

## THE ASSOCIATION BETWEEN POST-STROKE DEPRESSION AND MORTALITY: A META-ANALYSIS

*F. Bartoli<sup>1</sup>, N. Lillia<sup>2</sup>, A. Lax<sup>1</sup>, C. Crocamo<sup>3</sup>, V. Mantero<sup>2</sup>, E. Pini<sup>1</sup>, G. Carrà<sup>3</sup>, E. Agostoni<sup>2</sup>, M. Clerici<sup>1</sup>*

<sup>1</sup>Department of Neurosciences and Biomedical Technologies, University of Milano Bicocca, <sup>2</sup>Ospedale Niguarda Cà Granda, Milano, <sup>3</sup>Azienda Ospedaliera San Gerardo, Monza, Italy

**Introduction:** Stroke represents the third most frequent cause of mortality in developed countries, following only coronary heart diseases and cancer. Post-Stroke Depression (PSD) is extremely common among stroke survivors, and it may have great burden on the likelihood of functional recovery and long-term outcomes. We hypothesized that PSD is related to a higher rate of mortality among people suffering from a stroke.

**Aim:** To estimate the risk of mortality among subjects suffering from PSD as compared with stroke survivors who did not suffer from PSD.

**Methods:** We performed a systematic review of papers indexed in Pubmed. Both fixed and random-effects methods for estimating association and time-to-event pooled effects were used. The presence and the level of heterogeneity were assessed using Q test and  $I^2$  statistic.

**Results:** Seven papers had data suitable for meta-analysis. The pooled association effect for mortality at follow-up in people with PSD were statistically significant ( $p < 0.05$ ). The time-to-event estimation showed a statistically significant correlation exclusively under the fixed effect analysis.

**Conclusions:** These findings pointed out the potential burden of PSD on post stroke mortality. Further investigation is required to clarify the nature of PSD/mortality association.