Review: interventions focusing on patient behaviours in provider patient interactions improve diabetes outcomes


Clinical impact ratings GP/FP/Primary care ★★★★★★★ IM/Ambulatory care ★★★★★★★ Endocrine ★★★★★★★

In patients with diabetes, do experimental modifications of provider patient interactions improve patient behaviours and health outcomes?

METHODS

Data sources: 4 electronic databases and the bibliographies of retrieved studies.

Study selection and assessment: randomised controlled trials (RCTs) or quasi-experimental studies of modifications of provider patient interaction, provider consulting style, or patient education in patients with type 2 diabetes that assessed effects on diabetes outcomes. Study quality was assessed (maximum score 19 points).

Outcomes: patient behaviours (participation in care, adherence to professional advice, self care, self monitoring of blood glucose, insulin or other medication use, exercise, diet, and other lifestyle modifications); patient biomedical issues (glycaemic control, cardiovascular risk factors, complications, hospital admission, and mortality); patient functional measures (physical, emotional, social, and professional); psychological measures (satisfaction, well being, depression, anxiety, mental health, and quality of life); provider adherence to guidelines; and provider behaviour, satisfaction, and attitudes.

MAIN RESULTS

8 RCTs (4 on provider behaviour, 4 on patient behaviour) met the selection criteria. The quality score ranged from 13 to 19 points (mean 17.3 points). While 3 of 4 trials focusing on providers showed modification of clinicians’ behaviour, trials focusing on patients showed more positive effects on such biomedical outcomes as glucose control, as well as self care and psychosocial outcomes (table).

CONCLUSIONS

In patients with diabetes, interventions targeting patient behaviour seem to have better results than those targeting clinician behaviour.

Abstract and commentary also appear in ACP Journal Club.

Interventions on provider patient interactions in type 2 diabetes at 6 months to 6 years

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Focus of intervention</th>
<th>Number of trials showing improvement, no improvement, or uncertain improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical (see outcomes section)</td>
<td>Provider behaviour</td>
<td>Improvement: 1, No improvement: 3, Uncertain improvement: 0</td>
</tr>
<tr>
<td></td>
<td>Patient behaviour</td>
<td>Improvement: 4, No improvement: 0, Uncertain improvement: 0</td>
</tr>
<tr>
<td>Self care (see outcomes section)</td>
<td>Provider behaviour</td>
<td>Improvement: 0, No improvement: 3, Uncertain improvement: 1</td>
</tr>
<tr>
<td></td>
<td>Patient behaviour</td>
<td>Improvement: 2, No improvement: 2, Uncertain improvement: 0</td>
</tr>
<tr>
<td>Psychosocial (see outcomes section)</td>
<td>Provider behaviour</td>
<td>Improvement: 0, No improvement: 1, Uncertain improvement: 3</td>
</tr>
<tr>
<td></td>
<td>Patient behaviour</td>
<td>Improvement: 3, No improvement: 0, Uncertain improvement: 1</td>
</tr>
</tbody>
</table>

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Commentary

The systematic review by van Dam et al, and another one published later,2 support at least 2 conclusions: Firstly, providers with more patient centred behaviours (the result of multimodality interventions to change provider behaviour) enhance patient satisfaction with care. Patients appreciate clinicians who take their views and beliefs into account. Secondly, interventions empowering patients to participate actively in the encounter and to make informed choices on their own improve self efficacy measures and metabolic control (eg, haemoglobin A1c levels). Patients do better when they get involved in the day to day management of their condition.

Most of the decisions that affect patient important outcomes in diabetes occur in the “patient space” (eg, diet and exercise choices, medication adherence, and self monitoring). Thus, the clinical encounter may be most effective when clinicians (and other members of the care team) take into account patient treatment goals, offer patients tools and support to problem solve in that “space,” and provide extended and tailored support after the encounter.

Healthcare professionals in some practices have made efforts to redesign their delivery of diabetes care to include effective encounter strategies.2 Unfortunately, economic incentives exist to make encounters brief, which may hinder a participatory encounter style.3 It may follow that brief encounters with limited patient participation lead to poor patient outcomes, including preventable diabetes complications and their associated costs in suffering and healthcare dollars. Other barriers include discontinuity of care, lack of provider motivation, and lack of skills to support patient participation.

While identifying large knowledge gaps in need of research, this review offers hope that implementing multimodality interventions targeting patients and their healthcare providers may lead to more effective and satisfactory diabetes encounters.

Victor M Montori, MD, MSc
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