

## Social and Family Pressures on Anxiety and Stress During Pregnancy

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**Abstract:** None available.

**Full Text:** Headnote ABSTRACT: This prospective study focused on the relationships between social support, family, and income pressures on anxiety and stress during pregnancy. Four hundred and thirty-three women elected to participate in a study that included completing a medical/psychosocial questionnaire, the Spielberger State Trait Anxiety Inventory, the Jenkins Activity Survey, and stress measures formulated using the Social Readjustment Rating Scale. Each participant was assessed once during each trimester of pregnancy. Results found that lack of social support and experience of family and income pressures were related to anxiety and stress during pregnancy. Analysis of variance found that women with an emotionally supportive husband or an emotional confidante had lower state and trait anxiety. Married women, women with a lower number of stressors, and women who desired their pregnancy had lower state and trait anxiety. State and trait anxiety were also related to having lower incomes. Suggestions for expectant mothers were discussed.

**BACKGROUND** Previous studies analyzed the relationships between stress and health of the expectant mother (Brown, 1986) and her infant (Leaderman, 1985; Norbeck and Tilden, 1983) and found social support can moderate stress and birth complications. Nuckolls, Cassel, and Kaplan (1972) found that pregnancy complications were three times greater among women with high stress and low psychosocial assets (including social support) than among women with equally high stress but with high social assets during early pregnancy. Tietjen and Bradley (1985) indicated that satisfaction with the husband's support was significantly correlated with lower levels of stress and anxiety and better marital adjustment. Brown (1987) found expectant mothers who were employed had greater accessibility to network support. Methodological weaknesses of studies on relationships between social support and stress included drawing the sample from only one hospital (Chalmers, 1983), choosing measures unsystematically, and using cross-sectional research that failed to measure variables until the second (Brown, 1987; Chalmers, 1983) or third trimester (Norbeck & Tilden, 1983; Tietjen & Bradley, 1985). Previous methodological weaknesses were addressed in the following manner. First, the present sample was drawn from three hospitals and ten OB-GYN clinics. second, a multi-method approach was used to quantify psychosocial functioning: an anxiety inventory, a medical-psychosocial questionnaire that measured psychological pressures (e.g., self reports of family and income pressures), and hospital and physician medical records. Third, psychosocial measurements were obtained during each trimester. Health status of the expectant mother and fetus/infant was measured at three different times (pregnancy, labor and delivery, and six weeks postpartum). While other research analyzed the relationships among stress, anxiety, Type A and pregnancy complications, this study focused on the relationships between social support, family, and income pressure on anxiety and stress during pregnancy. **METHOD** Subjects Lists of prospective participants consisted of 546 women in their first trimester of pregnancy obtained from three suburban Detroit hospitals and ten private OB-GYN clinics. When contacted by telephone, 433 women elected to participate in the study; 93% (402 participants) returned the first packet mailed to them; 85% (366 participants) returned the second packet; and 82% (357 participants) returned the third. Women who miscarried (N = 23) could not complete all three packets, but were included in the study. **Materials** Materials used were a medical/psychosocial questionnaire, the Spielberger State-Trait Anxiety Inventory and the Jenkins Activity Survey. Stress measures were formulated using the Social Readjustment Rating Scale. **Procedure** Each participant was contacted by telephone during her first trimester of pregnancy and each trimester thereafter. A packet containing the medical/psychosocial questionnaire and two surveys was mailed to each participant on

each occasion. Stress during each trimester was assessed using questions about recent stressful events (e.g., illness, relocation) from the medical/psychosocial questionnaire. The stress responses were then rated for intensity and number using the Social Readjustment Rating Scale. Each medical record was reviewed after six weeks postpartum to document maternal and fetal complications of pregnancy, labor and delivery, or postpartum. Preliminary analyses were performed using ANOVA, productmoment correlation, and cross-tabulation. MANOVA and multiple regression were also performed. RESULTS Results found that lack of social support and experience of family and income pressures related to anxiety and stress during pregnancy. (Unless otherwise indicated, all relationships were significant at  $p < .01$ ). Specifically, analysis of variance found women with emotionally supportive husbands, in comparison to women with nonsupportive husbands, had lower State anxiety:  $F = 17.1$ ,  $F = 22.7$ , and  $F = 24.6$ , for each respective trimester. Women with an emotional confidante, in comparison to those without an emotional confidante, had lower State anxiety:  $F = 7.6$ ,  $F = 7.5$ , and  $F = 9.5$ , for each respective trimester. Married women in comparison to nonmarried women had lower State anxiety:  $F = 31.6$ ,  $F = 36.4$ , and  $F = 15.5$ , for each respective trimester. Women with a lower number of stressors, in comparison to those with a higher number of stressors, had lower State anxiety:  $r = .183$ ,  $r = .327$ , and  $r = .224$ , for each respective trimester. Those with lower stress intensity, in comparison to those with higher stress intensity, were also associated with having lower State anxiety for each respective trimester:  $r = .208$ ,  $r = .328$  and  $r = .224$ . The degree to which a woman desired her pregnancy was related to having lower State anxiety during the first and second trimester: respectively,  $r = -.218$  and  $r = -.220$ . Participants with aboveaverage incomes, in comparison to those with below-average incomes, experienced lower State anxiety during the first and third trimesters: respectively,  $r = -.225$  and  $r = -.230$ . Similar relationships were found with regard to Trait anxiety. Women with supportive husbands were likely to have lower Trait anxiety:  $F = 19.7$ ,  $F = 24.5$ , and  $F = 47.4$ , for each respective trimester. Also, those with an emotional confidante had lower Trait anxiety during the second and third trimester: respectively,  $F = 3.4$  and  $F = 16.7$ . Married women had lower Trait anxiety:  $F = 36.4$ ,  $F = 39.1$ , and  $F = 15.4$ , for each respective trimester. A lower number of stressors was associated with lower Trait anxiety:  $r = .242$ ,  $r = .347$ , and  $r = .282$ , for each respective trimester. Women with lower stress intensity were associated with having lower Trait anxiety:  $r = .286$ ,  $r = .387$ , and  $r = .224$ , for each respective trimester. The degree to which a woman desired her pregnancy was related to having lower Trait anxiety:  $r = -.225$ ,  $r = -.224$ , and  $r = -.204$ , for each respective trimester. Women with above-average incomes had lower Trait anxiety:  $r = -.225$ ,  $r = -.198$ , and  $r = -.194$ , for each respective trimester. Compared to married women, unmarried pregnant women had more stressors during their second trimester ( $F = 3.54$ ,  $p < .004$ ), and higher stress intensity during their first and third trimesters ( $F = 2.31$ ,  $p < .04$  and  $F = 2.39$ ,  $p < .04$ ). Issues that were highly stressful for two unmarried pregnant women during their first trimester of pregnancy provoked them to consider termination of their pregnancy. One woman's boyfriend was leaving for the armed services for two years, and the pregnant woman felt she needed to make a decision because of his future lack of involvement with her and the infant. A second woman's boyfriend took cocaine during the time he impregnated her and later broke off the relationship. She felt abandoned by her boyfriend and, therefore, was considering having an abortion. As family income decreased, the number of stressors increased during the first trimester ( $r = -.10$ ,  $p < .05$ ) and stress intensity increased during the first and third trimester (respectively,  $r = -.10$ ,  $p < .04$  and  $r = -.10$ ,  $P < .05$ ). As the number of stressors and stress intensity increased during the second trimester, the pregnant women cried more often ( $r = .268$  and  $r = .306$ , respectively). Multiple regression analyses were performed to determine the relative relationship of family and income pressures with State and Trait anxiety. Of the seven variables (desirability of pregnancy, marital status, stress number and intensity, employment status, social support, and income), the strongest and most consistent predictors of State and Trait anxiety were stress number, stress intensity, and lack of social support. Being unmarried or having an unwanted pregnancy was anxiety-provoking (both State and Trait) during the first half of the pregnancy; low income was a source of anxiety during the second half ( $p < .05$ ). CONCLUSION Results suggest that State and Trait anxiety in pregnant women are associated with being

unmarried, having a higher number and intensity of stressors, and having lower incomes. These results are important for two reasons: first, research indicates that high levels of State and Trait anxiety during pregnancy are associated with having pregnancy complications, labor and delivery problems, and even poorer pregnancy outcomes. second, recent research (Kalil, Gruber, & Conley, 1991) indicates that for pregnant women at high medical risk, high trait anxiety in combination with a high number of stressors can increase the likelihood of having spontaneous abortions. High medical risk along with a high number of stressors and a Type A (hostility factor) personality can raise the likelihood of having a miscarriage. The results further suggest that anxiety can be ameliorated somewhat if a woman has social support from a husband or other emotional confidante. Of the women who had emotional support outside of marriage, the majority of their support came from women (i.e., girlfriends, sisters, or mother). Expectant women may find it helpful to work with physicians, psychologists, health care professionals, or support groups for assistance in reducing the impact of pressure in their environment. Prepregnancy counseling is also advocated for women in a high medical risk category; if women wait until their first appointment with their obstetrician at eight weeks of pregnancy and are highly stressed and anxious, they may be more likely to have pregnancy complications or poorer outcomes. References

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