from the obstetrics departments of New York Presbyterian Hospital at Columbia University College of Physicians and Surgeons (Columbia), New York Presbyterian Hospital at Weill Cornell Medical College (Cornell), and St Luke's Roosevelt Hospital (all located in New York, New York). The 3 hospitals represent a broad cross section of women in the metropolitan area from various racial, ethnic, and socioeconomic backgrounds. The diversity of these institutions and respective geographies together provided an equal proportion of white, African American, and Hispanic study participants. In addition, the geographic locations vary in socioeconomic status and psychosocial environment within racial/ethnic groups.

The research coordinator interviewed prospective participants by telephone to inquire about their mood and determine if the patient would very likely meet criteria for the study. Participants were invited into the Maternal Mental Health Program for a psychiatric consultation by the principal investigator (PI). Women who met *DSM-IV* criteria for a major depressive episode using the Structured Clinical Interview for *DSM-IV*, Research Version, Patient Edition (SCID-I/P)[16] and a minimum score of 12 on the 17-item Hamilton Depression Rating Scale (HDRS-17)[17] were invited into the treatment phase of the study. One hundred forty-two women met study criteria.

The PI enrolled participants after clinical evaluation, and the research coordinator randomly assigned participants to either interpersonal psychotherapy or the parenting education program. Randomization was stratified by site, ethnicity, and trimester of pregnancy using a block size of 4. Each woman was given $50.00 for each session to cover expenses.

The design of the study was to bring psychiatry into primary care by providing treatment in respective obstetrics departments. The original plan was to treat participants in the obstetrics departments of New York Presbyterian Hospital at Columbia, New York Presbyterian Hospital at Cornell, and St Luke's Roosevelt Hospital; however, the obstetrics department at New York Presbyterian Hospital at Columbia did not have space to accommodate the study. Therefore, the subjects from Columbia were treated in the Maternal Mental Health Program at the New York State Psychiatric Institute within 1 block of the Columbia obstetrics department. Telephone sessions substituted for in-person sessions if required because of bed rest or other health reasons. Blinded independent evaluators performed assessments every 4 weeks over the course of treatment. The study was approved by the institutional review boards at each institution and registered at ClinicalTrials.gov (identifier: NCT00251043).

Therapists and Training

Six female psychotherapists included 3 clinical social workers, 2 MDs, and 1 PhD, all of whom had at least 5 years of psychotherapy experience. Two of the 3 clinical social work therapists were bilingual in English and Spanish. The social workers provided both interpersonal psychotherapy and the parenting education program.

Prior to the study, therapists read and became familiar with *Interpersonal Psychotherapy of Depression*[12] and "Interpersonal Psychotherapy for Antepartum Depressed Women."[13] During the prestudy training, therapists attended 20 hours of didactic lectures provided by the PI (M.G.S.) and were required to complete a total of 24 supervised videotaped sessions of interpersonal psychotherapy with 2 antepartum women to a satisfactory level of competence and adherence.

The parenting education program is a didactic control condition of individual therapist–led 45-minute weekly educational sessions. For the preparation of the parenting education module, social work therapists also received 20 hours of didactic lectures on pregnancy, the postpartum period, and early infant development provided by the PI, who had past experience as an obstetrical registered nurse. Therapists used the same educational tools. The primary tool was a pregnancy book written for the lay public,[14] which served as a manual that systematically reviewed topics relevant to each stage of pregnancy and the postpartum period. Topics included physical changes, discomforts and complications of pregnancy, fetal development, perinatal screening, labor, delivery, postpartum changes, breastfeeding, and early infant care. A comprehensive visual aid[15] that accompanied the guidebook had illustrations of the pregnancy topics. Therapists were cautioned against providing psychotherapy or anything similar to interpersonal psychotherapy. Both treatments were provided in English and Spanish. All sessions were videotaped.

Patient selection. Sample size was selected such that a clinically meaningful effect could be detected with 80% statistical power. English- and Spanish-speaking women between 12 and 33 weeks' gestation and 18 to 45 years of age were included in the study. Consent forms were bilingual. Patients were excluded if they were psychotic, had abused drugs or alcohol in the past 6 months, were acute risks for suicide, or were taking psychotropic medication.

Clinical assessment procedures. Prior to randomization, patients received a complete psychiatric evaluation and were assessed with the SCID-I/P[16] to determine if they met criteria for major depressive disorder. The Edinburgh Postnatal Depression Scale (EDPS)[18] is a self-rated inventory

that measures symptoms of depression with minimal emphasis on somatic changes. The HDRS-17 is a clinician-rated scale designed to monitor change in depressive symptoms with treatment. The Clinical Global Impressions scale (CGI)[19] is used to record global ratings of severity of disorder (CGI-S) as well as improvement (CGI-I) relative to baseline. We also administered the Maternal Fetal Attachment Scale (MFAS),[20] a 29-item self-report scale that assesses the validity of 5 dimensions of maternal-fetal attachment.

Quality control. Blinded raters administered the HDRS-17, EPDS, and CGI at baseline (in person) and weeks 4, 8, and 12 (in person or by telephone). All interpersonal psychotherapy and parenting education program sessions were videotaped. Approximately 30% of the interpersonal psychotherapy and parenting education program sessions were randomly selected and reviewed for adherence. We used our modified scale from the National Institute of Mental Health (NIMH) collaborative study to measure competence in the interpersonal psychotherapy group.[21] Therapists met monthly to discuss cases and address problems and treatment strategies, all to ensure uniformity of method.

Statistical Analyses

The demographic measures were examined across the 2 treatment groups using the *t* test statistic for the continuous measures and the χ^2 statistic for the categorical measures. To examine the longitudinal treatment response data (HDRS-17, EDPS, CGI-S, and CGI-I ratings), we used linear mixed models (LMM) procedures available in IBM SPSS release 18.0.3 (IBM, Armonk, New York). For each LMM procedure, the independent variable was treatment group membership, and the stratification variables (age, education level, and race) were included as covariates. The primary outcome was the HDRS-17. The main focus of these analyses was the interaction term of treatment group and time, which would indicate treatment group differences in rate of change over the course of treatment. A 2-tailed α of .05 was used for each statistical test.

Missing data were controlled by the LMM procedures we used. The LMM procedure uses all available data. If a score is missing, it has no effect on the other scores from that same patient. When data are missing, the LMM procedure estimates parameters and tests hypotheses about them but does not impute missing values. Using LMM procedures, the covariance structure of the data can be assessed and the most appropriate covariance model chosen. Siddiqui et al[22] demonstrated that using mixed models was superior to last-observation-carried-forward methods. Hamer and Simpson,[23] in their *American Journal of Psychiatry* editorial, made the same observation and suggested that these methods can reduce bias due to dropout because they use all the data.

Table 1. Demographic Measures of the Participants in the Depression During Pregnancy Study

	IPT-Treated (n = 72)		PEP-Treated (n = 70)		Group Comparison[a]		
Demographic Measure	Mean	SD	Mean	SD	*t*	*df*	*P*
Age, y	30.0	6.9	28.9	6.6	0.98	140	.328
Educational level (1–5)	3.1	1.4	2.9	1.3	0.95	140	.345
Gestation, wk	22.4	6.0	22.1	7.0	0.31	139	.759
	n	%[b]	n	%[b]	χ^2	*df*	*P*
Educational level							
Less than high school (1)	13	18	11	16			
High school/GED (2)	9	13	15	21			
Some college (3)	19	26	23	33			
BA/BS degree (4)	17	24	10	14			
Graduate school (5)	14	19	11	16	4.20	4	.380
Race							
Hispanic	24	33	29	41			
Black	20	28	18	26			
White	28	39	23	33	1.04	2	.595
Marital status							
Married/living with significant other	34	47	35	50			
Single/separated/divorced/ widowed	38	53	35	50	0.11	1	.741
Income, US $							
< 15,000	18	25	13	19			
15,000–24,999	8	11	14	20			
25,000–39,999	19	26	20	29			
40,000–59,999	6	8	5	7			
≥ 60,000	21	29	18	26	2.76	4	.598
Immigration status							
US-born	43	60	46	66			
Immigrant	29	40	24	34	0.55	1	.460
Previous pregnancies							
0	26	36	17	24			
1–2	30	42	35	50			
≥ 3	16	22	18	26	2.35	2	.308
Previous episodes of depression							
No	67	93	59	84			
Yes	5	7	11	16	2.73	1	.098

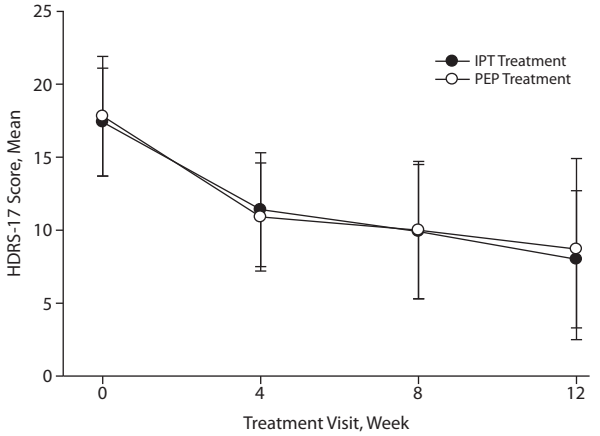
[a]Test statistics are the *t* test for continuous measures and the χ^2 test for categorical measures.
[b]Percentages may not sum to 100 due to rounding.
Abbreviations: GED = General Educational Development, IPT = interpersonal psychotherapy, PEP = parenting education program, SD = standard deviation.

RESULTS

Demographic Characteristics

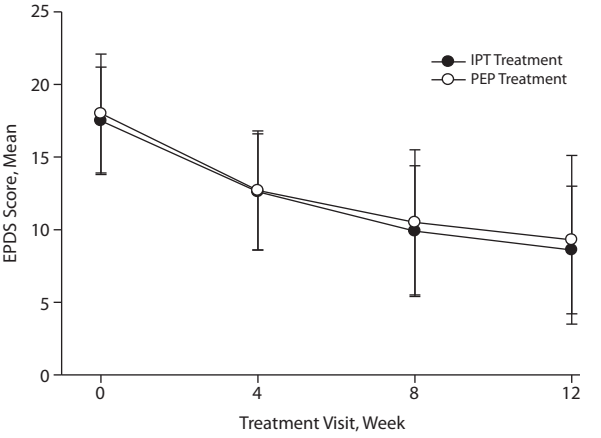
Demographic and other participant characteristics are presented and compared across the treatment groups in Table 1. There were no significant treatment group differences in age, education level, gestation age, race, marital and immigration status, household income, gravity, employment, or histories of depression. The mean age of the interpersonal psychotherapy and parenting education program groups was 30.0 years (standard deviation [SD] = 6.9) and 29.2 years (SD = 6.6), respectively. The interpersonal psychotherapy and parenting education program subjects entered the study at 22.4 weeks (SD = 6.0) and 22.1 weeks (SD = 7.0) of gestation, respectively. Education level, race, marital and immigration status, and income were well dispersed within and across the 2 treatment groups, showing no significant distribution differences. Racial diversity was well balanced as reflected in our groups. Hispanic: 33% versus 41% (interpersonal psychotherapy vs parenting education program);

Figure 1. Scores on the 17-Item Hamilton Depression Rating Scale (HDRS-17) for Pregnant Women With Major Depressive Disorder Who Were Randomly Assigned to 12 Weeks of Interpersonal Psychotherapy (IPT) or a Parenting Education Program (PEP) Control[a,b]



[a]Assessments were performed by an independent evaluator at randomization and treatment visits 4, 8, and 12.
[b]Error bars indicate standard deviation (SD).

Figure 2. Scores on the Edinburgh Postnatal Depression Scale (EPDS) for Pregnant Women With Major Depressive Disorder Who Were Randomly Assigned to 12 Weeks of Interpersonal Psychotherapy (IPT) or a Parenting Education Program (PEP) Control[a,b]

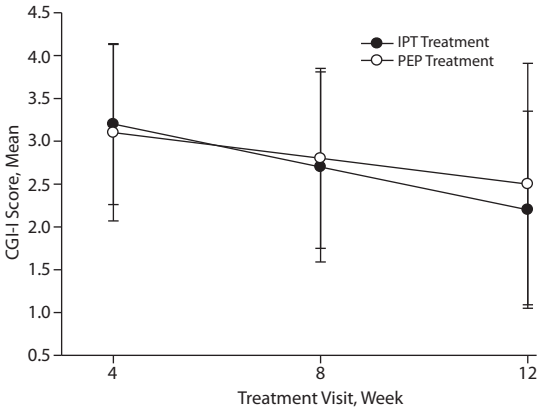


[a]Assessments were performed by an independent evaluator at randomization and treatment visits 4, 8, and 12.
[b]Error bars indicate standard deviation (SD).

African American: 28% versus 26%, and white: 39% versus 33% ($\chi^2_2 = 1.04$, $P = .595$). Approximately one-half was single, separated, divorced, or widowed, and one-half was married or living with a significant other. While incomes (categories) at the lower end of the spectrum were a bit uneven, the overall distribution was not significantly different ($\chi^2_6 = 2.76$, $P = .598$). Past history of depression was reported by 23% (interpersonal psychotherapy) and 31% (parenting education program).

The interpersonal psychotherapy attrition rate was 30.6% (22 of 72) compared to the parenting education program rate of 44.3% (31 of 70) ($\chi^2_1 = 2.86$, $P = .091$). Attrition did not differ significantly by site or race. All available data from randomized participants were included in the primary analyses. There were 10 telephone sessions with 3 subjects who were placed on temporary bed rest.

Figure 3. Scores on the Clinical Global Impressions-Improvement (CGI-I) Scale for Pregnant Women With Major Depressive Disorder Who Were Randomly Assigned to 12 Weeks of Interpersonal Psychotherapy (IPT) or a Parenting Education Program (PEP) Control[a,b]



[a]Assessments were performed by an independent evaluator at treatment visits 4, 8, and 12.
[b]Error bars indicate standard deviation (SD).

Treatment Phase Assessments and Outcomes

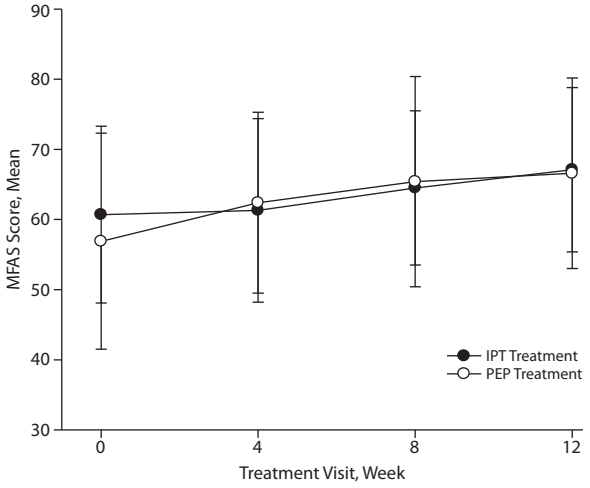
Primary outcome. For the HDRS-17, the interaction term for treatment group and time was not significant ($F_{3,104} = 0.40$, $P = .756$). The treatment group term was also not significant ($F_{1,117} = 0.13$, $P = .715$); however, the visit term demonstrated clear improvement of HDRS-17 ratings over the course of treatment for *both* treatment and control groups ($F_{3,104} = 100.29$, $P < .001$; Figure 1).

Secondary outcomes. For the EPDS, the interaction of treatment group and visits was not significant ($F_{3,104} = 0.06$, $P = .979$), nor was the treatment group effect ($F_{1,108} = 0.61$, $P = .437$). However similar to the HDRS-17, the visit term demonstrated improvement of EPDS ratings over the course of treatment for *both* treatment and control groups ($F_{3,104} = 78.87$, $P < .001$; Figure 2).

The CGI-I and CGI-S scales exhibited similar results—there was no significant interaction term for treatment group and visits (CGI-I: $F_{2,96} = 1.56$, $P = .216$; CGI-S: $F_{3,100} = 2.31$, $P = .081$), nor was there a significant effect for treatment group (CGI-I: $F_{1,104} = 0.35$, $P = .557$; CGI-S: $F_{1,110} = 1.49$, $P = .225$). However, there was significant improvement in illness as measured by the CGI-I and decrease in illness severity as measured by the CGI-S across treatment visits for both groups (CGI-I: $F_{2,95} = 9.30$, $P < .001$; CGI-S: $F_{3,99} = 27.69$, $P < .001$; Figure 3).

A separate analysis related to site found no difference in attrition, dropout rate, baseline HDRS-17 scores, or previous histories of depression. There was no difference in the

Figure 4. Ratings on the Maternal-Fetal Attachment Scale (MFAS) for Pregnant Women With Major Depressive Disorder Who Were Randomly Assigned to 12 Weeks of Interpersonal Psychotherapy (IPT) or a Parenting Education Program (PEP) Control[a,b]



[a]Ratings were performed by the subjects at baseline and treatment visits 4, 8, and 12. Higher ratings indicate better attachment.
[b]Error bars indicate standard deviation (SD).

baseline HDRS-17 scores or histories of depression in women in the interpersonal psychotherapy or parenting education program group who were removed for worsening depression or in the 11 subjects who refused the parenting education program compared to those who remained in the study.

We examined 11 cases that refused the parenting education program. Using 3 groups (non-termination, refused the parenting education program, and other reason), groups did not differ in HDRS-17, EPDS, or CGI-S at baseline. They did not differ in antepartum depression, postpartum depression, pregnancies, previous episodes of depression, age, or site. There were significant differences in race and education, specifically attributed to white, better-educated women who refused the parenting education program at randomization.

Maternal-Fetal Attachment

The MFAS was administered at baseline and treatment visits 4, 8, and 12, in conjunction with the HDRS-17. We computed an aggregate mean of the HDRS-17 scores across the 4 treatment visits and examined the associations between the MFAS and the HDRS-17 scores. The aggregate HDRS-17 score was significantly negatively correlated with the MFAS for both treatment groups (interpersonal psychotherapy: $r = -0.262$, $P = .030$; parenting education program: $r = -0.330$, $P = .007$), demonstrating that less depression as measured by the HDRS-17 is associated with higher levels of maternal-fetal attachment (Figure 4).

DISCUSSION

Similar to our previous study,[5] we found that the larger, multiracial sample of depressed pregnant women in the interpersonal psychotherapy group showed significant improvement in mood based on the clinician-rated HDRS-17 and CGI and the patient-rated EPDS. However, further findings demonstrated a significant and continuous improvement over the course of treatment for both the interpersonal psychotherapy treatment group and the parenting education program control group based on mood measures. Although the parenting education program group showed some improvement in the previous clinical trial, the mood improvement in the interpersonal psychotherapy group was significantly better at the end of the study. Unlike our former study, there were no significant differences in week 12 end of treatment outcome for either the interpersonal psychotherapy group or the parenting education program group on all mood scores.

Our recovery criteria for the HDRS-17 were based on a cutoff score of < 7, the recovery score used in the NIMH depression treatment trial.[24] The HDRS-17 showed that 41.9% (18 of 43) of the interpersonal psychotherapy–treated women and 48.6% (18 of 37) of the parenting education program–treated women were depression-free at visit 12.

The reason for differences in outcomes between the 2 studies remains unclear. While the present study had almost equal numbers of African American, white, and Hispanic participants, the previous trial was composed of predominantly Hispanic immigrants from the Dominican Republic with difficult and problematic life circumstances. Understandably, a problem-oriented therapy like interpersonal psychotherapy may be more helpful than a didactic therapy for this population.

Present findings could be attributed to the use of blinded raters, while the previous study used only treating clinician raters who may have biased the results in favor of the interpersonal psychotherapy group.

It is unlikely that women improved over time as part of the natural course of a depressive episode. Women with poor antepartum mental health are 16 times more likely to be in poor mental health postpartum.[25] Antepartum depression is one of the strongest risk factors for postpartum depression.[26] More than 50% of women with antepartum depression will have postpartum depression.[27,28]

A limitation of this study is the higher attrition rates than the former study.[5] As illustrated by others,[29] attrition rates can be as high as 30% in perinatal psychotherapy studies similar to our interpersonal psychotherapy rate. We had hoped to prevent potential obstacles such as childcare and transportation expenses and the need for bed rest or hospitalization by providing telephone sessions, hospital visits, and reimbursement for expenses.

A problem of psychotherapy studies that may prompt attrition is that subjects and therapists are not blind to the control condition. The interpersonal psychotherapy rate of attrition was 30.6% (22 of 72) compared to the parenting education program rate of 44.3% (31 of 70). However, 11 of 31 (35.4%) parenting education program dropouts who refused the parenting education program condition after randomization were white, educated, middle- and upper-middle-class women who could afford psychotherapy. This group of white,

educated, middle- and upper-middle class women accounted for the higher attrition rate in the parenting education program group, and the absence of blinded conditions remains a limitation in the study. Another 14 of the 31 (45.2%) parenting education program subjects, and 8 of the 22 (36.4%) interpersonal psychotherapy subjects who left the study after randomization were removed because of worsening depression and need for referral. Baseline depression scores or history of previous depressive episodes in terminators versus nonterminators did not impact the prognosis for recovery.

The fact that the parenting education program demonstrated some benefit in treating depression begs further consideration. The guidebook that served as a manual for the parenting education program protocol and videotape adherence assured us that there was no evidence of treatment contamination by therapists who administered interpersonal psychotherapy and the parenting education program. The videotapes demonstrated adherence to the educational outline.

Interestingly, we replicated the therapeutic benefit of the parenting education program demonstrated in the previous trial. This benefit may be attributed to several factors: education about pregnancy and delivery, the relationship formed with the therapist, and enhanced maternal-fetal attachment.

Other educational models have established benefit for prevention of depression, models that may also be considered for treatment of mild or moderate depression. Research by Howell et al[30] has shown that preparation and education about symptoms and expectations can improve postpartum experiences and decrease postpartum depression. A replication of this study in a randomized controlled trial by the same investigators[31] demonstrated that a 2-step behavioral educational intervention reduced the likelihood of postpartum depression when compared to usual care. The authors suggest that setting appropriate expectations and reducing fear and worry may diminish the onset of depressive symptoms.

Lara et al[32] also demonstrated a decreased incidence of postpartum depression in pregnant women who received a psychoeducation intervention. Women reported the beneficial influence on maternal role, well-being, mood, and relationship to their baby. Pregnancy is a unique time in a woman's life, and consistent discussion about the imminent birth can be very powerful for all women.

Stress is cited as the preceding factor in depression. Concerns and apprehensions about childbirth and parenting are stressors unique to pregnancy. We might hypothesize that relief from these anxieties may alleviate factors that contribute to the severity of antepartum depression.

The benefit of the parenting education program could also be attributed to the relationship formed between the therapist and the patient in this unique perinatal period. The weekly presence and regular availability of the therapist provided support for the pregnant women. Education about pregnancy and fetal and infant growth and development demonstrates a level of caring that parallels those levels that are expected of a woman's mother and, as such, could promote a maternal transference, a process that may occur in any treatment.

In addition, the information provided about fetal growth, maternal care, and preparation for delivery might awaken feelings of attachment to the fetus that may in turn relieve depressive symptoms. The fact that improved maternal-fetal attachment was associated with a decrease in depressive symptoms in both groups supports the model of interpersonal psychotherapy that is based on Bowlby's theory of attachment.[33] As such, maternal-fetal attachment may provide another treatment focus for the application of interpersonal psychotherapy for the perinatal population.

A limitation of our study is the use of certified social workers for both interpersonal psychotherapy and the parenting education program due to the limited numbers of bilingual practitioners available; however, our videotape reviews support adherence to the protocol. The benefit of our study is the replication of the finding that interpersonal psychotherapy decreased antepartum depression, and it supports the recommendation of the APA and ACOG that psychotherapy is a first-line treatment for mild-to-moderate depression. The fact that parenting education improved mood symptoms may suggest that the antepartum period has distinct stressors and may therefore respond to a novel treatment modality. In addition, if the therapeutic benefit of the parenting education program can be replicated, it may be administered by paraprofessionals and lay staff to large populations of depressed pregnant women in urban clinics. This can be practical, therapeutic, and financially beneficial.

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Potential conflicts of interest: **Dr Endicott** is an employee of the New York State Department of Mental Health; has received grant/research support from New York State and Cyberonics: and serves on speakers/advisory boards for AstraZeneca, Beyer, Amgen, and Pfizer. **Dr Spinelli** is a consultant to Pfizer. **Drs Goetz**, **Kalish**, and **Brustman** and **Mss Carmona**, **Meyreles**, **Vega**, and **Schulick** report no conflicts of interest.
Funding/support: This study was supported by a National Institute of Mental Health Research Scientist Development Award for Clinicians to Dr Spinelli (grant MH-01276).
Acknowledgments: The authors thank study investigators Katya Frischer, MD, St Luke's Roosevelt Hospital, New York, New York; Elizabeth Fitelson, MD, Columbia University College of Physicians and Surgeons, New York State Psychiatric Institute, New York; Kathryn Bleiberg, PhD, Weill Cornell Medical College, New York, New York; Allison Baker, MD, Columbia University College of Physicians and Surgeons, New York State Psychiatric Institute, New York; and research assistant Alexandra Richard, BS, Columbia University College of Physicians and Surgeons, New York State Psychiatric Institute, New York. The acknowledged persons report no conflicts of interest.

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Editor's Note: We encourage authors to submit papers for consideration as a part of our Focus on Women's Mental Health section. Please contact Marlene P. Freeman, MD, at mfreeman@psychiatrist.com.