



Abstracts

Supplement to
Journal of Science and Medicine in Sport

be active 2012

4th International Congress on Physical Activity and Public Health
Australian Conference of Science and Medicine in Sport
National Sports Injury Prevention Conference

31 Oct – 3 Nov 2012 Sydney Convention and Exhibition Centre, New South Wales, Australia

Published by Sports Medicine Australia Volume 15 Issue 6 December 2012 Supplement



Copyright

Sports Medicine Australia
PO Box 78, Mitchell ACT 2911 Australia

ISSN 1440 2440

Copyright © 2012 Sports Medicine Australia

Copyright under the International Copyright Union. All rights reserved.
This book is protected by copyright. No part of it may be reproduced
in any manner or by any means without prior written permission of
the publisher.

Disclaimer

The abstracts published in this supplement of the *Journal of Science
and Medicine in Sport* have been carefully reviewed by the Conference
Scientific Committee.

The Editors of the Journal wish to make it clear, however, that they
have not undergone the strict peer review process applied to papers
published in the regular issues of the Journal.

Advertising

Acceptance of advertising material does not imply endorsement by the
Journal of Science and Medicine in Sport or Sports Medicine Australia.

Layout & internal design

Papercut, www.papercut.net.au

Cover design

Papercut, www.papercut.net.au

Printer

CanPrint, www.canprint.com.au

S. Sarobol* ■ School of Administrative Studies, Mae Jo University, Chiang Mai, Thailand

At present, various research shows that the occurrence of non-communicable diseases (NCD) is increasing has a more negative impact on society than other types of disease. Many NCD are related to risks such as high blood pressure, high cholesterol, and obesity. These factors are closely related to diet and physical activity and are a leading cause of death in most of the world, including Thailand. Public health policy development supporting physical activity is a management tool to solve the issues mentioned above. However, the public policy development process requires the participation of all parties involved in the community, working together and sharing knowledge with public policy oriented on physical activities. This research project aims to assess the situation of NCD of working and elderly people, and to develop public health policies on physical activity as well as to provide a model for development of health public policies by the local community. The research project was conducted in two municipalities in Chiang Mai province namely Muang Kaen Pattana and Mae Jo municipalities from July 2010 until December 2011. The participatory action research methodology was employed at all steps of the research process by local community and local administration organization officers. The research reveals that the occurrence of NCD of working and elderly people in both Muang Kaen Pattana and Mae Jo municipalities were high blood pressure, cholesterol, fat, obese and lack of physical activity. The research also found that the process of public health policy for physical activities of the two municipalities was the fifth steps; firstly, identify the problem; This step was participatory health survey and collect data about NCD to the policy identification. Secondly, an alternative policy development; the serious issue will be suggested in this step from people and local community leader through the representative to municipality council as well as develop the project to solve a NCD issues. Thirdly, policy declaration; after the members of municipality was debated and conclude, the policy will be announced and declaration to the people in the community. Fourthly, public policy implementation; various project and activities was implemented in to the community to achieve NCD policy and the last steps was policy evaluation; the fifth step was assessed by using questionnaires and focus group meetings to discuss about the behaviour change of NCD in the community. Suggestion is to disseminate research results to all Local Administration Organizations in the North of Thailand.

W. Scott* ■ M. Cupples^{1,2} ■ L. Prior^{2,3} ■ R. Hunter¹ ■ M. Tully^{1,2} ■ F. Kee^{1,2} ■ M. Donnelly^{1,2} ■ ¹Centre for Public Health, Queens University Belfast
²Centre of Excellence for Public Health, Queens University Belfast ■ ³School of Sociology, Social Policy and Social Work, Queens University Belfast

Introduction: This paper reports on a review of policy documents concerning the nature and role of physical activity (PA) in improving health and wellbeing. Currently, over two thirds of adults surveyed in NI fail to meet recommended PA levels, whilst 1 in 4 girls and 1 in 5 boys aged 4–5 years are classed as overweight or obese. An important first step in any attempt to increase and improve levels of PA involves recognition of rates of physical inactivity and an awareness of the design and implementation of current relevant policies. Consequently, this review aimed to discover the extent to which issues relating to PA are acknowledged and dealt with in published NI government documents.

Methods: a systematic search was carried out on government websites and documents, using keywords, 27 government documents met the selection criteria for inclusion. Documents were analyzed using a grid that included an a priori list of "indicators" that were considered indicative of good practice in policy making. Documents were awarded a score based on their inclusion of such indicators (0–10) and also for salience, i.e. the level of importance given to physical activity (1–4). Documents were also reviewed to see whether health impact assessment (HIA) had been mentioned.

Results: 8 out of 12 government departments, plus the NI Executive had documents mentioning PA, most were produced by 2 departments (n=17). Documents were mainly produced in one of two waves around 2005 or 2009. 5 documents scored a salience rating of 4, meaning that the document's main focus was on PA; only 1 of these was produced since 2005. 15 documents scored a salience rating of 1 or 2, indicating that PA was mentioned but not a major focus of the document. Most documents scored highly on the inclusion of indicators of good practice (89% scoring at least 9). The indicators not dealt with in enough detail were: budget, evaluation, surveillance and use of current evidence. Only 2 documents carried out a HIA.

Discussion: evidence indicates that NI government departments are attempting to address physical inactivity, but inactivity is not a priority in recent documents. PA needs to be in the driver's seat, it deserves a higher profile and current PA policy and action plans need to be implemented. A more "accountable" joined-up approach to policy making is required, which is evaluated and monitored by an independent body and is evidence-based.

R. Sealey* ■ A. Leicht¹ ■ S. Devine¹ ■ ¹James Cook University

Introduction: Physical inactivity is a known contributor to a variety of chronic diseases, with many adults spending a large proportion of their lives working in sedentary occupations. The aim of this project was to examine the impact of occupational classification on health behaviors and health beliefs in full-time employees.

Methods: This project was a self-report, descriptive design. The participants included 117 Academic and 180 Professional staff employed at a regional University (65% female, age 43.2±11.0 years). Participants completed an online survey that involved a self-report of demographic characteristics, physical activity and sitting time (via the International Physical Activity Questionnaire) and health beliefs (via the Health Belief Model). Independent t-tests, Mann Whitney U-tests and Chi-squared tests were used to compare Academic to Professional staff responses. Spearman rank correlation coefficients were calculated to determine relationships between dependent variables.

Results: Academic staff agreed more than Professional staff that regular exercise would reduce disease-related mortality, surgery and anxiety, and that they were likely to develop a disease during their lifetime ($p < 0.05$). Academic staff also agreed more that maintaining good health was extremely important to them (6.5 ± 1.0 vs. 6.3 ± 0.9 , $p < 0.05$). Academic staff reported significantly longer working hours (49.9 ± 10.4 vs. 39.9 ± 5.0 hours/week, $p < 0.05$), significantly less moderate intensity physical activity (1613 ± 1508 vs. 2150 ± 2308 MET-minutes/week, $p < 0.05$) and a similar amount of walking (866 ± 990 vs. 811 ± 845 MET-minutes/week, $p > 0.05$) and sitting (3004 ± 1076 vs. 2758 ± 1031 minutes/week, $p > 0.05$) to Professional staff. Working hours were not significantly correlated to sitting or physical activity time in either group. Sitting time was significantly (negatively) correlated to walking time for the Professional staff ($\rho = -0.203$, $p = 0.02$), with no relationship evident for the Academic staff.

Discussion: Academic and Professional staff at a regional University report differences in health beliefs and health behaviors. The health beliefs of Academic staff do not appear to directly affect exercise behavior. The impact of both occupational classification and individual health beliefs should be considered when designing worksite health programs.

784

Adherence to the Canadian Sedentary Behaviour Guidelines for the Early Years (aged 0–4 years) among children from Kingston, Canada

V. Carson^{1*} ■ M. Tremblay^{2,3} ■ J. Spence⁴ ■ B. Timmons⁵ ■ I. Janssen^{1,6} ■ ¹School of Kinesiology and Health Studies, Queen's University, Kingston, ON, Canada
²Healthy Active Living and Obesity Research Group, CHEO Research Institute, Ottawa, ON, Canada ■ ³Department of Pediatrics, University of Ottawa, Ottawa, ON, Canada
⁴Sedentary Living Lab, Faculty of Physical Education and Recreation, University of Alberta, Edmonton, AB, Canada
⁵Child Health and Exercise Medicine Program, Department of Pediatrics, McMaster University, Canada
⁶Department of Community Health and Epidemiology, Queen's University, Kingston, ON, Canada

Introduction: The negative health effects of excessive sedentary behaviour begin early in life, particularly for screen-based sedentary behaviours such as television and video/computer games. As a result, the Canadian Society for Exercise Physiology recently released the first Canadian Sedentary Behaviour Guidelines for the Early Years (aged 0–4 years). The guidelines were informed by a systematic review of the literature, which was assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system. The objectives of this study were to assess adherence to these new guidelines among a sample of 0- to 4-year-olds and to describe parental attitudes towards and barriers to reducing screen time.

Methods: Results are based on the Healthy Living Habits in Pre-School Children study. Participants were 657 children aged 0–4 years from Kingston, Ontario, Canada. Data were collected between May and September, 2011. Parents reported the average time per day their child spent watching television and playing video/computer games on weekdays and weekends. For those parents whose child engaged in screen time, their attitudes towards and barriers to reducing their child's screen time were also assessed.

Results: On average, children younger than 2 years engaged in a 32.0 min/day of screen time and children 2–4 years engaged in 80.3 min/day. Approximately 32% of children younger than 2 years engaged in no screen time and approximately 46% of children 2–4 years engaged in less than 1 hour per day; thereby, meeting the recommendations of the Canadian Sedentary Behaviour Guidelines for the Early Years. The majority of parents whose children exceeded the guidelines agreed that screen time is enjoyable for their child (97%), provides parents an opportunity to get things done (87%), or is a good learning tool (79%). Furthermore, most agreed that reducing screen time would be difficult because screen time is enjoyable for their child (79%), parents need time to do household chores (70%), or their child does not engage in too much screen time (68%).

Conclusion: Less than half of the 0- to 4-year-olds adhered to the new sedentary behaviour guidelines. Future interventions and initiatives aiming to promote healthy growth and development in the early years should inform parents of the health benefits associated with the new sedentary behaviour guidelines and provide them with the necessary skills to help their children meet these guidelines.

785

Louisiana's report card on physical activity and health for children and youth

K. Dentre^{1*} ■ P. Katzmarzyk¹ ■ ¹Pennington Biomedical Research Center

Introduction: Louisiana's Report Card on Physical Activity and Health for Children and Youth is an authoritative, evidence-based advocacy tool providing a comprehensive evaluation of the level of physical activity and health behaviors among Louisiana's children. The 2011 Report Card established baseline data and set goals, objectives, and specific targets for the year 2020 for 15 indicators related to physical activity and health.

Methods: A Research Advisory Committee composed of scientists and health professionals guided the Report Card's development. The methodology for setting public health targets was modeled on Healthy People 2020, the U.S. national initiative for improving the health of Americans. However, the data and targets in the Report Card are specific to the population of children and youth in Louisiana. Given the poor ranking of Louisiana's children, the committee chose goals of 20% improvement in physical traits such as obesity, and 40% improvement in modifiable behaviors such as physical activity. Prior to publication, a draft of the Report Card was released for public comment on the objectives, targets, and action strategies. Baseline state-level surveillance data were established to set objectives and specific targets to reach by 2020 for each indicator. Data for tracking progress towards the goals will be provided in future annual Report Cards.

Results: The results of the 2011 Report Card indicate that only 23% of Louisiana's children are meeting current physical activity recommendations, while 48% are overweight or obese. Over 2,900 hard copies of the Report Card were distributed to key stakeholders in all 64 Louisiana parishes, a 16% increase compared to 2010. It was distributed to educators, school food authorities, healthcare professionals, school-based health centers, state and local government officials, children's advocates, and organizations/corporations committed to improving children's health. Thousands of electronic copies of the Report Card were also disseminated through an email initiative. Surrounding its release in November, the Report Card was covered in 18 television news stories with a total audience of 499,621 viewers. The Report Card also resulted in 17 newspaper articles and was included in 3 healthcare journals.

Discussion: The 2020 targets established for Louisiana are practical, achievable, and can be reached if collaborative efforts are made to implement initiatives, strategies, and policies supporting healthy behaviors and environments to improve physical activity levels of children. The results indicate good media coverage of the Report Card. Future efforts will be made to increase penetrance into key decision-making audiences.