Using Informative Prior from Meta Analysis in Bayesian Approach

ESIN AVCI

Department of Statistics, Faculty of Art and Science,
University of Giresun, Giresun, Turkey
esinavci@hotmail.com

Bayesian approach differ from the frequentist approach in terms all unknown parameters are considered as random variables. For that, prior distribution must be defined at first. Determination of the prior distribution is important in because it effect the posterior inference. If prior information is available, it should be appropriately summarized by the prior distribution. Such distributions are called informative distribution. In the case of no prior information is available, we define prior as a will not effect the posterior distribution [1].

Meta analysis refers to the statistical synthesis of results from a series of studies. If the studies have been collected systematically, the synthesis will be meaningful. Provide more powerfull test, summerise numerous and inconsistent findings and investigate consistency of effect across different samples are the reasons of using meta analysis [2].

The objective of this study is to used meta analysis for proportion to obtain prior information about patients with breast cancer stage-I who received modified radical mastectomy treatment and applied Bayesian approach. R and WinBUGS programs are performed for meta analysis and Bayesian approach respectively.

REFERENCES

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