



## **A Non Parametric Approach to Estimating Joint Maternal and Child Survival**

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Since the adoption of the Millennium Development Goal in 2000, much interest has been given to the study of maternal and child health. Despite several linkages among them, maternal and child survival continue to be studied independently. In this study, we apply survival analysis techniques and basic probability laws, to develop protective tables for the joint maternal and child hazards and survivals. Applying this technique to data from Ghana, the joint probabilities show that, about 93 percent of labouring women are expected to independently survive, up to one month after delivery, with their child; about 3 percent of mothers are expected to lose their children by the end of one month after delivery, and about 5 percent of children will lose their mothers, by one month after delivery. The results indicate that maternal mortality is higher than child mortality within the first one month after delivery.

**Keywords:** Joint probability; Maternal Survival; Child Survival; hazard.