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**Identifying opportunities to develop the science of implementation for community-based chronic disease prevention: an audit review of implementation trials**

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**Objectives/aims**

Implementation of interventions in community organisations such as schools, childcare centres, and sporting clubs are recommended to target a range of modifiable risks of non-communicable diseases. Poor implementation, however, is common and has contributed to the failure of non-communicable disease interventions globally. The aim of this study was to characterise experimental research regarding strategies to improve implementation of chronic disease prevention programs in community settings.

**Methods**

The review used data collected in three comprehensive systematic reviews undertaken between August 2015 and July 2017. Randomised controlled trials (RCTs), including those with a cluster design, and non-randomised trials with a parallel control group were included. The data were extracted to describe trial characteristics, implementation strategies employed, implementation outcomes and study quality.

**Main findings**

Of the 40 implementation trials included in the study, unhealthy diet was the most common risk factor targeted (n=20). The most commonly reported implementation strategies were educational meetings (n=38, 95%), educational materials (n=36, 90%) and educational outreach visits (n=29, 73%). Few trials were conducted at-scale (> 50 community organisations) (n=8, 20%) or reported adverse effects (n=5, 13%). Further, the reporting of other implementation related outcomes including intervention adoption (n=13, 33%), appropriateness (n=11, 28%), acceptability (n=8, 20%), feasibility (n=8, 20%), cost (3, 8%) and sustainability (n=2, 5%) was limited. For the majority of trials, risk of bias was high for blinding of study personnel/participants and for the blinding of outcome assessors.