The Determinants of Birth Interval in Rural Ethiopia

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ABSTRACT

Studying the dynamics of spacing of births is important for several reasons including an understanding of completed family size. For instance, making longer between successive births used to allow less competition between existing children for breastfeeding, food, nutrition, the mother's time, and other resources. In this paper the length of birth interval between successive children that is called inter-birth interval in rural community of Ethiopia was considered. The data for the study was obtained from Ethiopian Demography and Health survey (EDHS) data conducted in 2010/11. The data contains 9647 rural women aged from 15-49 years. The approach of the study was fitting probability density functions to identify better distribution that provide adequate fit for all birth interval data; and among those distributions lognormal distribution seem best fit. Identifying variables that affect birth intervals was done by parametric survival analysis technique called "accelerated failure time" model. The result shows that the duration time between successive births is different for different regions, religion groups and education level. The median length of birth intervals in rural community of Ethiopia is 28 months and more than 75% of births occur within 3 years.

Key Words: Birth Interval, Lognormal distribution, Accelerated Failure Time Model