

Cardiovascular prevention in young: the healthy eightfold path

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For decades, prevention of cardiovascular disease has focused on the management of the major four modifiable risk factors: hypertension, dyslipidaemia, diabetes and tobacco ¹⁻³. Most available risk equations such as SCORE ⁴ consider those risk factors with varying weighting, together with two non-modifiable risk factors that are gender and age. The latter weights a considerable burden on the risk estimation but, inversely, tends to reduce the risk among young people. Hence, most guidelines focus on people aged over 40 ³, as the CVD risk among younger people is considered as too low to warrant medical interventions.

In this issue, Xing et al ⁵ use the recent concept of « life's essential 8 » to assess the development of CVD in a cohort of over 16,000 young (18-40 years) adults living in Taiwan. They computed a cardiovascular health score based on eight factors: four health behaviours (diet, physical activity, smoking, and sleep) and four health factors (body mass index, non-high density lipoprotein cholesterol, blood glucose, and blood pressure) as described by the AHA ⁶. This cardiovascular health score ranges from 0 (the worst) to 100 (the best) and aims at preventing the occurrence of CVD risk factors rather than managing them.

After a median follow-up of 13 years, the group with the lowest score displayed a sevenfold (7.34, 95% confidence interval 3.19-16.89) higher risk of CVD than the group with the highest score. This hazard ratio increased further to 8.19 when taking into account variations in time, i.e. changes in the cardiovascular health score due to changes in health behaviours of the participants.

The results by Xing *et al.* show that even among apparently healthy young adults not included in the current CVD prevention guidelines, adherence to a healthy (or, as analysed in their paper, an unhealthy) lifestyle leads to an increased risk of CVD. Indeed, adopting a healthy lifestyle could achieve effects in blood pressure, lipid and glucose levels approaching those of CVD drugs ⁷. The authors point several limitations of their study, namely the dietary behaviour of Taiwanese people, which might differ from those of European or North American countries. The limited number of women (approximately one quarter of the overall sample) is also acknowledged as a limitation; still, an

interesting finding was that women represented the majority (two thirds) of participants in the high cardiovascular health score, showing that Taiwanese women display healthier lifestyles than their male counterparts do. Overall, it would be seminal to replicate the findings of Xing et al. in other countries, namely in Europe.

In the Fourth Noble Truth of the Buddhist philosophy, the Noble Eightfold Path is the way to the End of Suffering (*dukkha* in Pali) ^{8,9}. It describes eight factors aimed at promoting and perfecting the three essentials of Buddhist training and discipline: ethical conduct, mental discipline and wisdom ⁹. The teachings emphasize that “to follow the Noble Eightfold Path is a matter of practice rather than intellectual knowledge, but to apply the path correctly it has to be properly understood” ⁸. Now that the eight health behaviours have been understood, it is time for us to put the healthy eightfold path in practice.

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Conflict of interest

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