

Abstract

Background: studies have focused on the effect of short birth spacing on childhood mortality, yet, very little attention has been paid to the possibility of an inverse relationship such that child mortality might also positively or negatively affect birth spacing. In Nigeria, where both fertility and child mortality are high, it is important to examine this inverse relationship as a possible reason for high fertility in the country. Therefore, the objective of this study is to examine the effect of child death on time to birth of the next child.

Data and Methods: Data was drawn from the 2013 Nigerian Demographic Health Survey. A nationally representative survey of women aged 15-49 (reproductive ages) years, men, children, couples and households that collects data on reproductive health, fertility behaviour and birth history of mothers. This study population are live births and the sample size was 188,986 (weighted) live births born to the females (15-49 years) within the five years preceding the survey. A multivariate cox proportional hazard regression model was fitted. The interpretation of results was made using hazard ratios with 95% confidence interval

Results: Controlling for other covariates, the cox regression analysis showed that that the risk of next birth is higher when an index child dies compared to when an index child survives [HR: 2.21, CI: 2.035 – 2.413]. Sub-group analysis by geo-political zones in Nigeria showed that in all the regions there was a higher likelihood of having a next birth following the death of a preceding child. Result showed that the south west region had the highest hazard (HR= 1.79, 95% CI: 1.976 – 3.777) of having a next birth, while the south east region recorded the lowest hazard (HR= 1.49, 95% CI: 1.624 – 2.546).

Conclusion: The findings from this study demonstrate that child death is a major factor that shortens the length of birth intervals in Nigeria. It is therefore important that the government of Nigeria intensifies efforts aimed at reducing infant mortality and encouraging adequate birth spacing. This could be achieved through public awareness on the health importance of adequate birth space to both the mother and the child. This is especially important if significant progress is to be made in achieving a controlled fertility in the country and to achieve the sustainable development goal to improve health of both mother and child in the country by 2030

Keywords: birth spacing, child survival, fertility, maternal and child health.