MISSPECIFICATION OF FRAILTY RANDOM EFFECTS IN A CLUSTERED SURVIVAL DATA.

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Abstract

Survival Analysis models the time it takes until an event occurs. The prototypical event is death, from which the name Survival Analysis is derived.Accordingly, each time Survival Analysis is studied, aspects of some selected rates or reliability of some study are usually considered. Frailty modelling has been used in this study as the statistical tool for analysing the time-event data. Parametric and non-parametric models and the frailty models are fitted to help derive the required conclusions.The impact of misspecification of frailty random effects in a survival data using parametric frailty modelling approach were determined during this research study.It is expected that these approaches will produce less bias estimates compared to the results achieved of the estimates when the misspecification of the frailty random effects are ignored.

Keywords: misspecification, frailty modeling, clustered data