

Intensive treatment and support helps patients with poorly controlled type 2 diabetes

Research question Can intensive treatment and support help patients with poorly controlled type 2 diabetes achieve the goals set by the Canadian Diabetes Association?

Answer An intensive management package was better than standard care over one year, but gains were lost soon after it ended

Why did the authors do the study? Both American and Canadian guidelines recommend that people with type 2 diabetes are managed by a multidisciplinary team offering drug treatment, lifestyle, and dietary advice tailor made for each patient and intensified according to response. These authors wanted to test this strategy formally by comparing it with standard care. Specifically, they wanted to know if an intensive strategy would help patients with poorly controlled diabetes achieve goals for control of haemoglobin A_{1c}, blood pressure, and serum lipids set by the Canadian Diabetes Association.

What did they do? Seventy two patients with poorly controlled diabetes took part in a randomised trial comparing an intensive package of care delivered by a multidisciplinary team with standard care delivered by a primary care doctor or an endocrinologist, or both. Participants had a mean serum concentration of haemoglobin A_{1c} of 9%. Most were obese; many were hypertensive. Patients with severe diabetic complications were excluded.

Thirty six patients had the intensive treatment package, which included monthly face to face consultations, an exercise programme, a diet, education, and optimisation of drug treatments for diabetes, hypertension, and dyslipidaemia. The other 36 had standard care from their usual doctor or doctors, plus general advice from the research team when they attended for blood tests. The assigned treatment strategy lasted a year, but patients were followed up for a further six months to see how long any gains lasted.

What did they find? After 12 months, patients managed intensively were significantly more likely than controls to achieve targets set by the Canadian Diabetes Association: a serum concentration of HbA_{1c} of 7% or lower (12/34, 35% *v* 3/35, 8%; *P* = 0.007), a diastolic blood pressure below 80 mm Hg (22/34, 64% *v* 13/35, 37%; *P* = 0.02), or a serum concentration of low density lipoprotein cholesterol below 2.5 mmol/l (18/34, 53% *v* 7/35, 20%; *P* = 0.01). Results for fasting serum concentration of glucose and systolic blood pressure were less convincing, but still favoured the treated group (proportion reaching the target 14/34, 41% *v* 7/35, 20%; *P* = 0.056 for both outcomes). Quality of life improved more for patients managed intensively.

Six months later all these gains had disappeared. Patients treated intensively had stopped exercising and put on weight.

What does it mean? This small trial shows that it's at least possible for selected patients to gain control over their diabetes, reduce their cardiovascular risk, and improve their quality of life with the help of intensive support, exercise, diet, education, and optimal medical treatment. But it also shows that they can't do it once the support has gone. The authors describe their results as relatively disappointing, partly because the improvement didn't last and partly because fewer than half the patients achieved nationally agreed targets, despite a great deal of extra effort. Patients in the real world, and their doctors, are likely to struggle even more.

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Editor's choice

Learning for life

As doctors, how much should our moral values influence our clinical decisions?

When the footballer George Best was given a liver transplant for alcoholic liver disease, there were many dissenting voices. His continued drinking after the transplant further inflamed the moral outrage. A precious resource had been wasted, so people said, on a man who had brought his condition on himself and failed to change his lifestyle.

Commenting on his own similar case in our interactive case report, the patient, A Bond, doesn't think he should receive a transplant if he continues to drink, or even if he stops drinking (p 277). But as Paul Haber writes in an accompanying commentary (p 277), much adult illness is due to failure to change high risk behaviours. Clinicians must strike a balance between avoiding futile treatment and protecting recidivist patients from being stigmatised. In a rapid response (<http://bmj.bmjournals.com/cgi/eletters/332/7532/33>), Mark L Willenbring advises doctors to "do whatever is medically indicated and is consistent with the patient's wishes, and be wary about covert moral judgment coloring decision-making."

If moral judgments are to be avoided, judgments based on religious values should also be kept apart from clinical decisions, says Julian Savulescu in his essay against conscientious objection in medicine (p 294). As the state of Wisconsin considers a bill allowing doctors to opt out of a broad range of clinical activities, Savulescu takes a hard line. "If people are not prepared to offer legally permitted, efficient, and beneficial care to a patient because it conflicts with their values, they should not be doctors."

Conscientious objection may be acceptable, he says, where there are enough other clinicians willing to do a procedure such as abortion. But the doctor must make sure that the patient knows about and gets the care they are entitled to from another doctor. Doctors who don't do this should lose their licence to practise. He concludes that different values should be debated by society, not during patient care.

How then can we best prepare young doctors for the difficult balancing acts they will need to perform? Ed Peile praises case based learning as one important tool (p 278). It is "real, complex, and convoluted," forcing us to put the ethical and psychological aspects of care alongside the clinical. Naomi Lear tells us about Dr Ipp, the Jewish doctor who inspired her to take up medicine (p 311). "In his dealings with people he would remind me, 'Being a doctor is about more than the physical exam.'" Now a medical student in Canada, Lear feels the lack of such guidance and starved of spiritual development and critical thinking. "Medical students cannot become healers," she says, "if a focus on their emotional and spiritual development is confined to a limited lecture series." It's a reminder that we all need a few Dr Ipps in our lives. The hardest thing may be realising that we may also need to be that person for someone else.

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