

KIDS-CAN Research Alliance

Newsletter 2010-2011



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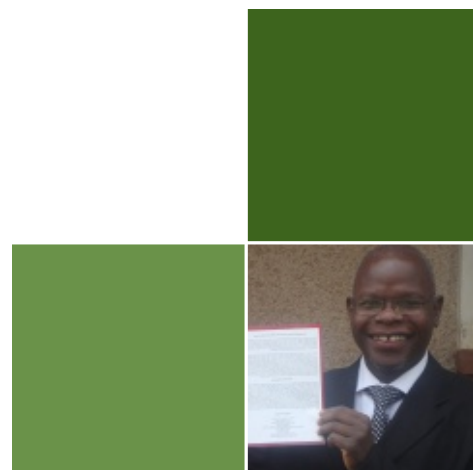
CONTACT INFORMATION

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KIDS-CAN Contact in Canada

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BACKGROUND

Examination of a broad range of health determinants and the complexity of their interactions shows that populations are increasingly facing “modern risks” due to physical inactivity, overweight/obesity, and other behavioural factors. This in turn causes a shift in the major causes of death from “traditional risks” associated with poverty such as undernutrition, unsafe water, and poor sanitation, to a growing prevalence of modifiable non-communicable diseases (1,2). The World Health Organization classifies physical inactivity and overweight/obesity as the fourth and fifth leading causes of global mortality, and two of the greatest health challenges of and determinants for various chronic non-communicable diseases in the 21st century (1-7). In contrast, sufficient participation in energy expending activities provides a wide spectrum of health benefits, reduces the risk for a variety of chronic diseases, and improves functional ability (8,9).

These global physical activity and nutritional transitions pose a particular threat to the welfare of children and youth due to the potential for long-term health concerns such as a higher likelihood of developing risk factors for cardiovascular disease later in life (10-12). Children need adequate support to gain basic life skills related to proper nutrition or how to accumulate sufficient levels of activity (13), which emphasizes the need for surveillance and population health interventions geared towards the prevention of these health risks in children and youth.

In countries such as Canada, current lifestyle transitions have had an immense impact on the prevalence of physical inactivity and overweight/obesity, particularly in Canadian children and youth, and this is a serious population health concern (14).

Considering the situation in Kenya, while communicable diseases remain the predominant health problem for the populations in sub-Saharan Africa, there is growing concern about rapid increases in non-communicable diseases such as diabetes and hypertension, particularly in urban areas (15). As the prevalence of non-communicable diseases increases in Sub-Saharan Africa, so does their contribution to the burden of disease in this area. Changes in physical activity levels, largely the result of modernization and greater access to technological equipment such as vehicles, computers and the internet, and a move toward more sedentary lifestyles, coupled with nutritional changes such as consumption of convenient and high calorie foods, are thought to be the main contributors to the increasing prevalence of non-communicable diseases in Sub-Saharan Africa (16-20).

It is important to consider the double burden of disease that this implies for many middle and low income countries like Kenya, and the need to adopt policies and programs to combat this risk. Given the considerable impact on human life, there is great need for surveillance and population health interventions geared towards the prevention of these emerging “modern” diseases.

FOCUS ON NON-COMMUNICABLE DISEASES – A TIMELY MOVE

In response to growing concern over the increased prevalence of non-communicable diseases (NCDs) worldwide, the United Nations convened a high level meeting to endorse a declaration on the prevention and control of NCDs. Recognizing the implicit emphasis for developing countries, the major concern discussed centered on the potential for this threat to undermine global social and economic development. Such discussions underscore the importance for action in adopting relevant resolutions that may best address the associated health risks (21).

The global burden of disease is progressively shifting from infectious/communicable diseases to non-communicable diseases (NCDs). This trend is resulting in a rapid increase in chronic conditions such as heart disease, diabetes, high blood pressure, osteoarthritis and cancer. This burden of disease is increasing rapidly, especially in developing countries, and is likely to cause major public health and economic crises in the near future. Kenya is not spared in this pandemic. Kenya like many developing countries is currently facing a rapid epidemiological transition as a result of technological advancements that are changing lifestyle behaviours. The transition is perpetuated through the evolution of an obesogenic environment that encourages overconsumption of energy-dense foods coupled with a sedentary lifestyle and engagement in insufficient amounts of physical activity. Consequently, overweight, obesity and associated comorbidities are likely to be on the increase in Kenya and other developing countries. The World Health Organization predicts that by the year 2020, NCDs will be causing seven out of every 10 deaths in developing countries.

Despite strong evidence of the arrival and consequences of the physical activity and nutrition transition in developing countries like Kenya, the action from policy-makers, international aid agencies, industry, research funding agencies and academics to date has been almost absent. Increased attention and investment by all sectors is required for the prevention of NCDs and further research is desperately needed in this area.

Kenyan's are admired globally as being active and fit, producing a disproportionate number of elite endurance athletes. The emerging physical activity and nutrition transition in Kenya is therefore likely to lead to a less active lifestyle, eroding our athletic prowess and national identity. It is critical from a cultural, economic and public health perspective to encourage, promote and facilitate a healthy active lifestyle across all populations. Further, it is important to begin to monitor physical activity patterns and fitness levels among Kenyans so as to initiate necessary interventions and monitor trends.

This completed report is also available on the KIDS-CAN website: www.haloresearch.ca/kids-can



The screenshot shows the CHEO Research Institute website. The header includes the CHEO logo, a search bar, and navigation links: Home | About Us | Contact Us. Below the header is a blue navigation bar with links: Director's Message | About Us | Team | Research | KIDS-CAN Alliance | Student Training | Publications | Strategic Partnerships | Careers | Funders | Annual Reports. The main content area features the KIDS-CAN logo, which includes the text 'Kenyan International Development Study', 'KIDS-CAN', and 'Canadian Activity Needs Research Alliance'. Below the logo are the Canadian and Kenyan flags with the text 'Working Together to Prevent Childhood Inactivity and Obesity'. A section titled 'Presentations by Mark Tremblay and Vincent Onywere on Global Physical Activity Transitions Available Online' includes a photo of Vincent Onywere and text about a symposium at the World Confederation for Physical Therapy Congress (Amsterdam, 2011). To the right, there is a section 'About KIDS-CAN Research Alliance' and a 'Most Popular' section with a list of articles and their view counts.

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KIDS-CAN
Kenyan International Development Study
Canadian Activity Needs Research Alliance

Working Together to Prevent Childhood Inactivity and Obesity

Presentations by Mark Tremblay and Vincent Onywere on Global Physical Activity Transitions Available Online
BY JOEL
01 Feb 2012 | No Comment |
The focused symposium on the Global Physical Activity Transition from the World Confederation for Physical Therapy Congress (Amsterdam, 2011) is available online and includes presentations by Prof. Mark Tremblay and Dr. Vincent Onywere. Audio and slides are provided... [read more]

About KIDS-CAN Research Alliance
KIDS-CAN Research Alliance has been formed to help study and prevent childhood obesity, inactivity and over-nutrition. Experiences and initiatives from Canada may be exported to assist with these emerging challenges in Kenya. An examination of Kenyan children's physical activity and lifestyle patterns may assist Canadian interventions. [read more]

Most Popular

| PAGES | SEARCHES |
|---|----------|
| Focus on Non-Communicable Diseases (NCD's) by the 2011 UN Summit is a Timely and Welcome Move - 508 views | |
| We Need Effective Campaigns to Keep Lifestyle Diseases at Bay - 403 views | |
| The International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE) - 446 views | |
| Children Growing Fatter and Sickly Due to Junk Food - 434 views | |
| Need to Focus on Lifestyle Diseases - 357 views | |

THE KIDS-CAN RESEARCH ALLIANCE

The Kenyan International Development Study – Canadian Activity Needs (KIDS-CAN) Research Alliance was formed in 2007 to bring together the expertise of Kenyan and Canadian researchers with interest in the area of childhood obesity and physical inactivity. This partnership is comprised primarily of leading researchers from Kenyatta University in Nairobi and the Children’s Hospital of Eastern Ontario (CHEO) Research Institute. The alliance was formed to address international development goals by fostering global partnerships and academic institutional alliances to promote collaboration among researchers in Canada and Kenya, thus allowing for effective dissemination of findings, and a contribution to innovative thinking by establishing relevant interventions for a variety of children and youth populations.

KIDS-CAN OBJECTIVES

- Promote and facilitate research in the area of determinants/predictors of child obesity.
- Exploit the timing of the current childhood obesity crisis in Canada, and the nutrition and activity transition threat in Kenya.
- Take advantage of the recent development and implementation of measurement protocols for the Canadian Health Measures Survey.
- Establish an organizational foundation from which infrastructural support can grow to create a base of support for research, leadership and advocacy for the promotion of healthy active living for children and youth.
- Develop a research exchange program that will allow for the training and support of young researchers/trainees who are interested in this area of study.
- Develop and foster long-term international partnerships to promote the generation of relevant data on child obesity-related factors and effectively disseminate this information.
- Help guide Kenyan and Canadian decision-makers (Government, industry, health, education, sport, child and youth sector leaders) to prevent and minimize the negative impact of social, economic and technological transitions on the health and wellness of children and youth.
- Serve as a model (or nucleus) for expansion of international partnership to other countries.

KIDS-CAN RESEARCHERS

Dr. Vincent Onywera

- Director, Centre for International Programmes and Collaboration, Kenyatta University
- Senior Lecturer, Department of Recreation Management and Exercise Science, Kenyatta University
- Adjunct Researcher, Children’s Hospital of Eastern Ontario (CHEO) Research Institute
- Scientific Officer, Healthy Active Kids Kenya

Dr. Mark Tremblay

- Director, Healthy Active Living and Obesity Research (HALO), CHEO Research Institute
- Scientist and Professor, Department of Pediatrics, University of Ottawa
- Adjunct Professor, Kenyatta University
- Chief Scientific Officer, Active Healthy Kids Canada

Dr. Kristi Adamo

- Research Scientist, Healthy Active Living and Obesity Research (HALO), CHEO Research Institute
- Assistant Professor, Department of Pediatrics, University of Ottawa

Dr. William Sheel

- Professor, School of Kinesiology, University of British Columbia

Dr. Judith Waudu

- Professor, Department of Foods, Nutrition & Dietetics, Kenyatta University

Dr. Michael Boit

- Professor, Department of Exercise and Sports Science, Kenyatta University
- Former Middle-Distance Athlete

Allana LeBlanc, MSc

- Research Coordinator, Healthy Active Living and Obesity Research (HALO), CHEO Research Institute

KIDS-CAN AMBASSADORS AND PARTNERS

Ambassadors

- Professor Olive Mugenda, Vice Chancellor, Kenyatta University
- Allan Rock, President and Vice-Chancellor, University of Ottawa
- Johana Jacton Nyaga, Senior Sports Officer, Kenyatta University
- Philip Boit, Four-Time Winter Olympian
- Kipchoge Keino, Middle and Long Distance Runner, and Two-Time Olympic Gold Medalist
- Wilfred Bungei, 2008 Men's 800m Olympic Gold Medalist
- Moses Tanui, Long Distance Runner and Gold Medalist in Over 10,000m
- Lorna Kiplagat, Four-Time World Champion in 10,000m

Partners

- Active Healthy Kids Canada (AHKC)
- Healthy Active Kids Kenya (HAKK)
- African Population Health Research Centre (Nairobi, Kenya)
- Canadian Society for Exercise Physiology (CSEP)
- Canada – Mexico Battling Childhood Obesity (CAMBIO) (Guadalajara, Mexico and Kinston, Canada)
- Division of Non-communicable Diseases of Kenya's Ministry of Public Health and Sanitation in collaboration with the World Health Organization and the African Institute for Health and Development. (Nairobi, Kenya)
- International Research Development Centre (Ottawa, Canada)
- Kenyatta University (Nairobi, Kenya)
- Kenya Central Bureau of Statistics (Nairobi, Kenya)
- Kenya Ministry of Health (Nairobi, Kenya)
- ParticipACTION Canada
- University of Ottawa (Ottawa, Canada)

RESEARCH IN PROGRESS

International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE) and the Canadian Assessment of Physical Literacy Study (CAPL)

KIDS-CAN researchers from Kenyatta University and the CHEO-HALO group are preparing to conduct a study that will examine the influence of behavioural, physical, social, and policy environments on the relationship between lifestyle characteristics and weight gain in school aged children. This multi-national study, called the **International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE)**, will collect data from 500 children in each of 12 countries representing five major regions of the world – including Kenya in Africa.

The participating children, their parents, and a school contact will be requested to complete questionnaires related to diet, lifestyle, neighbourhood, the home and school environment. Physical attributes of the children such as their body weight, physical activity, and dietary patterns will also be directly measured using standardized procedures and questionnaires.



Children participating in the ISCOLE study will also be requested to participate in an additional study that will focus on their physical education knowledge and skills. This ancillary study, called **the Assessment of**

Physical Literacy, will help teachers, coaches, and other physical activity leaders learn the best ways of measuring how well children are doing in physical and health education. The assessment will include an obstacle course to measure jumping, running, hopping, catching, throwing and kicking skills; measurement of their hand grip strength; measurement of their core/abdominal strength; a measure of their flexibility; their running speed; and questions about physical activity and fitness.

Funding: Funding for this multi-national project has been obtained from Coordinating Center at Pennington Biomedical Research Center in Baton Rouge, Louisiana, USA.

Study Approvals: These are both minimal risk studies and therefore the procedures are not anticipated to present any harm to the children. Ethical approval has been obtained from the Coordinating Center at the Pennington Biomedical Research Center in Baton Rouge, from the Government of Kenya, the Nairobi City Council, Kenyatta University, the CHEO Research Institute and the University of Ottawa.

Sampling: Schools will be methodologically selected to represent other schools in the Nairobi County. Data collection in these schools may take up to 5 research visits in a span of 4 weeks. The study team is seeking to recruit up to 30 pupils from the classes in the participating schools that best correspond to 10 year olds (standard 5 pupils). **Participation is therefore very important and the researchers hope that contacted schools, parents and children will positively consider the request.**

Training: To ensure that all persons assisting with the study are adequately informed about the protocol and trained in their study-related duties and functions as described in the protocol, the ISCOLE Coordinating Center organized a three-day intensive training program in August 2011 for principal investigators, project coordinators, and graduate students. Dr. Vincent Onywera, Dr. Mark Tremblay, and Stella Muthuri attended this training session for the Kenyan site. Lucy Joy Wachira will attend the training session in January 2012. The lead coordinators will in turn train all study personnel hired to work on this project to ensure that proper procedures are followed, that data collection and management is standardized, and that participant information is carefully handled.

Timelines: This study is slated to start in Kenya in January 2012 and run through to December 2012. Pilot testing of the protocols was completed in Nairobi in December 2011 and a great deal has already been learned from this process.

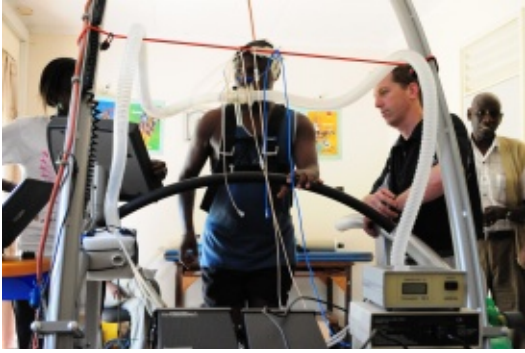
Implications: Given that much of the knowledge available on the influence of personal lifestyle behaviors and multiple domains of living on physical activity and overweight or obesity is informed by studies conducted in North America and Europe, there is a pressing need to determine the robustness of these relationships across all global regions. The results of this study will provide important new information that will help in the development of lifestyle interventions to address childhood obesity that will be culturally relevant for populations across these countries.

For more information about this study, please visit the KIDS-CAN website: www.haloresearch.ca/kids-can.

University of British Columbia Research Project

In April 2011, a group of researchers from the University of British Columbia (W. Sheel, G. Foster, M. Koehle, B. Wilson) travelled to Kenyatta University to complete a project titled "Kenyan running: lungs, genes, sport and peace". This study was funded by the Martha Piper Research Fund - The University of

British Columbia. The work was a collaborative project completed with colleagues from Kenyatta University (V. Onywera, M. Boit).



The project consisted of two main parts. First, lab-based experiments were completed where detailed measures of the respiratory responses to exercise in elite Kenyan runners were studied. Importantly, this portion of the project involved the training of undergraduate and graduate students. One graduate student from Kenyatta University will fulfill a portion of his doctoral requirements from this work. Second, a sociological perspective on the "Run for Peace" event that took place in Iten (2008) was successfully carried out by B. Wilson. Data and results

continue to be analyzed and interpreted. One conference abstract has been submitted and others will be submitted in the spring of 2012. It is anticipated that manuscripts will be submitted for peer-review in the fall of 2012.

KIDS-CAN GRADUATE STUDENTS

Lucy Joy Wachira, PhD Candidate

Degrees and Certifications

- Master of Science (M.Sc.), Physical and Health Education, Kenyatta University
- Bachelor of Education (B.Ed. Arts) Degree (Physical Education) Kenyatta University

Supervisor

- Vincent Onywera Ph.D.

Research Program

- Ph.D. Physical and Health Education, Kenyatta University

Thesis Topic

- Assessment of Physical Activity, Dietary Habits, Sedentary Screen Time and Adiposity of 10 Year Old School Children in Nairobi County, Kenya

Contribution to Research

Ms. Wachira will work as a project assistant for the ISCOLE and CAPL studies. Her thesis work will focus on assessment of physical activity, diet and sedentary screen time trends and adiposity among school-aged urban children in Kenya. The program mainly entails proposal development, field data collection and theses writing. Field data collection include anthropometric measurements, body composition assessments and physical activity measures as well as the administration of questionnaires related to diet and lifestyle completed by the sampled children in Nairobi through ISCOLE. The interest in Ms. Wachira's



analyses will be to examine the three main factors that are said contribute to overweight/obesity school-aged children which are; physical activity, diet and sedentarism. Therefore, levels of physical activity, intake of energy dense foods and sedentary screen time trends will form the basis of discussions. Participants' anthropometric and body composition status results will be used to analyze body weight and fatness as adiposity indicators. The results will not only show the status but also present the strengths of associations between these variables and their implications in relation to body weight and fatness of the child. The findings of this study will contribute to the knowledge, understanding and ongoing research efforts on the prevalence, risk factors and prevention of obesity among school-going children. The results will provide important new information that will help in the development of lifestyle interventions to address childhood obesity as well as assist policy makers, educators and caregivers in overcoming the current risk and burden of non-communicable diseases arising from inactivity and improper diet. The results will also contribute to the upcoming Kenya Report Card on Physical Activity and Body Weight of Children and Youth by Healthy Active Kids Kenya.

Stella Kagwiria Muthuri, PhD Candidate

Degrees and Certifications

- Master of Science (M.Sc.), Biochemistry, Concordia University
- Bachelor of Science (B.Sc., Hons), Biochemistry, Concordia University

Awards

- Ontario Graduate Scholarship in Science and Technology Award (2010-2011)
- Excellence Scholarship from the University of Ottawa (2010-2014)
- Student Mobility Bursary from the University of Ottawa (2011-2012)



Supervisor

- Mark Tremblay Ph.D.

Research Program

- Ph.D. Population Health, University of Ottawa

Thesis Topic

- A Comparative Study of Physical Activity and Overweight/Obesity in School-Aged Children in Kenya and Canada

Contribution to Research

Ms. Muthuri will act as a co-project manager for the ISCOLE and CAPL studies. Her thesis work will focus on three major components, each of which will include assessment of physical activity and overweight/obesity trends in school-aged children. The **initial phase** of the project will entail conducting a

systematic review of the physical activity and overweight/obesity transition in Sub-Saharan Africa's school-age children and youth in order to situate Kenya and its neighbouring countries in light of the growing threat of obesity in this region. In the **second phase** of the project, primary field data collection of body composition and physical activity measures as well as the administration of questionnaires related to diet and lifestyle will be completed in the Kenyan through ISCOLE. The interest in Ms. Muthuri's analyses will be to estimate the prevalence and examine factors that contribute to physical inactivity and overweight/obesity in school-aged children in Nairobi, Kenya, and the levels of physical activity accrued in and outside of the school environment. It has been argued that the school setting represents an important point of intervention for children given the amount of time they spend in schools; as such, by segmenting the day and assessing activity levels within and outside the school environment, this project will shed light on the places, times, and types of physical activity that school-aged children accumulate. The **final phase** will include secondary analyses of comparable measures in the Canadian context using data collected through the Canadian Health Measures Survey, a national survey that captured key information relevant to Canadians' health, in order to gain more insight into the similarities or differences in accumulation of physical activity by school-aged children, by place and time of day. The information gained within the scope of this project will serve to promote collaboration in surveillance and dissemination efforts, capacity strengthening, and innovative thinking among researchers as they attempt to address the population health problems caused by childhood physical inactivity and overweight/obesity related factors.

Francis Mwangi Mundia, PhD Candidate

Degrees and Certifications

- Master of Science (MSc), Physical and Health Education, Kenyatta University
- Bachelor of Education (BEd Arts), Physical Education, Kenyatta University

Supervisors

- Vincent Onywera, Ph.D. Michael Boit, Ed.D. William Sheel, Ph.D.

Research Program

- Ph.D. Exercise and Sports Science, Kenyatta University

Thesis Topic

- Pulmonary Function of Kenyan Elite Distance Runners at Rest and During Sub-Maximal and Maximal Endurance Exercise

Contribution to Research

Francis is working as a research project assistant in the UBC/KU research project titled 'Kenyan Running; Lungs, Genes, Sports and Peace' His focus in the research is the laboratory based tests to assess pulmonary function characteristics of Kenyan elite distance runners and find out if they are related to their aerobic capacity, endurance running performance, and also compare their lung capacity with measures that have been reported among athletes and none athletes elsewhere.



The study targets Kenyan elite middle and long distance runners, whose pulmonary function parameters will be assessed at rest and during sub-maximal and maximal endurance exercise performance. This enabled to determine whether the Kenyan elite runners –the best distance runners in the world, have an enhanced ability to moved and transfer oxygen from air to the blood.

The findings of this research will add to the body of knowledge on Kenyan distance runners and point to whether their pulmonary capacity and functions have bearing on their exemplary performance. The study will determine the extent to which pulmonary ventilation of Kenyan elite middle and long distance runners is effected by pulmonary limitations which have been observed among distance runners elsewhere. The researcher and research assistants as well as many students will gain scientific knowledge from the work and the results of this research project. The study and the institution is benefiting from essential collaborative contribution and material support by scientists from various countries who are working in the research project. There is capacity building on the research materials, equipment, apparatus and the procedures involved. The study will also inform pedagogical practices and training methods in the field of exercise and sports science. It may, for example, provide information on breathing muscle training to enhance performance among middle and long distance athletes.

HIGHLIGHTS

Registration of Healthy Active Kids Kenya (HAKK)



The Healthy Active Kids Kenya (HAKK) has formally been registered by the Kenya Government. HAKK is a non-profit research organization aimed at initiating, promoting and supporting physical activity and healthy eating programs for Kenyan Children and youth. The organization aims at providing opportunities for research, capacity building and training, sharing information, resources and collaborations directed towards improving the overall health of the children and youth. More information on the HAKK can be found at: www.hakkenya.org

Report Card Release

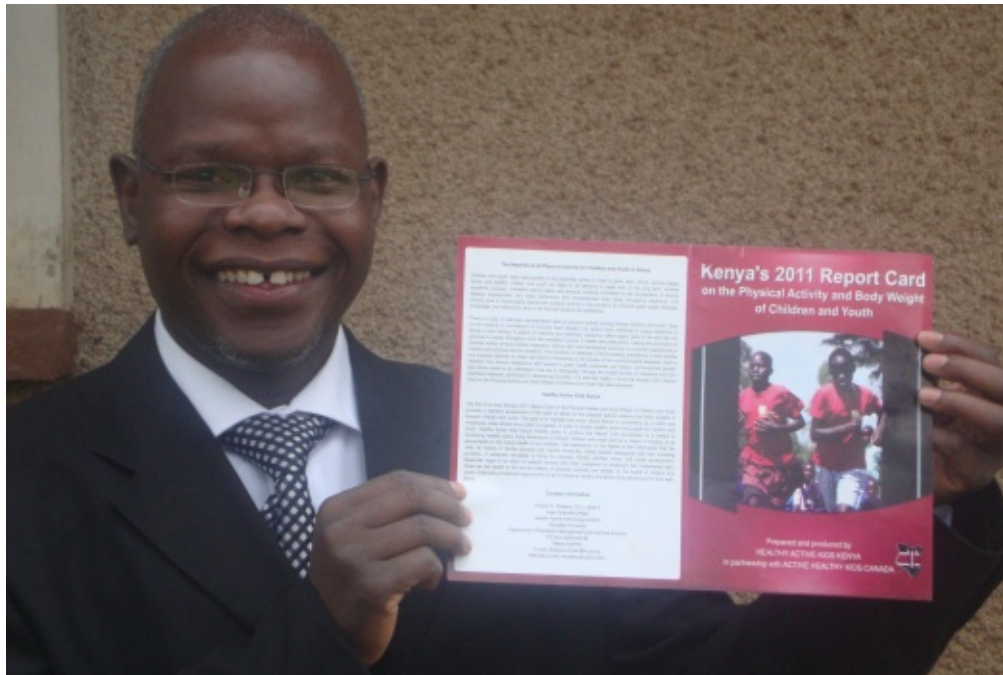
Healthy Active Kids Kenya (HAKK), in partnership with Active Healthy Kids Canada (AHKC), the Healthy Active Living and Obesity research group (HALO), and KIDS-CAN, released an inaugural Kenyan physical activity report and body weight report card on May 5th in Nairobi.

The first of its kind, *Kenya's 2011 Report Card on the Physical Activity and Body Weight of Children and Youth* will provide a baseline assessment of the state of affairs on the physical activity patterns and body weights of Kenyan children and youth. The goal is to highlight the areas where Kenya is succeeding as a nation and emphasize areas where more action is needed, in order to realize healthy active living goals for children and youth. HAKK plans to produce the Report Card periodically as a means of monitoring healthy active living behaviours of Kenyan children and youth and as a means of holding us all accountable for the future health of our children. Indeed, as stated in the Declaration on the Rights of the Child, the child, by reason of his/her physical and mental immaturity, needs special safeguards and care including provision of suitable standards of living for adequate physical,



mental, spiritual, moral and social development. Measures ought to be taken to support parents and other caregivers to implement this fundamental right. Since we are aware of the harmful effects of physical inactivity and obesity on the health of children and youth, it becomes a foremost responsibility to act to preserve healthy and active living behaviours for their well being, particularly the right to enjoy regular physical activity for the maintenance of a healthy body weight (22,23).

The short and long versions of the report card are available on the KIDS-CAN website: www.haloresearch.ca/kids-can.



SEMINARS, CONFERENCES, AND INVITED PRESENTATIONS

M.S. Tremblay. Active Healthy Kids Canada Report Card. Invited presentation **Kenyatta University, School of Applied Human Sciences Seminar** (Nairobi, Kenya), 2011



Non-Communicable Disease (NCD) Prevention Stakeholders Meeting in Nairobi

The IDRC's division for Non-Communicable Disease Prevention program (NCDP) sponsored a two day workshop in Kenya to discuss the NCD problem in Africa. The meeting was coordinated by the African Institute for Health and Development and brought together stakeholders from the Eastern, Central, Southern and Western African countries. The aim of the meeting was to come up with NCD prevention strategies for the African continent by galvanizing efforts, sharing lessons and experiences as well as to strengthen the UN High Level summit on NCD. Dr. Vincent Onywera attended the meeting and gave a presentation entitled: ***Promoting Physical Activity for a Healthier Nation.***



Dr. Vincent Onywera (Back row, 6th from right) with other delegates during the IDRC Workshop on NCD Prevention Held on 28th- 29th November 2011 in Nairobi.

Commonwealth International Conference on Non-Communicable Diseases: Diabetes, Obesity, and Healthy Living

Dr. Vincent Onywera was invited as one of the speakers at the Commonwealth International Conference on Non-Communicable Diseases: Diabetes, Obesity and Healthy Living. The meeting organized by the Kenyan Medical Association took place on 15th to 17th December, 2011 at Sarova Panafric Hotel in Nairobi. Dr. Onywera gave a presentation entitled: Physical Activity is Medicine.

FUNDING SUBMISSIONS

African Initiative Grant

| | |
|--------------------|----------------------|
| Status: | Granted but declined |
| Funding Amount: | Cdn 15,000.00 |
| Notification Date: | August 2011 |

In May 2011, KIDS-CAN submitted an application to the African Initiative, grants that provide an opportunity for African and Canadian researchers and scholars to conduct research and recommend solutions to some of Africa's most pressing issues.

This funding was sought to build on the physical activity and body composition measures that would be conducted and funded through the ISCOLE study. Specifically, funds would support ancillary data collection of the Assessment of Physical Literacy measures related to physical fitness and motor skill development as part of an assessment of physical literacy in a sub-sample of school-aged children participating in the ISCOLE study. "Physical Literacy" is an outcome of physical education, and is as important to children's education and development as numeracy and literacy. The ability to assess physical literacy will provide teachers, students, families and policy-makers with accurate information about the effectiveness of student learning and teaching in physical education.

Unfortunately, the timelines requested to satisfy the requirements of this grant were not in agreement with the ISCOLE work plan and the researchers decided to respectfully decline the award.

CIHR Planning Grant

| | |
|--------------------|---------------|
| Status: | Not Granted |
| Funding Amount: | Cdn 25,000.00 |
| Notification Date: | Jan/Feb 2012 |

KIDS-CAN has submitted an application to the Canadian Institute for Health Research (CIHR) – International Research Collaborations grant. This funding is sought to support a three-day workshop to be held in Nairobi, Kenya. The objectives of this meeting will be focused on discussions to enhance international research collaboration in efforts to prioritize a research and intervention agenda for Eastern Africa in the area of childhood physical activity and healthy body weights.

This proposed meeting will be led by Kenyatta University, in partnership with the Healthy Active Living and Obesity (HALO) Research Group, ParticipACTION, Healthy Active Kids Kenya (HAKK), Active Healthy Kids Canada (AHKC) and the Canadian Society for Exercise Physiology (CSEP). In light of the recent UN declaration and global campaign on the prevention and control of non-communicable diseases (NCDs),

this proposed planning meeting is very timely and will provide an opportunity for discussion and planning to enable East African partners to adopt successful methodologies from existing Canadian expertise and programs, while placing NCDs in the context of the overall burden of disease in the region.

It is proposed that the meeting will occur in two distinct parts, the first as a public symposium to create awareness and advocate for healthy active living, particularly in the pediatric populations in Eastern Africa, and the second as a capacity building workshop with the invited Eastern African researchers, to increase knowledge on measurement and surveillance of physical activity and its related health outcomes.

After the first unsuccessful attempt, KIDS-CAN plans to submit another application in the next round.

PUBLICATIONS

Refereed Publications

M.S. Tremblay, V. Onywera, K.B. Adamo. A child's right to healthy active living – Building capacity in Sub-Saharan Africa to curb the impending physical activity transition: The KIDS-CAN Research Alliance. In S. Bennett and M. Pare (Eds.) 20th Anniversary of the Convention on the Rights of the Child, University of Ottawa Press, p. 97-110, 2010.

Adamo, K. B., Sheel, A. W., Onywera, V. O., Boit, M. K., Waudu, J. N., & **Tremblay M. S.** (2011). Child obesity and fitness levels among Kenyan and Canadian children from urban and rural environments: A KIDS-CAN Research Alliance Study. *International Journal of Pediatric Obesity*, [Epub Ahead of Print].

Onywera, V. O., Adamo, K. B., Sheel, A. W., Boit, M. K., Waudu, J. N., & **Tremblay, M. S.** (2011). Emerging evidence of child obesity and physical inactivity threat in Kenya. *Journal of Physical Activity and Health*, [In Press].

Collective Work: The KIDS-CAN and CAMBIO Collaboration

The KIDS-CAN and CAMBIO partnership continues to bear more fruits as exemplified by these two upcoming manuscripts resulting from this collaboration:

Adiposity and Physical Activity Among Children in Countries at Different Stages of the Physical Activity Transition: Canada, Mexico and Kenya.

Authors: Vincent Onywera, Mariane Héroux, Edtna Jáuregui Ulloa, Kristi B. Adamo, Juan López Taylor, Ian Janssen, Mark. S. Tremblay

The Relation between Aerobic Fitness, Muscular Fitness and Obesity in Children from Three Countries at Different Stages of the Physical Activity Transition

Authors: Héroux M, Onywera V, Tremblay MS, Adamo KB, Lopez Taylor J, Jáuregui Ulloa E, Janssen I

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