Survival analysis and risk factors for valve surgery in Brazilian children and adolescents with rheumatic heart disease

Methods Ecological study using data about mortality of the Improvement Program of Information on Mortality of São Paulo and population estimates by demographic census (IBGE—2000). Areas were drawn from the Social Inclusion Map for the City. The outline was based on territorial classification of the 96 administrative districts in five areas, according to the index of social districts: Areas 1 and 2 (inclusion) and 3, 4, 5 areas (exclusion). We examined cardiovascular mortality rates calculated for 3-year averages age-standardised, relative to differences and rates ratio between areas (CI of 95%).

Results Cardiovascular mortality declined in all areas and both male and female sexes in these periods. It was observed major decline (50%) between 1996—1998 and 2003—2005 in rich areas and it was smaller in poor areas (5%). The highest differential was among male, with rate ratio (AS/AI) that it changed from 1.02 (95% CI 0.99 to 1.05) in first period for 1.38 in the last period (95% CI 1.34 to 1.42). In the women this ratio changed from 0.79 (95% CI 0.77 to 0.81) for 1.07 (95% CI 1.03 to 1.09).

Conclusion Although overall decline in cardiovascular mortality in all socioeconomic status, it was observed increasing of the inequality in reduction of this death rates, which may reflect worsening living conditions or less access to the health services and to the development diagnostic and therapeutic methods.