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Rates and predictors of depression treatment among pregnant women in hospital-affiliated obstetrics practices

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Abstract

Objective: The purpose of this study was to provide information on rates of depression treatment among pregnant women at risk for depression and among those with clinician-diagnosed current major depressive disorder (MDD) and to examine predictors of depression treatment.

Method: Women seeking prenatal care completed a screening survey (including the Center for Epidemiological Studies-Depression Scale) in several hospital-based obstetrics clinics. Women identified as high risk for depression completed diagnostic interviews ($n=276$) during pregnancy, consisting of the Structured Clinical Interview for *DSM-IV*, measures of depression symptom severity (Beck Depression Inventory-II), health functioning (SF-36) and current and past psychiatric treatment.

Results: Among women with a current MDD diagnosis, most of whom were experiencing a recurrence, 33% were currently receiving any depression treatment. The presence of current MDD was not found to be related to use of treatment. Prior history of MDD, history of psychiatric treatment and depression severity were significant predictors of depression treatment during pregnancy.

Conclusions: Most women with current MDD were found to be either untreated or suboptimally treated, and prenatal MDD was not predictive of treatment. These findings point to the need for effective detection, targeted follow-up assessment and treatment linkage interventions to be studied in medical settings that encounter perinatal women.

Keywords: Antenatal depression; Obstetrics; Treatment rates

1. Introduction

Detection and adequate treatment of antenatal depression are a critical public health issue for researchers, clinicians and policymakers to address. Antenatal depression affects between 10% and 15% of women [1] and represents the strongest risk factor for postpartum depression [2]. Depression in pregnancy has been associated with poor maternal functioning and birth outcomes [3–7], yet most depressed pregnant women are not detected or treated [8]. Despite the important growing literature documenting the prevalence of and risk factors for antenatal depression [9,10], research must also focus its attention on rates and predictors of depression-related treatments being received. Such research is important in determining the degree of undertreatment for such high-risk women and in identifying important factors that are related to whether or not depressed pregnant women seek treatment for their depression. Research on these issues will inform strategies for responding to women positively screened for depression risk in obstetrics settings in order to facilitate treatment seeking.

Prenatal care settings provide an optimal opportunity for identification and treatment of antenatal depression since most women will seek health care at some point during their pregnancy [7]. However, several recent studies of women seeking prenatal care have documented underdetection and undertreatment of depressed pregnant women seen in these settings, with depression detection rates (based on obstetric clinic chart review) to be less than 25% [8,11–14]. Factors that have been found to be associated with greater likelihood of detection and referral for psychiatric treatment include

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higher depression severity scores, being Caucasian, psychiatric comorbidity (i.e., PTSD), previous adverse perinatal outcomes, substance abuse, lifetime history of domestic violence and the presence of an identified mental health care provider [13,14].

Most of these studies have employed depression screening or symptom measures and have not used validated structured psychiatric interviews to determine treatment rates among women with current and recurrent major depressive disorder (MDD), those most clearly in need of treatment [15,16]. Also, studies have relied on medical chart review for detection and treatment information. Although this is a valid method for studying rates of medical treatments, health care providers may not consistently note psychiatric treatment information in the medical charts [17]. Finally, although impairment in physical, social and emotional functioning has been documented in depressed, pregnant women [4], the relationship of functional impairment to depression treatment use has not been studied.

This study examined rates of depression treatment, both among pregnant women considered to be at risk for depression according to depression screening and a subset of the sample with MDD diagnosed through clinician-administered structured interview. Such analyses provide not only information regarding rates of treatment associated with at-risk samples defined by relatively standard and efficient screening questions (similar to the approach used in other studies) but also information regarding rates of treatment for those women with current depression, who are most likely in need for specialized depression treatment interventions. We expected that a minority of the at-risk women, as well as those with current MDD, would be receiving any treatment. This study also examined predictors of depression treatment in a multivariate model. The analysis strategy was designed to examine the impact of demographics (e.g., race), measures of symptom severity and functioning, treatment history and the presence of current MDD on treatment use. It was hypothesized that use of treatment would be associated with greater patient need (i.e., greater symptom severity and poorer functioning) and that, based on prior studies (e.g., Ref. [14]), Caucasian race would be positively associated with depression treatment. Such analyses can provide useful information regarding the most important factors to assess and target in order to facilitate treatment seeking for depressed pregnant women.

2. Methods

2.1. Procedures

Participants in this study were 276 pregnant women recruited across five university-hospital-affiliated obstetrics clinics, serving primarily patients with private insurance and Medicaid. All participants were recruited for the present study after being screened for depression and other health behaviors as part of a larger screening study while waiting for their prenatal care visit at the clinic sites. Women who were at least 18 years of age, English speaking and less than 32 weeks pregnant (in order to ensure that the woman had not yet delivered at the time of the prenatal study interview) were eligible for screening. All eligible pregnant women in the waiting areas of the clinics were approached by research assistants between September 1999 and October 2002, with a 90% screening agreement rate (total number of screened women was 1837). Screening sites were staffed by research assistants on days and times with the highest volume of scheduled prenatal care appointments and not on days and times with primarily gynecology specialty clinic appointments. Data on those who refused to be screened were not collected due to privacy constraints. Of the screened sample, 16% ($n=294$) met the criteria for depression risk and, thus, were eligible to take part in the present study. Depression risk was defined as (a) a score of 16 or greater on the Center for Epidemiological Studies-Depression Scale (CESD [18]; significant elevated symptomatology has been associated with decrements in functioning and poor outcomes generally [19] and among pregnant women [5–7]), (b) a self-reported major depression in the past 6 months or (c) recent discontinuation of antidepressant medications due to conception (based on research suggesting that medication discontinuation constitutes high risk for depression relapse [20]). Most women (85%) met eligibility criteria for the study based on their elevated CESD scores.

2.2. Participants

Characteristics of the study sample are presented in Table 1. Women were recruited into the study at an average of 21.3 weeks of pregnancy (S.D.=8.2). Most women (77%) had one or no biological child living with them at the time of the study. The racial/ethnic distribution of the sample closely approximated that of the geographical catchment area of the study based on the 2000 U.S. Census [21].

2.3. Measures

2.3.1. Screening

The CESD [18] was included in the initial screening questionnaire. The CESD consists of 20 depression-related symptom items rated on a four-point scale (0–3) based on the amount of time during the past week the respondent has experienced each symptom. Scores range from 0 to 60, and a cutoff score of 16 or higher was used as indicative of elevated depressive symptomatology. This cutoff point has been used as an indicator of clinically significant elevated depressive symptomatology for postpartum women [22], and good internal consistency (Cronbach's $\alpha=.84$) has been found with pregnant women (Cronbach's $\alpha=.89$; [23]). Recent depression was assessed using an item derived from the DIS-III-R [24]. This item asks participants if, within the specified time frame (past 6 months), "you had two weeks or more when nearly every day you felt sad, blue, or