COVARIATES' BEST SET OF 3RD BIRTH-INTERVAL DYNAMICS BY COX'S SEMI-PAMETRIC MODEL

W. SHANTIKUMAR SINGH ¹ AND N. SHARAT SINGH²

¹Assoc. Professor,
Department of Statistics,
Modern College under Manipur University,
Imphal, India

²Asst. Professor,
Department of Statistics,
Thoubal College under Manipur University,
Imphal, India

Abstract

Research Problem: 3rd birth transition is serious demographic phenomenon as it obstructs the India's National Population Policy (NPP)'s fertility replacement level of 2.1, to be achieved by 2010. Failing which, the present investigation demands to identify the proximate socio-demographic covariates contributing the short time interval of 3rd birth. **Materials and Method**: Cox's Semi-Parametric model $[\lambda(t;x) = \lambda_0(t)\varphi(x)]$ explores best set of covariates from the empirical study of 1397 eligible women of four valley district of Manipur under cluster sampling taking 11-th July 2009 as the reference date of survey. Inference is drawn through SPSS vs 18. **Findings**: Couple's desire number of son (P < 0.05), infant and child mortality (P < 0.01), use of contraceptives (P < 0.01), Muslim women (P < 0.01), place of residence (P < 0.05) constitute the Best Set. **Conclusion**: Managing the covariates by program implementing agencies at a level consistent with 2.1 of total fertility in Manipur is urgently needed.
