

Economic evaluation of interventions which aim to prevent smoking relapse: systematic review and critical appraisal

Kemi-Rotimi Oyewumi, MSc

Norwich Medical School, University of East Anglia

Aim: To carry out a systematic review of studies that have conducted economic evaluations on smoking relapse prevention interventions by critically appraising the quality of the methodology.

Methods: All relevant articles were identified by searching three electronic databases MEDLINE, EMBASE, Cochrane Library and reference lists of relevant articles. To be included, an economic evaluation of smoking relapse prevention needed to have been undertaken, modelling studies were permitted. Two reviewers screened all articles from the search for eligibility based on the predefined criteria for inclusion and a single reviewer extracted methodological details, study design and outcomes into summary tables. The methodological quality for the included papers was judged using the checklist recommended by the British Medical Journal (BMJ) for assessing economic evaluation studies.

Results: Eleven full text papers were retrieved and three studies met the inclusion criteria. Different interventions were assessed by each of the three, each of which was estimated to be cost-effective based on cost utility analysis. None of the three studies met all the criteria on the checklist.

Conclusions: At present few studies analysing the economic evaluation of smoking relapse prevention interventions have been conducted and further studies are required in this area. Future high-quality studies performed either by conducting clinical trials alongside economic evaluation or modelling economic evaluation from published trials are required. It is recommended that the associated methods are clearly stated including the viewpoint of the analysis.

Key words: economic evaluation, smoking, relapse prevention, quality-adjusted life years, systematic review.