Public Health Importance

Research shows that maternal stress influences fetal growth, central nervous system development and behavior, and neonatal birth outcomes in profound and long-lasting ways.¹ Stress has been associated with preterm birth and low birth weight.^{2,3} Significant relationships have been found between the severity of life events, prenatal bleeding, a prior history of delivering a low birth weight (LBW) infant, and the occurrence of preterm delivery.⁴

In their 1996 review of ten years of research on stress, social support, and pregnancy outcomes, Hoffman and Hatch found that intimate social support, such as that provided by a partner or close family member, is associated fairly consistently with improved fetal growth, regardless of a woman's level of stress. ⁵ Low levels of social support have been associated with late entry into prenatal care^{6,7} and lower Apgar scores.⁸

Levels of stress and social support may also influence the health of a mother and her infant during the postpartum period. Women who receive more support may experience less postpartum depression. ⁸ In addition, higher levels of social support have also been shown to inhibit smoking relapse among high risk pregnant smokers. ⁹

Ohio PRAMS Data Highlights Stressful Events Before Delivery

- The majority of women (79.9%) experienced at least one stressful event during the 12 months before delivery.
- Approximately 41% of these women experienced only one or two stressful events during this period.
- Women under age 20 and with less than a high school education were more likely than their older or more educated counterparts to experience more than five stressful events during the twelve month period before they delivered.

Support During Pregnancy

- Over 80% of women had access at least one type of support during their most recent pregnancy.
- The most common type of social support reported by women (93.0%) was someone to take them to the doctor's office or clinic if they needed a ride.
- The least common type of social support reported (85.1%) was having someone who would loan them money.

Support Since Delivery

- During the period since delivery, over 90% of women reported having access to one or more types of social support.
- The most common type of social support reported (92.2%) was having access to someone to take care of the baby.
- The least common type of social support reported (88.2%) was someone who would loan them money.

- ⁴ Mutale T, Creed F, Maresh M, Hunt L. Life events and low birth weight-analysis by infants preterm and small for gestational age Br J Obstet Gynaecol 1991; 98: 166-72.
- ⁵ Hoffman S, Hatch MC. Stress, social support and pregnancy outcome: a reassessment based on recent research Paediatr Perinat Epidemiol 1996; 10: 380-405.
- ⁶ Rogers MM, et al. Impact of a social support program on teenage prenatal care use and pregnancy outcomes J Adolesc Health 1996; 19(2): 132-40.
- ⁷ Schaffer MA and Lia-Hoagberg B. Effects of social support on prenatal care and health behaviors of low-income women J Obstet Gynecol Neonatal Nurs 1997; 26(4): 433-40.
- ⁸ Collins NL, Dunkel-Schetter C, Lobel M, Scrimshaw CM. Social support in pregnancy: Psychosocial correlates of birth outcomes and postpartum depression J Person Soc Psychol 1993; 65: 1243-58.
- ⁹ Donatelle RJ, Prows SL, Champeau D, Hudson D. Randomized controlled trial using social support and financial incentives for high risk pregnant smokers: significant Other Supporter (SOS)program Tob Control 2000; 9 Suppl 3: iii67-iii69.

¹ Lederman RP, Regina P. Treatment strategies for anxiety, stress, and psychosocial development to reproductive health Behav Med 1995; 21(3): 113-22.

² Copper RL, Goldenberg RL, Das A, et al. The preterm prediction study: maternal stress is associated with spontaneous preterm birth at less than 35 weeks' gestation Am J Obstet Gynecol. 1996; 175: 1286-92.

³ Pagel MD, Smilkstein G, Regen H, Montano D. Psychosocial influences on newborn outcomes: a controlled prospective study Soc Sci Med 1990: 30: 597-604.