

**Results** Key concepts and processes were synthesised into a framework of change processes in group-based health interventions. Processes were categorised into: (1) group dynamic and development processes, (2) inter-personal change processes, and (3) intra-personal change processes in groups. Examples of practical strategies to facilitate and manage these processes were identified and categorised into: (1) group design elements, (2) group set-up tasks, (3) group facilitation strategies, and (4) group closure tasks. Work to identify examples of how group interaction and group processes might link with participant engagement and outcomes is still in progress but will be presented.

**Discussion** The presented framework integrates a large body of literature on change processes in groups, and provides examples of practical strategies that can be used to instigate and facilitate change processes in group-based health interventions. It provides a practical tool for researchers and practitioners that can be used to design and deliver better group-based health interventions, train group facilitators, and guide evaluations of group-based interventions, with a view to optimising intervention engagement and outcomes.

#### P92 LIFESTYLE INTERVENTIONS FOR THE TREATMENT OF OVERWEIGHT/OBESE ADOLESCENTS—COCHRANE REVIEW

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**Background** The prevalence of overweight and obese adolescents has increased worldwide, presenting a global public health crisis. This review assessed the efficacy of diet, exercise and behavioural interventions for the treatment of overweight/obesity in adolescents (12–17 years).

**Methods** A systematic literature search (up to July 2016) with no language restrictions was performed in CENTRAL, MEDLINE, EMBASE, PsycINFO, CINAHL, LILACS, and the trial registers ClinicalTrials.gov and ICTRP Search Portal. Search terms included obesity, diet, exercise and adolescent. References of identified studies and systematic reviews were checked. Authors of included studies were contacted for missed studies. Two reviewers evaluated studies independently at all stages. Eligibility: RCTs that observed participants for  $\geq$  six months, overweight/obese (investigator-assessed) adolescents (mean age 12–17 years), interventions with a primary aim to treat overweight/obesity with any form of dietary, exercise and/or behavioural therapy delivered as a single or multi component intervention, any setting and any delivery method. Comparators were no treatment/wait list control, usual care or an alternative concomitant therapy providing it is delivered in the intervention arm. Primary outcomes were changes in BMI/weight measured at baseline and at  $\geq$  6 months. Data that could be meta-analysed were expressed as mean differences (MD) with 95% CI otherwise data were reported narratively. Heterogeneity, risk of bias and quality of evidence were assessed.

**Results** The searches generated 16 106 records (duplicates removed). Title and abstract screen excluded 15 422 records. 736 records were assessed for eligibility. 105 trials were included: 50 ongoing; 11 awaiting classification, 44 qualitative synthesis and 39 quantitative synthesis. This review included 4682 participants. BMI change at the longest follow-up was MD  $-1.18$  (95% CI  $-1.67$  to  $-0.69$ );  $p < 0.00001$ ; 2774 participants; 28 trials; low quality evidence. Most studies were multi-disciplinary interventions (BMI MD  $-1.18$ , 95% CI  $-1.75$  to  $-0.61$ ,  $p < 0.0001$ ; 2293 participants; 22 studies), some studies were diet alone (BMI MD  $-0.62$ , 95% CI  $-1.29$  to  $0.06$ ;  $p = 0.07$ ; 277 participants; 3 studies) or exercise alone interventions (BMI MD  $-1.73$ , 95% CI  $-3.12$  to  $-0.34$ ,  $p = 0.01$ ; 229 participants; 4 studies). Studies undertaken in schools showed a lower effect compared to community and health care settings.

**Conclusion** Interventions that involve a combination of diet, exercise and behavioural components appear to be an effective treatment option for overweight/obese adolescents. Effects of lifestyle interventions were maintained at 18–24 months follow-up. Results should be interpreted with caution as the evidence was rated as low quality for inconsistency and publication bias.

#### P93 WHAT ARE THE VIEWS OF OVERWEIGHT AND OBESE ADOLESCENTS (12–17YRS) ATTENDING LIFESTYLE TREATMENT INTERVENTIONS: A QUALITATIVE SYSTEMATIC REVIEW

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**Background** A third of all children in England are overweight or obese. Physical and psychosocial effects of obesity in adulthood are now seen in children and adolescents. Current NICE guidance recommends that obese adolescents attend a family-based multi-component weight management service. Cochrane reviews have shown that lifestyle programmes can be effective. However, weight management interventions recruit  $< 2\%$  of the childhood population. For those that do attend weight management interventions, attrition is high. Understanding the views of adolescents is necessary for planning and development of future interventions.

The goals of this systematic review include:

- To explore the views of overweight or obese adolescents aged 12–17 years who have attended a lifestyle treatment intervention.
- To identify what adolescents deem as successful and unsuccessful components of an intervention to inform future practice, as well as research.

**Methods** This review examined studies of overweight or obese adolescents who have attended a lifestyle treatment intervention. Interventions were single or multi-component and contained one or more diet, physical activity and behavioural elements. Only studies that collected and analysed data qualitatively were included. There were no language restrictions.

Published literature was identified by searching the following databases: MEDLINE, EMBASE, Web of Science, PsycINFO, ASSIA and CINAHL. Reference lists of included studies were screened.