

A community-based primary prevention programme for type 2 diabetes mellitus integrating identification and lifestyle intervention for prevention: a cluster randomised controlled trial

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Plain English summary

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Plain English summary

Prediabetes mellitus (PDM) occurs when blood glucose levels are raised but are not sufficiently high to be classified as type 2 diabetes mellitus (T2DM). Individuals with PDM are at a significantly higher risk of developing diabetes mellitus in the future.

The study aimed to develop a screening tool to be used within primary care that could easily identify individuals with PDM. High-risk individuals were invited for screening and received a blood test to check their glucose levels and to see if they had either undiagnosed PDM or T2DM. We then assessed whether or not it is possible to prevent individuals with PDM from going on to develop T2DM by delivering a 6-hour structured education programme that focused on diet and physical activity to enhance a healthy lifestyle. Half of the individuals with PDM were invited to the education programme; the other half were given written information.

Participants were followed up for 3 years. After 3 years, there was some evidence that the education programme reduced the progression to T2DM; however, this is inconclusive (as it was not statistically significant). There was good evidence that the education programme had led to healthier lifestyle choices, with participants walking more and sitting less, as well as demonstrating lower levels of glucose and cholesterol. The intervention group were also less anxious and had a better understanding of their condition than the control group. When the cost of delivering the education was compared with the health gains, it was found to be good value for money.

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