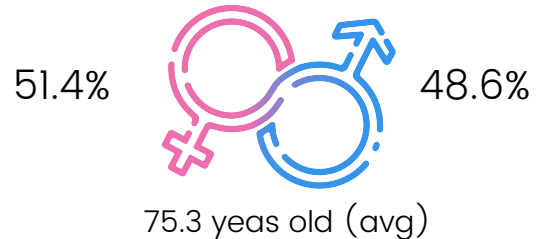
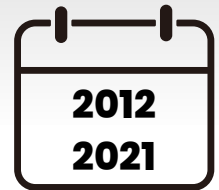
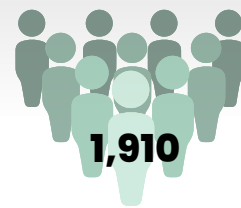


LONG-TERM SURVIVAL AFTER AN ACUTE STROKE IN BRAZIL FROM 2012–2021: A POPULATION–BASED COHORT STUDY FROM A HEALTHCARE PLAN

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OBJECTIVES

There is a lack of epidemiological data on long-term survival trends of first-ever stroke patients in the Brazilian private market. Such knowledge is essential for the evaluation of the current and future burden of stroke. This study presents up to 10 years of follow-up of patients after an ischemic and hemorrhagic stroke hospitalization.



METHODS

All discharged patients with main diagnosis of stroke from 2012 to 2021, which were identified through the administrative database of healthcare plan. Kaplan–Meier curves were used to estimate the cumulative survival rates. Cox proportional hazard regression models were applied to assess the independent association between predictors mortality (sex, age) and comorbidities risk factors arterial hypertension and diabetes mellitus. For each subject, we calculated all-cause age–sex specific potential years of life lost (PYLL) due to stroke and complications.

RESULTS

In total, 1,910 patients were recorded with all types of strokes. The average age was 75,3 years, 51.4% of those affected were women. From total, 767 died during follow-up. The cumulative 90-day, 1-year, 5-year and 10-year survival rates of stroke patients in the cohort were 81.1%, 66.7%, 32.3%, 9.8%, respectively. The most important determinant for long-term survival was age at time of stroke, being lowest for those aged over 80 years (10 years survival rate 6.8%). The multivariate predictive model revealed that diabetes ($p<0.001$) and arterial hypertension ($p<0.001$) were significant unfavorable outcome. PYLL estimated was 9,675 from those who died after stroke (359 women 4,427, 408 men 5,248).

Cumulative survival rate	
90-DAY	81.1 %
1-YEAR	66.7 %
5-YEAR	32.3 %
10-YEAR	9.8 %

CONCLUSIONS

Despite major improvements in both prevention and acute management over the last decades, stroke remains a devastating disease. As expected, age influenced on the high risk of poor survival. Diabetes and hypertension were significant independent predictors of poor long-term survival. The PYLL observed reinforce the need for targeted prevention of risk factors and comprehensive stroke care initiatives.

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