

Effective Interventions to Promote Physical Activity in Socio-Economically Disadvantaged Communities: a Review

Physical activity interventions in socio-economically disadvantaged communities

Regular physical activity plays an important role in maintaining good physical and mental health. Despite the well-known benefits, only a third of adults in Northern Ireland accumulate the recommended 150 minutes of moderate-to-vigorous intensity physical activity per week. Therefore urgent action is required to address the global problem of physical inactivity.

In order to learn what has worked in previous programmes, researchers conduct systematic reviews. This is where a search is conducted for reports of all relevant interventions from previous research and the evidence is summarised. Previous reviews investigating interventions targeting the general population have found that community-wide education campaigns, individually tailored behaviour change programs, social support and enhanced access to places for physical activity had positive effects on physical activity. However, it was not clear if these types of interventions would be effective for people living in socio-economically disadvantaged groups.



What did we do?

Researchers in the Centre for Public Health, Queen's University Belfast searched for published reports of physical activity interventions in four major databases. Articles were included that evaluated interventions targeting socio-economically disadvantaged communities, aiming to increase participants' physical activity. Interventions included counselling, organised exercise classes, information/leaflet distribution, exercise consultations, or lifestyle advice. We defined "a socio-economically disadvantaged community" as an area, neighbourhood or community with residents clearly defined as disadvantaged, relative to the wider national population. Definitions related to income, educational level, ethnic diversity or public housing. Two researchers independently extracted information from each of the reports and rated the quality of the evidence. We then used statistical methods to combine the results in order to determine whether approaches that targeted individuals, groups or whole communities were most effective.

What did we find?

In all, 27 studies were identified. Most took place in the USA (20 studies), and the rest took place in the UK (2 studies), the Netherlands (2 studies), Norway (1 study), South Africa (1 study) and Panama, Trinidad and Tobago (1 study). Studies were categorised according to whether interventions targeted individuals (4 studies), groups (18 studies) or communities (5 studies).

We found that group-based interventions were effective for adults but not for children. Effective interventions targeting groups of adults included exercise classes which combined education with physical activity. As there were only a small number of interventions targeting individuals, it was not possible to make a definitive recommendation on their effectiveness. However, approaches used included individual counselling, delivered face-to-face or by telephone, or by providing vouchers for the free use of exercise facilities. Whilst these limitations suggest that the evidence for community-wide interventions is weak, outcomes were consistent in direction, with four of the five studies

showing increased physical activity. Therefore, community interventions were deemed to have sufficient but limited evidence for effectiveness.

In addition, interventions that were designed using a theoretical framework, compared to none, were more likely to be effective. Though all of the interventions were complex and included more than one strategy, several effective interventions included education, social support, incentives, such as free gym membership, were beneficial. Several studies noted that transportation may be required by participants if the intervention site is beyond walking distance from home, school or place of work. Finally, frequent contact, over longer periods, tended to be associated with effectiveness; without ongoing contact activity levels tended to decline after six months.

Why is this important?

The evidence shows that group-based interventions targeting adults are most effective, suggesting that the best hope of narrowing health inequalities lies in interventions at the community or societal level. Our finding that interventions implemented in socio-economically disadvantaged communities have a small effect on physical activity levels supports the view that such an approach is worthwhile.

These findings have implications for the development of physical activity programmes using the Connswater Community Greenway. The results show that physical activity interventions should be designed to meet the needs of the target populations. It would appear that individuals residing in socio-economically disadvantaged communities may require support to change their behaviour, including help from friends, ongoing professional support and practical assistance in getting to venues.

Citation:

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