

## SPACE-TIME ANALYSIS APPLIED TO THE OCCURRENCE OF HYPERTENSION AND DIABETES IN THE MUNICIPALITIES OF STATE OF MINAS GERAIS

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- **ABSTRACT:** *To evaluate the spatial and temporal distribution of hypertension and diabetes mellitus of Minas Gerais, between 2002-2012, we applied the techniques of spatial data analysis area, highlighting the moving average site, the autocorrelation coefficients of global and local content Moran. Moreover, were built thematic maps of spatial distribution of local autocorrelation (Box Map) and identification of the cluster, using the space-time scan statistic. It was found that spatial autocorrelation for both variables, among municipalities, which showed coefficients Moran (global) positive and significant for all years studied. It was possible to identify, by analyzing local grouping of municipalities in the southern part of the state with the highest prevalence rates of hypertension and diabetes also in all years studied. Also it was found that persisted cluster in space and time for both variables and is located in the southern state. We conclude that the space-time analysis to map and understand the distribution of rates of hypertension and diabetes in the state of Minas Gerais. Studies like this provide information to the local health services can select the main places with high rates in an attempt to propose actions.*
- **KEYWORDS:** *Spatial statistics; data area; spatial distribution; autocorrelation; Scan spatiotemporal.*

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