

ANNOTATIONS

THE RELATION OF FERTILITY AND LONGEVITY IN MARRIED WOMEN DYING AFTER THE CHILDBEARING PERIOD

Do women who have borne many children live longer after the childbearing period than those who have been less fertile? It has been argued that the vitality reflected by high fertility predisposes to longevity. With equal force, it has also been held that the debilitating effect of frequent childbearing must curtail the length of life.

Until recently the numerous statistical approaches to the problem have suggested that fertility and longevity are positively correlated, but the evidence submitted has been scarcely more convincing than the earlier *a priori* pronouncements. Students of the subject, on finding an apparent direct association, have been over-willing to accept their results at face value. Little account has been taken of the inadequacy of the data used or of the influence of such factors as the differences in age at marriage and changes in birth rate during the period of investigation.

Miss Freeman recently has published the results of a critical study of the subject.¹ After careful analysis of her material, she concludes: "There probably is a low positive correlation between the duration of life and the number of offspring born, in married women who have survived the reproductive period. . . . However, the correlations are of such a low order that the changes in the mean duration of life associated with increasing numbers of offspring are of no practical importance."

This conclusion, interesting for its own sake, has an important bearing on the study of past trends of fertility from data relating to the total number of children born to surviving groups of married women. Such data permit the calculation of the mean number of offspring for women of any specified age at the time of enumeration. Since the childbearing period is virtually over at 45 years of age, it is possible from them to compare the fertility of women 45 years of age with that of any older group, for example, of women 75 years old whose families were completed

¹ Freeman, Bettie C.: Fertility and Longevity in Married Women Dying after the End of the Reproductive Period. *Human Biology*, September, 1935, vii, No. 3, pp. 392-418.