Review: group-based education in self management strategies improves outcomes in type 2 diabetes mellitus


Clinical impact ratings Endocrine ★★★★★☆

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 that included the 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 observational studies that compared GBE (delivered in primary or secondary care, based on learner/patient centred education, >6 participants in a group with >1 session) with a control condition that included usual care, no intervention, or a waiting list.

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

Main Results

8 RCTs (n = 1260) and 3 observational studies (n = 272) met the selection criteria. Random effects meta-analyses showed that glycated haemoglobin and fasting glucose concentrations were lower in the intervention group than in the control group (table) and that diabetes knowledge scores were greater in the intervention group than in the control group (standardised mean difference 0.95, 95% CI 0.72 to 1.18) (3 trials, n = 432). More patients in the intervention group than in the control group took part in group discussions. Patients then receive individualised care.4

Conclusions

In patients with type 2 diabetes mellitus, group-based education in self management strategies improves clinical and lifestyle outcomes.

A modified version of this abstract appears in Evidence-Based Nursing.

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Main Results

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Follow up in months</th>
<th>Number of trials (n)</th>
<th>Weighted means</th>
<th>CI (95%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycated haemoglobin (%)</td>
<td>4–6, 12–14, 24</td>
<td>3 (995), 7 (1044), 2 (333)</td>
<td>9.53</td>
<td>10.85</td>
</tr>
<tr>
<td>Fasting blood glucose (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.
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