

Available online at www.sciencedirect.com

Public Health

journal homepage: www.elsevier.com/puhe

Original Research

A systematic review of interventions to increase physical activity among South Asian adults



M. Horne ^{a,*}, S. Tierney ^b, S. Henderson ^c, A. Wearden ^d, D.A. Skelton ^e

^a School of Healthcare, University of Leeds, Leeds, UK

^b Nuffield Department of Primary Care Health Sciences, University of Oxford, Oxford, UK

^c School of Nursing and Midwifery, Griffith University, Menzies Health Institute, Queensland, Australia

^d School of Psychological Sciences, University of Manchester, Manchester, UK

^e School of Health and Social Care, Glasgow Caledonian University, Glasgow, UK

ARTICLE INFO

Article history:

Received 21 November 2017

Received in revised form

19 March 2018

Accepted 11 May 2018

Keywords:

South Asian

Prevention

Health promotion

Behaviour change

Physical activity interventions

Cultural adaptations

ABSTRACT

Objectives: To identify interventions aimed at increasing physical activity (PA) levels among South Asian (SA) adults and identify the specific changes in the content and delivery mode of interventions designed to increase PA levels among SA people aged ≥ 18 years.

Design: A systematic review of quantitative studies.

Data synthesis: Extracted data were synthesized using a narrative approach.

Data sources: ASSIA, CINAHL, EMBASE, Medline, SPORTDiscus and PsychINFO were searched. Included articles met the following criteria: (1) population: community-dwelling SA adults aged ≥ 18 years and (2) outcome: reporting determinants of PA, exercise, or a combination of the two, measured objectively or using self-report. The search was restricted to articles published in the English language up to 31 January 2017.

Results: Fifteen trials/programmes (16 articles) met the review criteria. The findings show that involving the target community in developing culturally appropriate interventions appears to be important in their acceptability, delivery and uptake. Using community-based participation in intervention planning, evaluation and research appears to produce culturally and linguistically tailored interventions that address core values, attitudes, beliefs and norms, and encourage participation in PA. Furthermore, the use of community health workers and underpinning the interventions with a psychological theory show promise in increasing PA uptake.

Conclusions: This systematic review suggests that making cultural adaptations to PA interventions shows promise, but the evidence base presented is not strong. This does not mean that adopting such an approach is ineffective but that the evidence base is currently lacking.

© 2018 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

* Corresponding author. School of Healthcare, University of Leeds, Leeds, LS2 9JT, UK.

E-mail address: M.Horne@leeds.ac.uk (M. Horne).

<https://doi.org/10.1016/j.puhe.2018.05.009>

0033-3506/© 2018 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

Background

Physical activity (PA) can reduce the risk of developing major chronic diseases by up to 50% and the risk of premature death by 20–30%.^{1,2} However, 60% of the world's population do not achieve the minimum PA recommendations.^{1,2} Minority groups are less physically active than the Western population as a whole³ and suffer disproportionately higher rates of certain health conditions.^{4,5} Specifically, South Asian (SA) people (those originating from the countries of India, Pakistan, Bangladesh and Sri Lanka) are less likely to exercise compared with their Caucasian peers and experience higher levels of heart disease and type 2 diabetes mellitus (DM).^{5,6} Additionally, SA people may have to exercise more than their Caucasian European counterparts to achieve the same levels of fitness to reduce their risk of DM.⁷

Meeting the health needs of minority groups is a public health challenge, particularly in early intervention, prevention and reducing health inequalities.^{8–11} Although some progress has been made in advancing our understanding of adapting the behavioural interventions for minority groups,¹² little evidence exists on effective interventions tailored to their needs.^{13,14} Minority groups are generally treated as homogenous, leading to inappropriate generalisations and potentially unsuitable interventions.¹⁵

Interventions that are effective in the general population are likely to prove effective among minority groups if appropriately tailored.^{13,15} Cultural adaptations are modifications made to programmes so that they reflect a cultural group's traditional world view and lifestyle and address within-group differences¹⁶ (e.g. matching intervention messages to observable, surface characteristics of culture [i.e. language, dress¹²] or targeting deeper structures of culture, such as explanatory models about the causes of health and illness¹⁷ and unique barriers/facilitators to changing behaviour¹⁸).

If interventions are to be successful, they must respond to cultural, religious and economic issues to address health

needs.¹⁹ Therefore, segmenting populations into subgroups by their cultural characteristics can augment receptivity to acceptance of and salience of health messages.¹⁸ It is crucial that healthcare professionals understand the needs of diverse groups if they are to adapt evidence-based interventions²⁰ and tailor information and support so that it is culturally acceptable and appropriate^{9,13,21,22} to promote behavioural change effectively.^{10,21,23,24}

Recent systematic reviews have focused on identifying what is known about PA levels and sedentary time among SA women²⁵; levels of PA among SA adults residing in South Asia²⁶; assessment of evidence for effectiveness of primary care-based PA and dietary interventions in SA populations²⁷; and diet and PA interventions to prevent or treat obesity in SA children and adults.²⁸ No available reviews have focused specifically on changes made to interventions to increase the PA levels among SA adults.

Aims

This systematic review aimed to identify interventions aimed at increasing the PA levels among SA adults and identify the specific changes in the content and delivery mode of interventions designed to increase the PA levels among SA people aged ≥ 18 years.

Methods

Design

A structured systematic literature search was performed in January 2017 using established standards,^{29,30} with PRISMA guidelines used to inform conduct and reporting.³¹ Search terms and strategy are presented in [Box 1](#). The selection, inclusion and exclusion criteria are outlined in [Box 2](#). Initial pilot searches found few studies that focused specifically on PA as

Box 1

Search terms and search strategy.

Search terms

Search terms were developed under the headings 'South Asian', 'intervention' and 'uptake or maintenance'. Truncation was employed where variations of a search term existed. Broad search terms were used to ensure that all studies meeting the inclusion criteria were captured. Keywords included combinations of 'physical activity', 'physical exercise', 'exercise', 'sport', 'physical training' and 'Indian' or 'Pakistani' or 'Bangladeshi' or 'South Asian'. A copy of the search terms used is available upon request from the first author.

Search strategy

Full holdings of the following six electronic databases were searched for references from first publication to 31st January 2017: ASSIA, Cumulative Index to Nursing and Allied Health Literature (CINAHL), EMBASE, Medline, PsycINFO and SPORTDiscus. A limit was not placed on the years searched for each database to enable the broadest capture of articles for comparison; however, no records published prior to 1991 were returned from searches. Additional articles were identified by searching the references of included articles as well as systematic reviews, which were not included in this review.

Download English Version:

<https://daneshyari.com/en/article/7525338>

Download Persian Version:

<https://daneshyari.com/article/7525338>

[Daneshyari.com](https://daneshyari.com)