EDITORIAL

Public health issues—aspects of health promotion

This issue of the *Hong Kong Medical Journal* addresses several topical and important population health problems which collectively threaten current and future health trends. The seminar papers are illustrative rather than in any way comprehensive in their approach and coverage. But each in various ways demonstrates the need for and importance of environmental control through legislative and fiscal measures as well as lifestyle choices that are based on education and knowledge of risks. The threats to public health that have been identified by the authors have major implications for health promotion in young people. Advocacy for improvements in the public health in these areas is based on a utilitarian approach and contrasts with some currently fashionable libertarian arguments for 'freedom' which so often leave the health of the young vulnerable to both environmental hazards and marketeers.

This seminar is in many ways a call for greater involvement of all branches and specialties in medicine to play a greater role in public health advocacy. Several contributions properly emphasise the enormous damage to population health from tobacco, and the contribution from Mackay[1] underlines the fact that health is a wholly political issue that requires government action at all levels. In the prevention of tobacco-related disease, there will be no prospect of achieving our prevention targets without political will. Lam's[2] description of the impact of active and passive smoking at all ages in Hong Kong, in terms of multisystem disease, is echoed by the Hong Kong Childhood Injury Prevention Research Group[3] in their data on childhood burns from smoking materials, and by Lau and Woo[4] on the role of smoking in the growing epidemic of osteoporosis.

Since the Second World War, Hong Kong has made rapid and dramatic progress in the improvement of conventional indices of population health. These include low infant mortality and increases in life expectancy at all ages below the very old. In contrast to these achievements, through environmental engineering and economic development, the Hong Kong Childhood Injury Prevention Research Group[3] focus on the catastrophic loss of young lives and life-years from avoidable accidents and neglect. They clearly indicate why epidemiological data is critically important in formulating effective prevention policies, but also remind us that up to now, there has been a dearth of different types and sources of information on morbidity from any routine statistics.

The seminar clearly focuses on aspects of health promotion rather than therapeutics as the key to future population health and health-related quality of life. The discussion on the health benefits of exercise by Adab and Macfarlane[5] epitomises this approach. The most recent report from the British Heart Study[6] demonstrates that people who can change from a consistently sedentary existence to one that contains at least occasional light exercise will reduce their risks of all causes of mortality (after adjustment for all other relevant factors) to 0.55 (range, 0.36-0.84) compared with those who remain inactive. There are of course very mixed social sentiments about taking regular exercise, and many declare that if they ever have the urge to do so, they lie down until the feeling passes! As Adab and Macfarlane[5] state, exercise must be associated with both positive attitudes and confidence, and result in enjoyment as well as other benefits. But they also point out that our social and physical environment is not conducive to this aspect of lifestyle, and the harm resulting from this is now measurable in Hong Kong primary level schoolchildren, who are inactive throughout the day on most days.

Woo[7] deals comprehensively with another fundamental factor that is affected by lifestyle—nutrition—and focuses on its preventive role in adults, particularly in the elderly. The best evidence for the protective effect of fruit and vegetables in Hong Kong has been reported by Cheng et al,[8] who found a much reduced risk for the development of oesophageal cancer and a very strong dose-response relationship. Woo[7] emphasises that the determinants of the dietary content of foods which are protective for health are likely to be socioeconomic, as indicated by the strong association with educational attainment and ageing. Fortunately, fresh fruit and vegetables, as vehicles for antioxidants, are readily available in Hong Kong, but would their powerful protective effect against cancer and heart disease, and their other health benefits be seen as a justification by the Hong Kong Government to intervene to maintain both affordability and availability?

The solutions proposed for the health problems described in the seminar are based on lifestyle and

environmental change, but they are firmly grounded in biomedical science and epidemiology. An excellent illustration is provided by Lau and Woo,[4] in a seminar paper on osteoporosis. They describe population-based strategies that are feasible and would probably be effective. The article is important because of its implications for the containment of health care costs that—in a rapidly ageing population—arise from the treatment of hip fractures. Their conclusions on possible interventions link closely with those of other contributions in the seminar—namely, smoking prevention, promotion of exercise, and improvement of the nutritional value of diets.

This community faces a major transition in environmental health, which is very likely to exert a major influence on population health outcomes beyond the millennium. Life expectancy will continue to increase, but in an ageing community with risk-related lifestyles, we can also expect an increase in morbidity in the years preceding the point of death. Poor health-related quality of life will be the result. This is not inevitable and, as Lau and Woo[4] mention, the hypothesis that morbidity can be compressed towards the end of the natural life span, as advanced by Fries in 1980,[9] is still regarded as a viable worthwhile goal. Recently, Vita et al[10] produced new evidence from a cohort study to support the hypothesis. In a group of subjects born between 1913 and 1925, they demonstrated that cumulative disability is strongly related to smoking, high body mass index, and sedentary lifestyle. For those in the lowest level of risk, the onset of functional disability was delayed by about 5 years. The study is continuing and a complete answer will not be available until 2010, when most of the subjects will have died, but I doubt anyone believes we should wait that long before taking new steps in health promotion.

The seminar in this issue is centred on the prevention of non-communicable disease. However, as Lo[11] describes in the commentary, towards the end of the 1990's Hong Kong has been stressed by several critical incidents in communicable disease. They have jolted the territory to reflect that even a region with a high gross domestic product per capita, years of financial growth, a low level of unemployment, and an infant mortality rate that approximates to the lowest on the planet, is not immune from the vicissitudes of environmental neglect or gaps in health care management. Lo's[11] discussion of the outbreaks of cholera, avian influenza, and rubella in terms of agent, vector, and host points to several different aspects of control, without which we will inevitably experience recurrent epidemics of otherwise preventable communicable diseases in the future.

As in all modern health care systems, in the past two decades there has been too little emphasis on the public health dimensions of Hong Kong health, in contrast with the profession-led demand for health care resources. The seminar in this issue, in a small way, adds an additional voice to the call for a renaissance in public health. Recent events have led to a call for the establishment of a Centre for Disease Control in Hong Kong. We certainly need a fresh approach not only to surveillance, but also decision analysis and policy making in public health. This could, in part, be provided by the establishment of a public health commission and a comprehensive review of public health and health protection needs in Hong Kong.

There are many as yet unrealised health benefits to be gained by all members of this community, but as the authors of this seminar show compellingly, the first step in our new approach should be to protect both the environment and health-related lifestyles of young people in Hong Kong.

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