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# Repeated Categorical Response Data Analysis to see The Effect of a new drug "Saheli" on Breast Cancer

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#### Abstract

We have collected a data of a new drug "saheli" for the treatment of breast cancer. With the social, economical, educational and information evolution increasing number of women solicit medical opinion for simple pain and nodularity in breasts. There is a considerable morbidity amongst women in India on account of breast pain and nodularity. Pain is usually the most common complaint in a breast clinic followed by a lump with or without pain. Approximately 30% of women seen at surgical clinics in western countries have symptoms of breast pain. Such pain and lumpiness (absent, discrete or dominant lump) in breast is taken as a physiological aberration of normal development and involution. Mild cases can be simply treated by reassurance but sometimes it becomes troublesome enough to interfere with the quality of life or incapacitating to the extent that it interferes with the day to day activity of the woman. In such cases, it becomes mandatory for the physician to offer some form of treatment. In a study, it is reported that 85% women required no treatment after being reassured that malignant disease is absent whereas the remaining 15% requested treatment. Reassurance in the absence of a serious disease I mass I discharge in mild symptoms is very helpful and often the women will demand no further treatment.

In this research paper we have applied repeated categorical response analysis to dataset. Models are fitted for both dependent variables pain and nodularity. Estimates of parameter of model with p value are computed with the help of R. The results are discussed and presented in the form of tables and graphs.

Keywords: Breast Cancer, Saheli drug, Repeated categorical response analysis, Estimates of parameters of model, p-value.

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