A randomised trial of the effect and cost-effectiveness of early intensive multifactorial therapy on 5-year cardiovascular outcomes in individuals with screen-detected type 2 diabetes: the Anglo-Danish-Dutch Study of Intensive Treatment in People with Screen-Detected Diabetes in Primary Care (ADDITION-Europe) study

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Plain English summary

The ADDITION-Europe study

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Plain English summary

Diabetes is a common chronic condition associated with an increased risk of heart attack, stroke, amputation, eye disease and kidney damage. Many people have symptoms or a complication when diagnosed with diabetes; however, the true onset of the disease occurs several years earlier. Although it seems logical to propose that earlier detection would be beneficial, this has not been clearly established. We aimed to discover whether or not intensive treatment of people who have their diabetes detected early using preventative medication and lifestyle advice leads to health benefits at 5 years and in the longer term.

A total of 343 general practices in England, Denmark and the Netherlands took part. Following invitation to a screening programme, 3057 people were diagnosed with diabetes. General practices were allocated by chance to deliver either intensive treatment (a combination of medication and advice on lifestyle changes, e.g. diet and physical activity) or standard care according to national guidelines. After 5 years we re-examined participants to see whether or not intensive treatment reduced the risk of diabetes-related complications such as heart attack and stroke.

After 5 years, people receiving intensive treatment had slightly lower cholesterol levels, blood pressure and blood glucose levels than those receiving routine care. However, we cannot be sure that the small reductions in the number of heart attacks, strokes and premature deaths and in the level of visual impairment and kidney damage between the groups were not due to chance. Participants in both groups reported similar levels of well-being and quality of life and were equally satisfied with the treatment that they received. Intensive treatment is likely to be cost-effective only if it can be delivered at a reduced cost.

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