WISH: Walking In ScHools Study

Led by Professor Marie Murphy

Why did we conduct this trial?

The immediate and future health benefits of regular physical activity in childhood are well established. Despite this, many children, and adolescents on the island of Ireland fail to meet current physical activity recommendations. The transition from primary to second-level education, represents a time when physical inactivity increases, especially in adolescent girls. School-based activities that increase opportunities for physical activity, particularly for those left out of other sporting activities because of the competitive selection process, and types of activity that can be easily maintained into adulthood, such as walking are needed. Walking is a low-cost, effective means of increasing physical activity in adults and, after active play, is the greatest contributor to physical activity in children. The potential of walking to increase physical activity in low-active adolescent girls has not been explored. The school environment is an important health-promoting setting, overcoming many of the health inequalities found in other settings. In a survey, we identified that most Northern Ireland (NI) post-primary schools do not offer walking as a form of extracurricular physical activity but were highly supportive of this type of intervention, particularly for low-active groups including adolescent girls.

Based on the findings of focus groups with adolescent girls, we developed a school-based, peer-led walking intervention. The pilot of this intervention provided girls with opportunities to participate in structured walking sessions during the school-day with walks led by older pupils trained as walk leaders and delivered across 12 school weeks. The feasibility/pilot study increased physical activity with excellent compliance to the intervention and associated research measures. This led to the definitive trial, funded by the CHITIN programme, which aimed to evaluate the effectiveness of a novel, school-based walking intervention at increasing physical activity levels of adolescent girls.

What did we do?

Female pupils aged 12-14 years, were recruited from 18 schools across the border region of the Republic of Ireland (ROI) and NI. In intervention schools (n=9), female pupils aged 15-18 years, were trained as walk leaders, using the Walking for Health Public Health Agency training programme, and led the younger pupils in 10-15 minutes walks before school, at break and lunch recess. All walks took place in school grounds and pupils were encouraged to participate in as many walks as possible each week. Incentives and promotional materials were utilised to maximise involvement. The intervention was delivered for a full school year (18-21 weeks). The primary outcome was total physical activity, which was measured using accelerometers. In total, 589 pupils were recruited to the study.

What answer did we get?

Before the intervention, pupils took part in 36 minutes of moderate-vigorous physical activity (MVPA) per day and only 12% of participants met physical activity guidelines (60 minutes MVPA per day). When we looked at the change in total physical activity over the course of the intervention, there was no difference between the groups. Although this suggests that in this context, the WISH intervention did not increase physical activity levels among adolescent girls, process evaluation suggests changes to school environments due to the COVID-19 pandemic may have affected how well schools were able to implement the intervention. The intervention period was a time where schools continued to face post-COVID challenges: pupils were still required to wear masks, many schools used a staggered break and lunch time schedule where the walk leaders may have had a different break and lunch time to the intervention pupils, some schools continued to place students in class/year group bubbles and in some schools the sports hall was used as additional teaching space which had implications. The WISH intervention was positively received by schools, Teachers,

and pupils. It is a low-cost intervention that showed considerable promise and positive outcomes at feasibility trial stage. However, since COVID-19, school environments have changed, and future school-based interventions will need to assess the individual school context to determine from the outset the factors that may affect the intervention delivery.

What should be done now?

Future school-based interventions will need to assess the individual school context to determine from the outset the factors that may affect the intervention delivery.