Sit-stand desks to reduce sedentary behaviour in 9- to 10-year-olds: the Stand Out in Class pilot cluster RCT

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Plain English summary

The Stand Out in Class pilot cluster RCT

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Plain English summary

Advances in technology and changes to our environment and lifestyles have led to children and adults spending most of their waking hours sitting and expending low levels of energy. Our day-to-day environments (e.g. school classroom/workplace) promote prolonged sitting, which is linked to poor health outcomes in adulthood. Children who sit for long periods are likely to become adults who sit for long periods; therefore, for future health, it is important to encourage reduced sitting during childhood. A typical school classroom encourages prolonged sitting and research has shown that desks that change height (sit–stand desks), enabling children to switch between sitting and standing, are effective, in the short term, in reducing children's school day sitting time.

This study assessed the acceptability of installing sit–stand desks in primary school classrooms over a 4.5-month period to determine whether or not it would be feasible to test this intervention on a larger scale. Eight primary schools in Bradford, UK, took part. The study involved 176 children aged 9–10 years. In four schools (intervention schools), six sit–stand desks (with stools) replaced three standard desks (sitting six children). The teachers were assisted to devise a rotation plan to ensure that children were exposed to the sit–stand desks for an average of 1 hour per day over a typical week, when they could choose to sit or stand.

This study revealed that the sit–stand desks were acceptable to teachers and children, and preliminary findings suggested that children using the sit–stand desks experienced a greater reduction in daily sitting time during the trial than children using standard desks. The trial procedures were mainly acceptable and feasible. Preliminary economic analysis revealed no differences in health costs, education costs or outcomes between intervention and control schools during the trial. Findings suggest that it is feasible and acceptable to conduct a full-scale randomised controlled trial of this intervention with some modifications.

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