Reduced exposure to vasopressors through permissive hypotension to reduce mortality in critically ill people aged 65 and over: the 65 RCT

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Plain English summary

The 65 RCT

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Plain English summary

Low blood pressure is common in patients in intensive care. It is associated with a high risk of death. It can be treated with drugs called vasopressors. These drugs raise blood pressure, but also come with risks and side effects. Usually, a blood pressure target is used to guide how much of the drugs to give to patients.

Two previous clinical trials suggested that using a lower blood pressure target (and therefore giving less of the drugs) might reduce the number of deaths among older patients. However, although these results were promising, more research was needed to find out if they were correct.

The 65 trial was carried out to test if using a lower blood pressure target really did improve outcomes for older patients. The trial also looked at whether or not it would provide value for money for the NHS.

A total of 2600 patients aged $\geq$ 65 years who had low blood pressure in intensive care joined the trial. Half were randomly assigned to the new lower blood pressure target (less drugs). The other half were assigned to usual care (control group). As we had hoped, patients in the low blood pressure target group received less vasopressor drugs than the usual-care group.

After 90 days, 41% of patients in the new low blood pressure target group had died, compared with 44% in the usual-care group. Although fewer patients died in the low blood pressure target group, the difference was small and may have occurred by chance. On average, the new target saved a small amount of money for the NHS.

Although we could not prove that use of a lower blood pressure target saves lives for older patients in intensive care, our trial suggests that it might. Receiving less vasopressor drugs appeared safe for patients.

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This report

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