

Effect of Household Characteristics on Under-Five Child Health in Tanzania

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Master in Official Statistics

Eastern Africa Statistical Training Centre, October 2019

ABSTRACT

The study assessed the effect of household characteristics on under-five child health in Tanzania, using Tanzania Demographic Health Survey (TDHS) 2015-16 data. Eight sociodemographic household characteristics were analyzed to determine their influence on the under-five child's normal height for age and under-five child survival. To examine the effect of sociodemographic household characteristics on an under-five child's normal height for age and under-five child survival, binary logistic regression and Cox proportional hazard regression were used to determine the odds ratio of a child being stunted or not and the hazard of a child to die respectively. The chi-square test was used to determine the independent variables associated with the dependent variable under five child's stunting. Among all variables household wealth index, household size, birth spacing, marital status and type of place of residence had an association with under-five child stunting. Link test for model specification and Hosmer–Lemeshow goodness-of-fit test were used to test the binary logistic model. Whereas, a log-rank test of equality of survivor functions was used to determine the independent variables with significant differences among independent groups. Thereafter, the univariate Cox proportional hazard regression model was used to determine the individual effect of the independent variable on the outcome variable. Findings revealed that wealth index, household size, birth spacing, marital status and sex of the head of household were significantly associated with under-five child stunting in Tanzania. Furthermore, children from households with older mothers, long preceding interval between births, married mothers, more

than four household members and those households headed by a male have the advantage of a higher chance of a child to survive to age five (less chance of under-five mortality). Therefore, education and advocacy on marriages, the proper age for women to start conceiving and feeding practices should be provided to ensure children's normal height for age and their survival.