Prevention of cardiovascular risk factors: Moving upstream

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The present supplement is based on the presentations given at the 7th Annual Symposium of *The Canadian Journal of Cardiology* held at the Canadian Cardiovascular Congress in Edmonton, Alberta, in October 2009. The Symposium was sponsored by the Canadian Cardiovascular Society, Pulsus Group Inc and, for the first time, the Public Health Agency of Canada. We appreciated having the Public Health Agency of Canada involved and hope that this 'tradition' continues.

In February 2009, The Canadian Heart Health Strategy & Action Plan (1) was presented to the federal government. More than two years in development, it represents a very comprehensive pan-Canadian strategy dealing with the entire spectrum of the health system – from policy, through prevention, acute care, chronic care and rehabilitation, and end-of-life planning and care. Although all aspects of the health continuum are addressed, there is a focus on prevention. It was specifically recognized that to effectively achieve the degree of prevention possible, we needed to move the emphasis 'upstream' to address not only the causes of vascular disease but the 'causes of the causes'. In particular, this applies to the socioeconomic determinants of health but also recognizes that some of the more traditional risk factors can actually be prevented through attention to the upstream contributors that may be influenced by public policy – an example being the marked decrease in the prevalence of smoking among Canadians achieved over the past two decades.

This represented the rationale for this symposium, which is focused on the potential to prevent the development of risk factors. We chose to focus on a group of risk factors known to be influenced by upstream factors. The symposium was opened by Dr Sonia Anand from McMaster University (Hamilton, Ontario). In her article, she describes the social determinants of health and their contribution to the total burden of disease from a global and a Canadian viewpoint. She emphasizes how the social determinants of health not only influence disease prevalence and incidence, but also contribute to a treatment gap. Minimizing social inequities at a young age through effective public policy offers an important opportunity to prevent the development of risk factors and subsequent disease.

In the second article, Dr Norman Campbell addresses the important issue of hypertension, and its major contribution to the development of cardiovascular disease morbidity and mortality. He points out how the intense effort in Canada to improve knowledge translation has resulted in marked improvement in the detection and treatment of hypertension, and how current efforts to reduce the salt content of prepared foods offer an exciting opportunity to further decrease the threat of this risk factor.

In the third article, Dr Raj Padwal addresses the challenges associated with preventing obesity, metabolic syndrome and diabetes. The increasing prevalence of both youth and adult obesity represents a major challenge to cardiovascular health, and to the sustainability of our health system. Dr Padwal recognizes that intervention programs that result in modest weight loss among obese patients are efficacious; however, to date, obesity prevention programs have met with limited success. It remains a major challenge for the health system, the productivity of our country and the sustainability of the health care system. Future efforts need to focus on the environmental, social, psychological and economic drivers if we are to mount successful programs to prevent obesity.

The final article is from Dr Kim Raine. It deals with the important issue of poor nutrition and its profound effect on cardiovascular disease, and provides a framework for how to think about interventions to tackle this problem. The major upstream initiatives need to focus at the population level with the creation of supportive environments through public policy. She points out, however, that the more traditional midstream and downstream interventions are also important and should not be neglected.

We are pleased to be able to bring these four important papers to our readers in this supplement to the *Journal*.

REFERENCE

1. The Canadian Heart Health Strategy and Action Plan. <www.chhs.ca> (Accessed on August 2, 2010).

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