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Barriers to Physical Activity Promotion in the Public Debate: How Can We Change Preconceptions?

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This symposium discussed common concerns regarding physical activity promotion, namely sports injuries, road safety and cycling promotion, the new concept of “shared road spaces,” as well as air pollution and outdoor physical activity. The symposium presented the evidence on these issues, examples where concerns are justified and where not, and counter-arguments for the public and policy debate. In conclusion, it was shown that all topics are relevant public health issues. More synergies than antagonisms exist between physical activity promotion and injury prevention, and those should be strengthened further. The importance of a system approach to road safety was emphasized, looking beyond health risks and including health benefits of activity as well. Evidence on promising approaches such as “shared spaces” is becoming available. More cross-disciplinary research on air pollution exposure and physical activity is needed, including an integrated health impact assessment of risks and benefits. Such assessments are scarce and so, many of the counterarguments cautioning in the public debate against certain forms of physical activity are currently based on incomplete evidence. The physical activity promotion community has a crucial role to play by being more actively engaged in interdisciplinary dialogue and work to achieve a true public health approach.

Keywords: exercise, road safety, sports injuries, air pollution, policy

In the last decade, physical activity promotion has gained traction and is now addressed by many countries through policies, strategies and interventions. However, with increasing importance on the political agenda, physical activity has also been more exposed to the public debate. While the benefits of physical activity are widely accepted, frequently, counterarguments are brought up, including sports injuries, road safety, and air pollution exposure.

This symposium aimed to discuss these common concerns regarding physical activity promotion. It presented the evidence on these issues, examples where concerns are justified and where not, and counter-arguments for the public and policy debate.

Dr. Brian Martin from the University of Zurich, Switzerland, presented the country example of Switzerland, where increases in physical activity at the population level were not accompanied by proportional increases in sport injuries. This seemed mainly because of the rising popularity of less accident-prone activities such as walking, cycling or fitness training. The scientific literature shows that higher levels in physical activity are associated with less falls in elderly people, but the picture is less clear for other age groups. The research that has been published indicates that in children more vigorous intensity activities—such as sports—are associated with more fractures and probably more injuries in general. However, the effect of activities of lower intensity cannot yet be described conclusively. There is no doubt that physical activity promotion and the prevention of sport injuries are both important public health issues. However, more synergies than antagonisms exist between them, and those should be strengthened further.
Dr. Harry Rutter from the National Obesity Observatory for England addressed the topic of cycling promotion and road safety. He described the important burden of road traffic injury in the context of the much greater health impacts of cardiovascular disease, a proportion of which is preventable through regular physical activity. He highlighted the importance of understanding the statistics: road safety data are often presented without denominators, or with different denominators for different transport modes. Cycling may appear dangerous when considering the risk per trip, but risk per distance travelled is comparable to driving.

Dr. Rutter described the phenomenon of ‘safety in numbers,’ which reflects the empirical data showing that the greater the level of walking and cycling within an area the lower the risk of injury per individual walker or cyclist. This demonstrates the importance of a system approach to road safety, looking beyond a narrowly constructed view of health risks to a broader one that encompasses health benefits as well. A true public health approach considers the entire system, working across professional and disciplinary boundaries.

Nick Cavill from Cavill Associates, United Kingdom, presented the evidence on the emerging transport policy, or so called “shared spaces,” with regard to concerns about road safety. Shared spaces can mean any space that is shared between different road users, such as joint-use pedestrian and bike paths, or even temporary changes of use such as the ‘Ciclovía’ programs in Colombia and other South American countries. But more recently, shared space has developed into a concept of deliberately blurring the distinction between motorized traffic and cyclists and pedestrians. Through appropriate use of materials (such as colored paving or bricks instead of tarmac) and removal of the barriers between cars and people (such as removing guard rails and lowering pavements) the intention is to make the car driver more cautious and reduce speed. Evidence of the effectiveness of this new approach is currently still quite scarce, but there are many impressive case studies in progress.

Dr. Tegan Boehmer from the U.S. Centers for Disease Control and Prevention (CDC) addressed a topic that has found a wider audience more recently, namely the possible health risks from outdoor air pollution exposure while being physically active. She summarized known health effects of air pollution exposure and findings from the few scientific studies that address the inter-relationship between physical activity and air pollution exposure. Factors that impact health risk from air pollution exposure while being active include 1) time and location of activity, 2) duration and intensity of activity, and 3) individual susceptibility.

The 2008 Physical Activity Guidelines for Americans state that “the benefits of being active, even in polluted air, outweigh the risk of being inactive” (p. 39). In April 2010, CDC convened a 2-day workshop of 25 experts from physical activity and air pollution disciplines to discuss the existing guidelines. Objectives were to review the state of the science and provide recommendations to CDC regarding future public health guidance. A detailed summary of the workshop is forthcoming.

**Conclusions.** It was shown that more synergies than antagonisms exist between physical activity promotion and injury prevention, and those should be further strengthened. In road safety, evidence on promising approaches such as “shared spaces” is becoming available. The importance of a system approach was emphasized, looking beyond health risks and including health benefits of activity as well. Likewise, more cross-disciplinary research on air pollution exposure and physical activity is needed, including an integrated health impact assessment of risks and benefits. Public health officials should continue to promote outdoor physical activity and educate the public about how to minimize air pollution exposure while being active.

In conclusion, the symposium showed that all of the discussed topics are relevant public health issues. However, integrated health impact assessments of both risks and benefits are scarce and so, many of the counterarguments cautioning in the public debate against certain forms of physical activity are currently based on incomplete evidence. The importance of definitions and denominators was demonstrated, and that is crucial to ensure that comparable data are used as basis for discussion. Solutions should focus on elimination of the root causes of risk without increasing barriers for physical activity.

All speakers called for working more across professional and disciplinary boundaries in research and promotion efforts to achieve a true public health approach. In this endeavor, the physical activity promotion community has a crucial role to play by being more actively engaged in inter- and cross-disciplinary dialogue and work.

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**References**


