

Socioeconomic and Cardiovascular Variables Explaining Regional Variations in Stroke Mortality in Chile: An Ecological Study

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Resumen

Background: Regional differences in stroke mortality rates have been described in Chile. These could be related to the distribution of cardiovascular risk factors, the quality of medical care or socioeconomic status influencing incidence or case fatality rates. Our objective was to investigate variables explaining the variability in stroke mortality rates in the different regions of Chile. Methods: Adjusted stroke mortality rates in different regions were calculated for the year 2003. Variables were added from three sources: the National Death Certificate Database, the National Socioeconomic Characterization Survey and the National Health Survey. A logistic regression model was used to investigate regions, demographic variables and socioeconomic variables associated with the risk of death from stroke. A linear regression model was used to study the association of socioeconomic variables and cardiovascular risk factors with the standardized mortality rate by region and the contribution of these to the variability. Results: A twofold increase was found in adjusted stroke mortality rates among regions. Greater risk was associated with older age, female gender and residence in regions V, VII, VIII and IX. Sixty-two percent of the regional variability rate was explained by the combined prevalence of poverty (34%), diabetes (17%), sedentarism (8%) and overweight (3%). Conclusion: The risk of death from stroke in Chile is associated with age, sex and living in four specific regions of the country. The majority of the increased risk in these regions is explained by the prevalence of poverty, diabetes, a sedentary lifestyle and overweight. Copyright (C) 2011 S. Karger AG, Basel

Palabras clave

Palabras clave de autor: Cerebrovascular disease; Chile; Mortality rate; Poverty; Risk factors; Stroke management; Variations, regional, geographical

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