In patients with type 2 diabetes mellitus, does group-based education (GBE) in self-management improve clinical, lifestyle, and psychosocial outcomes?

**METHODS**

**Data sources:** electronic databases including Cochrane Library, MEDLINE, CINAHL, ERIC, ASSIA, AMED, PsycINFO, and EMBASE/Excerpta Medica; bibliographies of relevant articles; and contact with experts in the field.

**Study selection and assessment:** randomised controlled trials (RCTs) or clinical controlled trials (CCTs) that compared GBE for adults with type 2 diabetes mellitus (delivered in primary or secondary care settings, based on learner/patient-centred education, >6 participants in a group, and >1 session of 1 hour) with a control condition (usual care, no intervention, or a waiting list).

**Outcomes:** clinical (glycated haemoglobin, fasting glucose, and medication use), lifestyle (diabetes knowledge), and psychosocial (quality of life and empowerment/self-efficacy) measures.

**MAIN RESULTS**

8 RCTs (n = 1260) and 3 CCTs (n = 272) met the selection criteria. Meta-analysis (using a random effects model) showed that glycated haemoglobin and fasting glucose concentrations were lower in the intervention group than in the control group (table). More patients in the intervention group than in the control group reduced their use of diabetes medication over 12–14 months (5 trials, n = 654; relative benefit increase 82%, CI 0.72 to 1.18). More patients in the intervention group than in the control group (3 trials, n = 432; standardised mean difference 0.95, 95% CI 0.72 to 1.18) reported greater total empowerment scores in the intervention group than in the control group throughout follow-up (p values <0.05).

**CONCLUSION**


**Group based education (GBE) in self management strategies vs a control condition (usual care, no intervention, or a waiting list) in type 2 diabetes mellitus**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Follow up in months</th>
<th>Number of trials (n)</th>
<th>Weighted means</th>
<th>Weighted mean difference (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycated haemoglobin (%)</td>
<td>4–6</td>
<td>3 (395)</td>
<td>9.53</td>
<td>10.88</td>
</tr>
<tr>
<td></td>
<td>12–14</td>
<td>7 (1044)</td>
<td>7.93</td>
<td>8.75</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>2 (333)</td>
<td>6.54</td>
<td>7.51</td>
</tr>
<tr>
<td>Fasting blood glucose concentration (mmol/l)</td>
<td>12–14</td>
<td>4 (641)</td>
<td>9.55</td>
<td>10.72</td>
</tr>
</tbody>
</table>

*CI defined in glossary; weighted means calculated from data in article.
Review: group based education in self management strategies improves outcomes in type 2 diabetes mellitus

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