

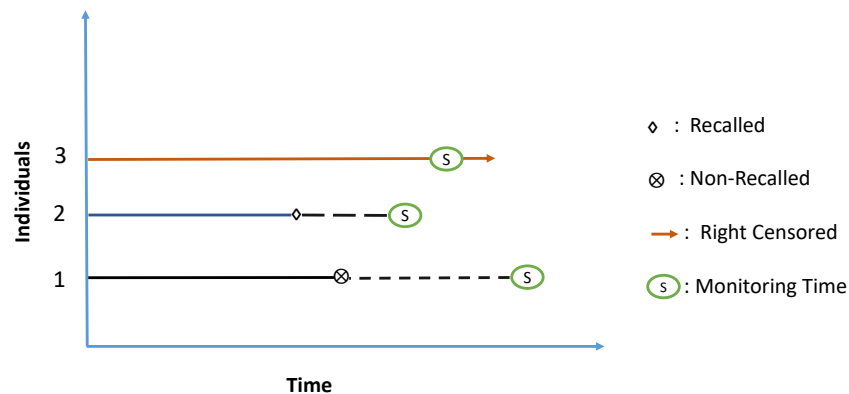
Objective Bayesian inference for recall-based studies with application to breastfeeding data

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In the survey-based study, it is expected that the subject will recall the time to event if it has already occurred. The recall-based data provides additional information on subjects than current status data. In this work, objective Bayesian analysis has been performed for the recall-based data. The reference priors are derived for different ordering of parameters based on their inferential importance. Additionally, the propriety of the posterior distribution is established since the reference priors are generally improper. The Bayesian estimation of unknown parameters is obtained under the squared error loss function. To elucidate the performance of Bayesian estimators, a simulation study has been carried out for different proportions of censored and non-recall observations. To show the applicability of the model established under the Bayesian paradigm, a real dataset taken from Nation family of health survey(NFHS) round IV, India, is analysed.



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