

# The Relationships of Maternal Health, Infant Health, and Sociodemographic Factors to Fertility

*An analysis of data from the 1973 National Survey of Family Growth and the 1972 National Natality Survey*

GORDON SCOTT BONHAM, PhD, and PAUL J. PLACEK, PhD

Data from two national surveys, the National Survey of Family Growth (NSFG) and the National Natality Survey (NNS), were used to assess the relationships of maternal and infant health characteristics to past and expected future fertility. Although the two surveys were designed for different purposes and sampled different populations, confidence can be placed in the relationships found to the extent that both surveys show statistical significance in the same direction.

A relationship was seen between more children ever born and poorer maternal health or health care. Both surveys show that mothers with a medical condition, a history of fetal loss, and fewer prenatal visits have had more children ever born than other mothers. These relationships persist after sociodemographic characteristics have been controlled in a regression analysis. However, mothers with a health condition or a history of fetal loss expect fewer births than other mothers, but prenatal care from a hospital outpatient clinic is related to more additional births expected.

Some relationship exists between poor infant health characteristics and higher past and expected fertility. High birth weight and the infant not being discharged at the same time as the mother are related to more children ever borne by the mother, according to the NSFG. Both surveys support the hypothesis

□ *Dr. Bonham and Dr. Placek are statisticians with the National Center for Health Statistics, Public Health Service, Department of Health, Education, and Welfare. This paper is a revision of one presented at the annual meeting of the Population Association of America in Seattle, April 1975.*

*Tearsheet requests to Dr. Gordon Scott Bonham, National Center for Health Statistics, Rm. 2-44, Center Bldg., 3700 East-West Highway, Hyattsville, Md. 20782.*

that women attempt to replace deceased children; mothers whose last child died shortly after birth expected more additional births than mothers who had not lost a child.

Both surveys show that sociodemographic characteristics of mothers explain more variation in their actual and expected fertility than do maternal and infant health factors. Mothers who are older, black, younger at the birth of their first child, and have completed less education have had more children ever born than other mothers. Fewer additional births are expected by older women; and, independent of other characteristics in the regression equation, fewer additional births are expected by women who were younger at first marriage.

Much has yet to be learned about the causes of fertility patterns, and better measurements of health, including perceptions of health, could be of some utility. Although maternal and infant health factors are less strongly related to fertility than are sociodemographic characteristics, they are still important in understanding variations in fertility.