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Were meta-analyses of etiological studies of high methodological qualities?

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Background: Meta-analyses of etiological studies have been developed for nearly twenty years. However, we were unclear about their methodological qualities.

Objective: To evaluate the methodological qualities of meta-analyses of etiological studies.

Methods: The Cochrane Library, PubMed, Embase, ISI Web of Knowledge, China Academic Journal Network Publishing Database, and Chinese Scientific Journals Full text Database and Chinese Biomedical Literature Database were searched to include systematic reviews or meta-analyses about factors that were related to gastric cancer. All searches were conducted in April 2011. The methodological qualities of included systematic reviews were evaluated using assessment of Revised Assessment of Multiple Systematic Reviews (R-AMSTAR).

Results: 55 systematic reviews or meta-analyses were included. The R-AMSTAR score ranges from 13 to 30 (median 22, mean \pm SD 22.13 \pm 4.65). 31 achieved 22-30 score and 23 achieved 13-21 score with a maximum possible total score of 44. Of 52 small items from the R-AMSTAR, seven small items were not conducted in all included studies, seventeen small items were conducted in more than half of all included studies (five small items were conducted in more than 75% of all included studies), twenty-seven small items were conducted in less than half of all included studies (eleven small items were conducted in less than 25% of all included studies).

Conclusion: The methodological qualities of included systematic reviews of etiological studies were so bad that we should be caution about the conclusions drawn by them.



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