Self-reported Gastrointestinal Symptom Clusters and Factor Models in Survivors of Gynecological Cancer

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Abstract

The main aim of this study is to verify empirical techniques for clustering symptoms experienced in gynecological cancer patients, by comparing the results with a clustering based on clinical experience. Data are taken from a survey of symptoms experienced by 516 cancer patients who received radiation therapy at Karolinska University Hospital in Stockholm or at Jubileumskliniken at Sahlgrenska University Hospital in Gothenburg. The study finds that Wards clustering algorithm based on the phi correlation matrix gives the closest agreement out of several empirical clustering combinations, as measured by adjusted Rand index. An alternative approach based on factor analysis is also considered.

Key Words: Symptom clusters; cancer survivors; clinical classification; adjusted Rand index; exploratory factor analysis.

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