Measuring Religiosity and Risk in a Prenatal Population: Attendance, Prayer, Influence or Surrender to Predict Developmental Risk?

Background: Recent studies confirming health benefits of religiosity have attributed at least some of this benefit to lifestyle variables such as lower rates of alcohol, tobacco, and drug use, and higher rates of marriage among more religious individuals. These health risk behaviors are particularly important during prenatal development, as alcohol, tobacco, and illicit drug use are known to be related to developmental problems in children. Although detailed measures of religiosity are sometimes used, a majority of the existing findings are based on self-reporting of religious attendance and private religious practice, such as prayer. In our quest to determine aspects of religiosity that contribute to prenatal health, we prospectively measured religious attendance (ATTENDANCE), prayer frequency (PRAYER), the degree to which religiosity influences daily activities (INFLUENCE), and surrender (SURRENDER), and their relationships to several health risk behaviors and to one health-protective characteristic, being married.

Methods: Participants (n=249) were recruited prenatally, and detailed data on religiosity, smoking, alcohol and other risk factors were collected during pregnancy. Demographic data (including marital status) and risk variables (smoking, alcohol consumption, illicit drug use) were drawn from self-report surveys, obstetric medical records, and hospital birth charts. Religiosity was assessed using the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS; Fetzer Institute, 1999) and the Surrender Scale (Wong-McDonald & Gorsuch, 2000). The BMMRS is a 38-item scale designed to assess 11 core dimensions of religiosity and spirituality, all identified by the Fetzer Institute to be theoretically and empirically related to physical and mental health. For
the current study, individual items assessing ATTENDANCE, PRAYER, and INFLUENCE were pulled from the BMMRS. SURRENDER was measured using two items from the 12-item Surrender Scale, which measures the extent to which individuals surrender their wills to God and believe that when their own desires differ with what they believe to be God’s will, they surrender to God’s will.

Results: All four measures of religiosity were significantly related to marital status (ps .001-.011), with those higher on religiosity variables more likely to be married. Only INFLUENCE and SURRENDER significantly predicted alcohol consumption (p = .048 and p = .001, respectively) and illicit drug use (p = .038 and p = .012, respectively), and only INFLUENCE predicted smoking (p = .032) in this southern Appalachian pregnant population. In each of these associations, greater religiosity predicted lower substance use.

Conclusions: It is apparent that all dimensions of religiosity are not equal in their ability to predict health risk or protection. In this prenatal population, SURRENDER and INFLUENCE were far more predictive of lower levels of risk than frequency of attendance or frequency of prayer. In fact, with the exception of the marriage variable, those who did and did not pray frequently were indistinguishable with respect to health risk. In summary, these findings indicate that much of the current literature is not adequately capturing the dimensions of religiosity that are most predictive of health risk, thereby reducing the capacity to identify those in most need of intervention.