Psychiatry and Primary Care

Recent epidemiologic studies have found that most patients with mental illness are seen exclusively in primary care medicine. These patients often present with medically unexplained somatic symptoms and utilize at least twice as many health care visits as controls. There has been an exponential growth in studies in this interface between primary care and psychiatry in the last 10 years. This special section, edited by Jürgen Unutzer, M.D., will publish informative research articles that address primary care-psychiatric issues.

The association of psychosocial factors and obstetric history with depression in pregnant women: focus on the role of emotional support

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ABSTRACT

Objective: Depression during pregnancy can negatively affect both maternal and fetal health. The benefits of early detection and treatment for antenatal depression have been emphasized. Therefore, we investigated risk factors for antenatal depression with a focus on emotional support.
Methods: We conducted a cross-sectional study of pregnant women ($n=1262$) enrolled from the local division of a community mental health center. All subjects completed self-report questionnaires that assessed depressive mood, emotional support and other risk factors. Associations between antenatal depression and potential risk factors including emotional support were analyzed by logistic regression analysis.
Results: Antenatal depression was associated with various biopsychosocial correlates: unmarried state, low education, cigarette smoking, low income, familial history of depression, past history of depression, physical abuse history, sexual abuse history, premenstrual syndrome, primiparity and unplanned pregnancy. When the associations of emotional support with antenatal depression were specified by its resources, current emotional support from partner [odds ratio (OR)=2.26, 95% confidence interval (CI)=1.94–2.64] and mother (OR=1.43, 95% CI=1.26–1.62) and past experience for emotional support from mother (OR=1.52, 95% CI=1.32–1.74), but not from father significantly influenced depression during pregnancy.
Conclusions: The multidimensional biopsychosocial approach would be needed to identify and assess antenatal depression. Promoting emotional support from the partner, family member and, possibly, the health provider could be a protective effect against the development of antenatal depression.

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1. Introduction

Major depressive disorders are common in women, and the majority experience their first onset at a reproductive age [1,2]. About 8%–12% of pregnant women have been known to experience a major depressive disorder [3–5]. Furthermore, the rate of pregnant women with clinically significant depressive symptoms, which do not meet the criteria for a major depressive episode, is presumed to be as high as 20% [6,7]. Even though antenatal depression is commonly experienced by pregnant women, it has not drawn the attentions as much as postpartum depression.

Antenatal depression can negatively affect not only maternal but also fetal health. It is associated with greater maternal psychosocial and lifestyle risks, postpartum depression, suicide, as well as adverse birth outcomes [8,9]. Adverse birth outcomes include delivery with a low birth weight, infants of small size for their gestational age and preterm delivery [10]. Early detecting and intervention in antenatal depression have been emphasized since it is possible to minimize the harmful effects on both the mother and fetus during pregnancy and reduce postnatal mood and anxiety disorders [11].

Antenatal depression is a treatable condition, and antidepressants are proven to effectively reduce depressive symptoms during pregnancy. However, antidepressant use during pregnancy can potentially have teratogenic effects [12,13]. Pregnant women with

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depression are often reluctant to take antidepressants. In such women, nonpharmacological approaches targeting the psychosocial factors related to antenatal depression are needed. Furthermore, identifying modifiable risk factors for antenatal depression enables health providers to develop a preventive strategy for the development of depression in pregnant women.

Therefore, we aimed to investigate risk factors for antenatal depression with a focus on emotional support. We sought to explore the impact of several aspects of emotional support on antenatal depression since it is a modifiable factor and, consequently, could be applied to mental health programs for pregnant women.

2. Methods

2.1. Study design and participants

All pregnant women visiting a local division of the public health center at Guro-gu, a borough of Seoul, Korea, were approached about the study. Korean women generally visit a public health center at least a couple of times during pregnancy because they can receive comprehensive services including antenatal screening examinations, ferritin supplements and breast-feeding education. Participants were recruited between September 2007 and March 2009. This study was conducted as part of a survey undertaken for the purpose of developing and implementing a stress relaxation program for pregnant women at a local division of a national community mental health center.

2.2. Procedure

Two psychiatrists and three trained mental health providers conducted face-to-face interviews to obtain socioeconomic status, psychiatric history, gyneco–obstetric history, alcohol use and smoking information. Past history of depression and family history of depression were included in the interview for participants who reported never having taken antidepressants or received psychotherapy. After the interview, the self-report questionnaires were left with participants to rate their depressive symptoms and emotional support. They were given written instructions to complete all of the questionnaires. While participants completed the questionnaires, one investigator was available to assist in the completion of questionnaires. All assessments were performed at the local division of a national community mental health center.

All participants were fully informed of the study protocol, and all provided written informed consent. The study protocol was approved by the Institutional Review Board of the Korea University Guro Hospital.

2.3. Measures

2.3.1. Depression
Participants' depression was assessed using the Korean version of the Edinburgh Postnatal Depression Scale (EPDS) [14]. The EPDS, a brief self-report screening tool with good sensitivity and specificity, is used by primary health care professionals to screen for postnatal depression and can also be used in the antenatal setting [15]. The EPDS consists of 10 items, and each item is rated on a 4-point scale where a high score indicates more symptoms of depression within the previous 7 days. The score of 10 or greater on the EPDS was chosen as a cutoff threshold for depression based on a previous study that indicated this was the optimal point on the Korean version of the EPDS [area under the curve=81.8%, 95% confidence interval (CI)=72.6%–91.1%] [14].

2.3.2. Emotional support
Participants were asked whether they perceived their partner and parents as supportive figures currently and in their childhood and whether emotional support would be available after their delivery.

Emotional support was indicated by responses to the following five items: (a) When you were growing up, did you feel your mother was emotionally supportive of you? (b) When you were growing up, did you feel your father was emotionally supportive of you? (c) At present, is your mother emotionally supportive? (d) Is your relationship with your partner an emotionally supportive one? (e) Do you feel you will have people you can depend on for emotional support when you go home with your baby? All items were rated on a 5-point Likert-type scale and scored as 1 (*very much*) to 5 (*not at all*). These items were selected from a pregnancy risk questionnaire [16].

2.4. Statistical analysis

For descriptive statistics, we presented continuous variables as mean values with standard deviations and categorical variables as frequencies. We performed statistical comparisons using independent t tests for continuous variables and chi-squared tests for categorical variables.

We identified the predictors of the antenatal depression among the demographic and clinical variables using logistic regression analysis. The identified predictors (unmarried state, low education, cigarette smoking, low income, familial history of depression, past history of depression, physical abuse history, sexual abuse history, premenstrual syndrome, primiparity and unplanned pregnancy) were adjusted in the following logistic regression models for testing the impact of emotional support on antenatal depression. The effects of variables are described by their odd ratio (ORs) and 95% CIs. We set the significance level at a two-tailed P value of ≤.05.

All analyses were performed using Statistical Package for the Social Sciences (SPSS) software for Windows (SPSS version 12.0, Chicago, IL, USA).

3. Results

3.1. Participants' characteristics

One thousand and two hundred sixty-two participants agreed to enter the study. The mean age was 31.65±3.39 years (range: 17–44 years). Among them, 20.2% of pregnant women had antenatal depression determined by the EPDS using a threshold 9/10. A total of 255 pregnant women in the depressed group and 1007 (79.8%) pregnant women in the healthy control group were included in the analysis. The number of participants was unequally distributed across the depressed and control groups because they were recruited from a community sample. As shown in Table 1, women with antenatal depression versus those in the healthy control group more frequently reported a past history of sexual abuse/physical abuse/major depression/premenstrual syndrome, familial history of major depression, unplanned pregnancy, cigarette smoking, unmarried state, low education level, and low income (P<.05). However, age, gestational age, being a housewife, past history of alcohol use/abortion (both spontaneous and induced abortion) and pregnancy stage did not differ between depressed and healthy controls of pregnant women (P>.05).

3.2. Factors associated with antenatal depression

Table 2 shows the ORs of potential predictors for antenatal depression. The strongest factor predicting antenatal depression in our analysis was unmarried state (OR=3.12, 95% CI=1.15–8.47, P=.025). Other predictors for antenatal depression were history of sexual abuse (OR=3.02, 95% CI=1.49–6.11, P=.002) and physical abuse (OR=2.77, 95% CI=1.55–4.97, P=.001). Previous premenstrual syndrome had as much risk for antenatal depression as past history of depression. Both past history and familial history of depression increased the risk for antenatal depression by more than twofold. Among obstetrical factors, unplanned pregnancy (OR=1.55, 95% CI=1.16–2.05) and primiparity