



## Effect of population screening for type 2 diabetes and cardiovascular risk factors on mortality rate and cardiovascular events: a controlled trial among 1,912,392 Danish adults.

<https://arctichealth.org/en/permalink/ahliterature292701>

Author: Rebecca K Simmons  
Simon J Griffin  
Daniel R Witte  
Knut Borch-Johnsen  
Torsten Lauritzen  
Anelli Sandbæk

Author Affiliation: MRC Epidemiology Unit, University of Cambridge School of Clinical Medicine, Box 285, Institute of Metabolic Science, Cambridge Biomedical Campus, Cambridge, CB2 0QQ, UK. rks34@cam.ac.uk.

Source: Diabetologia. 2017 Nov; 60(11):2183-2191

Date: Nov-2017

Language: English

Publication Type: Controlled Clinical Trial

Journal Article

Keywords: Adult  
Aged  
Blood Glucose - metabolism  
Cardiovascular Diseases - etiology - prevention & control  
Denmark  
Diabetes Mellitus, Type 2 - complications - diagnosis - metabolism  
Female  
Glycated Hemoglobin A - metabolism  
Humans  
Male  
Mass Screening - methods  
Middle Aged  
Risk factors


Abstract:

Health check programmes for chronic disease have been introduced in a number of countries. However, there are few trials assessing the benefits and harms of these screening programmes at the population level. In a post hoc analysis, we evaluated the effect of population-based screening for type 2 diabetes and cardiovascular risk factors on mortality rates and cardiovascular events.

This register-based, non-randomised, controlled trial included men and women aged 40-69 years without known diabetes who were registered with a general practice in Denmark (n = 1,912,392). Between 2001 and 2006, 153,107 individuals registered with 181 practices participating in the Anglo-Danish-Dutch Study of Intensive Treatment in People with Screen-Detected Diabetes in Primary Care (ADDITION)-Denmark study were sent a diabetes risk score questionnaire. Individuals at moderate-to-high risk were invited to visit their GP for assessment of diabetes status and cardiovascular risk (screening group). The 1,759,285 individuals registered with all other general practices in Denmark constituted the retrospectively constructed no-screening (control) group. Outcomes were mortality rate and cardiovascular events (cardiovascular disease death, non-fatal ischaemic heart disease or stroke). The analysis was performed according to the intention-to-screen principle.

Among the screening group, 27,177 (18%) individuals attended for assessment of diabetes status and cardiovascular risk. Of these, 1,533 were diagnosed with diabetes. During a median follow-up of 9.5 years, there were 11,826 deaths in the screening group and 141,719 in the no-screening group (HR 0.99 [95% CI 0.96, 1.02], p = 0.66). There were 17,941 cardiovascular events in the screening group and 208,476 in the no-screening group (HR 0.99 [0.96, 1.02], p = 0.49).

A population-based stepwise screening programme for type 2 diabetes and cardiovascular risk factors among all middle-aged adults in Denmark was not associated with a reduction in rate of mortality or cardiovascular events between 2001 and 2012.

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Cites: BMJ Open. 2015 Dec 18;5(12):e009651 PMID 26685034  
PubMed ID: 28831535 [View in PubMed](#) 

## [Effect of screening for type 2 diabetes on risk of cardiovascular disease and mortality: a controlled trial among 139,075 individuals diagnosed with diabetes in Denmark between 2001 and 2009.](#)

<https://arctichealth.org/en/permalink/ahliterature292700>

Author: Rebecca K Simmons  
Simon J Griffin  
Torsten Lauritzen  
Anelli Sandbæk  
Author Affiliation: Department of Public Health, Section of General Practice, Aarhus University, Aarhus, Denmark. rks34@cam.ac.uk.  
Source: Diabetologia. 2017 Nov; 60(11):2192-2199  
Date: Nov-2017

Language: English  
Publication Type: Controlled Clinical Trial  
Journal Article  
Keywords: Adult  
Aged  
Blood Glucose - metabolism  
Cardiovascular Diseases - etiology - mortality - prevention & control  
Denmark  
Diabetes Mellitus, Type 2 - complications - diagnosis  
Female  
Humans  
Male  
Mass Screening - methods  
Middle Aged  
Primary Health Care  
Risk factors


**Abstract:** There is continuing debate about the net benefits of population screening for type 2 diabetes. We compared the risk of cardiovascular disease (CVD) and mortality among incident cases of type 2 diabetes in a screened group with those in an unscreened group.

In this register-based non-randomised controlled trial, eligible individuals were all men and women aged 40-69 years without known diabetes, registered with a general practice in Denmark (n = 1,912,392). Between 2001 and 2006, 153,107 individuals registered with 181 practices participating in the Anglo-Danish-Dutch Study of Intensive Treatment in People with Screen-Detected Diabetes in Primary Care (ADDITION)-Denmark study were sent a diabetes-risk-score questionnaire. Individuals at moderate-to-high risk were invited to visit their family doctor for assessment of diabetes status and cardiovascular risk (screening group). The 1,759,285 individuals registered with all other practices in Denmark constituted the retrospectively constructed no-screening (control) group. In this post hoc analysis, we identified individuals from the screening and no-screening groups who were diagnosed with diabetes between 2001 and 2009 (n = 139,075), and compared risk of CVD and mortality in these groups between 2001 and 2012.

In the screening group, 27,177/153,107 (18%) individuals attended for screening, of whom 1533 were diagnosed with diabetes. Between 2001 and 2009, 13,992 people were newly diagnosed with diabetes in the screening group (including those diagnosed by screening) and 125,083 in the no-screening group. Between 2001 and 2012, the risks of CVD and mortality were lower among individuals with diabetes in the screening group compared with individuals with diabetes in the no-screening (control) group (CVD HR 0.84, 95% CI 0.80, 0.89; mortality HR 0.79, 95% CI 0.74, 0.84).

A single round of diabetes screening and cardiovascular risk assessment in middle-aged Danish adults in general practice was associated with a significant reduction in risk of all-cause mortality and CVD events in those diagnosed with diabetes.

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Cites: Diabetologia. 2012 Jun;55(6):1651-9 PMID 22237689  
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PubMed ID: 28831539 [View in PubMed](#) 

## The effects of a school-based physical activity intervention programme on children's executive control: The Health Oriented Pedagogical Project (HOPP).

<https://arctichealth.org/en/permalink/ahliterature291812>

Author: Carolien Konijnenberg  
Per Morten Fredriksen

Author Affiliation: 1 Department of Psychology, Inland Norway University of Applied Sciences, Lillehammer, Norway.

Source: Scand J Public Health. 2018 May; 46(21\_suppl):82-91

Date: May-2018

Language: English

Publication Type: Controlled Clinical Trial

Journal Article

Keywords: Child

Executive Function - physiology

Exercise - physiology

Female

Humans

Male

Norway

Program Evaluation

School Health Services

Schools

Abstract: To assess the effects of a large school-based physical activity intervention on children's ability to resist distractions and maintain focus, known as executive control.

A quasi-experimental design with seven intervention and two control primary schools. The Health Oriented Pedagogical Project (HOPP) intervention consisted of 45?min of physical activity a day during school time for 6-8 months in addition to the regular weekly physical education lessons. A total of 1173 children, spanning from second grade (age 7?years) to sixth grade (age 12?years) were included in the analysis. Main outcome measures were executive control was measured at baseline and 1?year after using a modified Eriksen flanker task for the younger children (second and third grades) and a computerised Stroop task for the older children (fourth, fifth, and sixth grades).

Both the intervention and control group showed improvements in executive control after 1?year. However, the children in the intervention group did not improve their performance more than those in the control group.

No positive effect of the physical activity intervention programme on children's task performance was found, suggesting that the intervention did not affect children's executive control.

PubMed ID: 29754580 [View in PubMed](#) 

## Evaluation of a school-based cognitive-behavioral depression prevention program.

<https://arctichealth.org/en/permalink/ahliterature299209>

Author: Pernilla Garmy  
Eva K Clausson  
Agneta Berg  
Katarina Steen Carlsson  
Ulf Jakobsson

Author Affiliation: 1 Department of Health Sciences, Kristianstad University, Kristianstad, Sweden.

Source: Scand J Public Health. 2019 Mar; 47(2):182-189

Date: Mar-2019

Language: English

Publication Type: Controlled Clinical Trial  
Journal Article

Keywords: Adolescent  
Cognitive Behavioral Therapy  
Depression - prevention & control  
Feasibility Studies  
Female  
Follow-Up Studies  
Humans  
Male  
Program Evaluation  
Psychiatric Status Rating Scales  
School Health Services  
Students - psychology - statistics & numerical data  
Sweden

Abstract: The aim of this study was to investigate the feasibility and cost-utility of a school-based cognitive-behavioral (CB) depression prevention program.

A quasi-experimental trial with an intervention group and a control group, with follow-up measurements obtained at three and 12 months after baseline, was conducted. The setting was six Swedish municipalities. The participants were students in grade 8 (median age: 14). A total of 462 students (79% girls) were allocated to the school-based CB prevention program, and 486 students (46% girls) were allocated to the control group. The school-based CB prevention program, Depression in Swedish Adolescents (DISA), was presented by school health service staff and teachers once per week for 10 weeks.

The main outcome measures were self-reported depressive symptoms and self-rated health; the secondary outcome measures were adherence and cost-utility. The intervention group decreased their self-reported depressive symptoms (as measured by the Center for Epidemiological Studies Depression Scale) and improved their self-rated health (as measured by the visual analog scale) at the 12-month follow-up more than the control group ( p

PubMed ID: 29226799 [View in PubMed](#) 

## Internet-based support for self-management strategies for people with COPD-protocol for a controlled pragmatic pilot trial of effectiveness and a process evaluation in primary healthcare.

<https://arctichealth.org/en/permalink/ahliterature291584>

Author: André Nyberg  
Karin Wadell  
Helena Lindgren  
Malin Tistad

Author Affiliation: Department of Community Medicine and Rehabilitation, Physiotherapy, Umeå University, Umeå, Sweden.

Source: BMJ Open. 2017 Aug 01; 7(7):e016851

Date: Aug-01-2017

Language: English

Publication Type: Controlled Clinical Trial  
Journal Article

Keywords: Exercise  
Feasibility Studies  
Female  
Health Personnel  
Health Promotion - methods  
Humans  
Internet  
Male  
Outcome and Process Assessment (Health Care)  
Pilot Projects  
Primary Health Care - methods  
Pulmonary Disease, Chronic Obstructive - therapy  
Quality of Life  
Research Design  
Self Care  
Self-Management  
Surveys and Questionnaires  
Sweden

Abstract: The use of adequate self-management strategies for people with chronic obstructive pulmonary disease (COPD) reduces healthcare use, improves health-related quality of life (HRQoL) and recovery after acute exacerbations. However, not many people with COPD receive support that promotes the use of such strategies and therefore new methods to facilitate and promote the use of self-management strategies are highly warranted. This pilot trial aims to evaluate the feasibility of the study design and study procedures considering effectiveness of the novel intervention, the COPD-web. METHODS AND ANALYSIS: The overall design is a pragmatic controlled pilot trial with preassessments and postassessments and a parallel process evaluation. Patients with the diagnosis of COPD will be eligible for the study. The intervention group will be recruited when visiting one of the six participating primary care units in Sweden. The control group will be identified from the unit's computerised registers. The intervention, the COPD-web, is an interactive web page with two sections; one directed at people with COPD and one at healthcare professionals. The sections aim to support patients' self-management skills-and to facilitate the provision of support for self-management strategies, respectively. Effectiveness with regard to patients' symptoms, HRQoL, knowledge of and readiness for COPD-related self-management, health literacy, self-efficacy for physical activity and time spent in physical activity and time being sedentary, and further, healthcare professionals' knowledge of and readiness to support COPD-related self-management strategies will be assessed using questionnaires at 3 and 12 months. The process evaluation will include observations and interviews. Ethical approval has been obtained. Findings will be presented at conferences, submitted for publication in peer-reviewed publications and presented to the involved healthcare professionals, patients and to patient organisations.  
ClinicalTrials.gov: NCT02696187.



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PubMed ID:

28765136 [View in PubMed](#) 

## Religious and Spiritual Practices Among Home-less Urban American Indians and Alaska Natives with Severe Alcohol Problems.

<https://arctichealth.org/en/permalink/ahliterature292684>

Author: Dennis C Wendt  
Susan E Collins  
Lonnie A Nelson  
Kelly Serafini  
Seema L Clifasefi  
Dennis M Donovan

Source: Am Indian Alsk Native Ment Health Res. 2017; 24(3):39-62

Date: 2017

Language: English

Publication Type: Controlled Clinical Trial  
Journal Article

Keywords: Adult  
Alaska Natives - ethnology  
Alcohol-Related Disorders - ethnology  
Female  
Homeless Persons - psychology  
Humans  
Indians, North American - ethnology  
Male  
Middle Aged  
Religion and Psychology  
Urban Population

Abstract: Engagement in religious and spiritual practices may be protective for homeless individuals with alcohol-related problems. However, little is known in this regard for urban-dwelling American Indians and Alaska Natives (AI/ANs) who have disproportionately high rates of homelessness and co-occurring alcohol use problems. Using secondary data from a nonrandomized controlled study testing a Housing First intervention, AI/AN participants (n = 52) and non-AI/AN participants (n = 82) were compared on demographic variables, alcohol use problems, religious affiliations, and religious/spiritual practices (importance, frequency, and type). AI/ANs who engaged in Native-specific independent spiritual practices had significantly lower alcohol use frequency in comparison to AI/ANs who did not.

PubMed ID: 29161454 [View in PubMed](#) 