Intermediate factors, such as age and sex, have been included in the statistical analysis to ‘control’ for their effect on the relationship. Estimates have also been presented stratified on the intermediate factor.

The objective was to review publications measuring the effect of unemployment on health with a focus on methodological shortcomings.

METHODS: A systematic search was performed through the literature database Web of Science. It aimed to identify original publications, from 2003 and later, studying the effect on health (excluding morbidity and mortality measures) from unemployment by comparing employed and unemployed individuals in the general population.

Forty-four studies were identified and for them were health measures, statistical methods, study design and intermediate factors documented.

RESULTS: Approximately half ($n=23$) of the studies used logistic regression. Other regression techniques were also common ($n=13$). Important assumptions for the statistical analysis were often not mentioned, indicating that they may not have been considered. Often logistic regression models used intermediate factors as controlling variables without mentioning how they were validated.

There were cases where the statistical method did not respond to the research question it was aimed for. The use of cross-sectional study designs ($n=26$) was more common than longitudinal ($n=18$) designs. The most common intermediate factor was sex ($n=34$) followed by age ($n=32$), level of education ($n=27$) and marital status ($n=18$).

CONCLUSIONS: There are methodological shortcomings. The documentation on how assumptions for the statistical methods are verified needs to be improved. There is also a need for an increased awareness about how intermediate factors are added to the statistical method. Cross-sectional study designs are common despite the difficulty in showing causality.