Non Communicable Disease Prevention: Investments that Work for Physical Activity

Physical inactivity is the fourth leading cause of deaths due to non-communicable disease (NCDs) worldwide - heart disease, stroke, diabetes and cancers - and each year contributes to over three million preventable deaths.\(^1\) Physical inactivity is related (directly and indirectly) to the other leading risk factors for NCDs such as high blood pressure, high cholesterol and high glucose levels; it underpins the recent striking increases in childhood and adult obesity, not only in developed countries but also in many developing countries. Substantial scientific evidence supports the importance of physical inactivity as a risk factor for NCD independent of poor diet, smoking and alcohol misuse.

Physical activity has comprehensive health benefits across the lifespan: It promotes healthy growth and development in children and young people, helps to prevent unhealthy mid-life weight gain, and is important for healthy ageing, improving and maintaining quality of life and independence in older adults. The most recent global estimates indicate that 60% of the world population are exposed to health risks due to inactivity.\(^2\) Increasing population-wide participation in physical activity is a major health priority in most high and middle income countries and is a rapidly-emerging priority in lower income countries experiencing rapid social and economic transitions.

The Toronto Charter for Physical Activity: A Global Call to Action (May 2010) outlines the direct health benefits and co-benefits of investing in policies and programs to increase levels of physical activity.\(^3\) Already translated into 11 languages, the Toronto Charter makes a strong case for increased action and greater investment on physical activity as part of a comprehensive approach to NCD prevention. The Charter was developed with extensive world-wide stakeholder consultation and calls for action in four key areas consistent with the WHO Global Strategy for Diet and Physical Activity: 1) national policy; 2) policies and regulations; 3) programs and environments; and 4) partnerships.

There is strong evidence to guide the implementation of effective approaches to increase physical activity.\(^4,5,6\) Reversing downward trends in physical activity will require countries to commit to a combination of strategies aimed at the individual, social-cultural, environmental and policy determinants of inactivity. Physical activity is influenced by policies and practices in education, transportation, parks and recreation, media, and business, so multiple sectors of society need to be involved in the solutions. There is the clear need to inform, motivate and support individuals and communities to be active in ways that are safe, accessible and enjoyable. There is no one single solution to increasing physical activity, an effective comprehensive approach will require multiple concurrent strategies to be implemented. To support countries ready to respond, there are seven “best investments” for physical activity, which are supported by good evidence of effectiveness and that will have worldwide applicability.
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Best Investments for Physical Activity

1. ‘Whole-of-school’ programs

Schools can provide physical activity for the large majority of children and are an important setting for programs to help students develop the knowledge, skills and habits for life-long healthy and active living. A ‘whole of school’ approach to physical activity involves prioritizing: regular, highly-active, physical education classes; providing suitable physical environments and resources to support structured and unstructured physical activity throughout the day (e.g., play and recreation before, during and after school); supporting walk/cycle-to-school programs and enabling all of these actions through supportive school policy and engaging staff, students, parents and the wider community. More information on the best approaches to implement whole of school approaches to physical activity is available from:


Support structured and unstructured physical activity throughout the day ...

2. Transport policies and systems that prioritise walking, cycling and public transport

‘Active transport’ is the most practical and sustainable way to increase physical activity on a daily basis; also increased active transport will achieve co-benefits such as improved air quality, reduced traffic congestion, and reduced CO2 emissions. Increasing active transport requires the development and implementation of policies influencing land use and access to footpaths, bikeways and public transport, in combination with effective promotional programs to encourage and support walking, cycling and use of public transport (e.g. trains, trams and buses) for travel. This combination of strategies can shift mode choice away from personal motorised vehicles and increase physical activity. Examples of successful actions are available worldwide. More information on the best approaches to increase non-motorised transport is available from:

- World Health Organization; A physically active life through everyday transport with a special focus on children and older people and examples and approaches from Europe. WHO Regional Office for Europe, Copenhagen 2002.
3. Urban design regulations and infrastructure that provides for equitable and safe access for recreational physical activity, and recreational and transport-related walking and cycling across the life course

The built environment provides opportunities for or barriers to safe, accessible places for people to be involved in recreation, exercise, sports, walking and cycling. National, regional, and local urban planning and design regulations should require mixed-use zoning that places shops, services, and jobs near homes, as well as highly connected street networks that make it easy for people to walk and cycle to destinations. Access to public open space and green areas with appropriate recreation facilities for all age groups are needed to support active recreation. Complete networks of footpaths, bikeways, and public transit support both active travel and active recreation. More information on the best approaches to creating urban environments that support physical activity is available from:

- Heath GW, Brownson RC, Kruger J, Miles R, Powell K, RamseyLT. The effectiveness of urban design and land use and transport policies and practices to increase physical activity: A systematic review. J Phys Act Health; 3(S1): S55-S76; 2006.

4. Physical activity and NCD prevention integrated into primary health care systems

Doctors and health care professionals are important influencers of patient behaviour and key initiators of NCD prevention actions within the health care system and can influence large proportions of the population. Health care systems should include physical activity as an explicit element of regular behavioural risk factor screening for NCD prevention, patient education and referral. Positive messages about physical activity are important for primary and secondary prevention. Opportunities for NCD prevention should be integrated with communicable disease management systems, tailored to the context and resources available. The focus should be on practical brief advice and links to community-based supports for behaviour change. Most countries will require additional training of health professionals to build competencies in NCD prevention through behavioural risk factor modification and physical activity. More information on the best approaches to promoting physical activity through primary health care is available from:


5. Public education, including mass media to raise awareness and change social norms on physical activity.

Mass media provide an effective way to transmit consistent and clear messages about physical activity to large populations. In most countries, physical activity promotion is absent from mass media. Both paid and non-paid forms of media can be used to raise awareness, increase knowledge, shift community norms and values and motivate the population to be more active. Public education can involve print, audio and electronic media, outdoor billboards and posters, public relations, point of decision prompts, mass participation events, mass distribution of information as well as new media such as text messaging, social networking and other uses of the internet. Combinations of approaches, supported by community-based events and community engagement and which are sustained over time, are most effective in building health literacy and changing community values. More information on the best approaches to mass media and public education is available from:

6. Community-wide programs involving multiple settings and sectors and that mobilize and integrate community engagement and resources

Whole-of-community approaches to physical activity across the life course will be more successful than a single program to increase population levels of physical activity. Using key settings, such as cities, local governments, schools and workplaces provides the opportunity to integrate policies, programs and public education aimed at encouraging physical activity. Whole-of-community approaches where people live, work and recreate have the opportunity to mobilize large numbers of people. There are good examples of success from high and middle income countries. More information on the best approaches for community wide programmes is available from:


7. Sports systems and programs that promote ‘sport for all’ and encourage participation across the life span

Sport is popular worldwide and increased participation in physical activity can be encouraged through implementation of community sport or ‘Sport for All’ policy and programs. Building on the universal appeal of sport, a comprehensive sport system should be implemented that includes the adaption of sports to provide a range of activities to match the interests of men and women, girls and boys of all ages, in addition to well coordinated coaching and training opportunities. However, providing enjoyable physical activity needs to be an explicit priority of sports programs. Implementation should involve partnerships between International Sports Federations, National Olympic Committees and national/ regional sporting organisations along with community-based clubs and other sports providers. The sport and fitness industries are large world wide businesses and a potentially influential communication medium. Sports stars can act as role models and promote participation, but such promotional initiatives are not sufficient in themselves. Organizations can promote physical activity through supportive policies and programs that reduce social and financial barriers to access and participation, and increase motivation to be involved, including in individuals with mental or physical disabilities. More information on the sport systems and Sport for All are available from:


Investments that work for Physical Activity is a complementary document to the Toronto Charter for Physical Activity and identifies seven best investments to increase population levels of physical activity which, if applied at sufficient scale will make a significant contribution to reducing the burden of non-communicable diseases and promote population health. In addition, these investments will contribute to improving the quality of life and the environments in which we live.

References

Correction


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Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International Society for Physical Activity and Health (ISPAH). NCD Prevention: Investments that Work for Physical Activity. *Br J Sports Med* 2012;46:709–712. The author for this paper should be listed as ‘Global Advocacy for Physical Activity (GAPA) the Advocacy Council of the International Society for Physical Activity and Health (ISPAH)’, and the correct title for the article is ‘NCD Prevention: Investments that Work for Physical Activity’.