EDITORIAL

Colorectal cancer screening in Hong Kong: investment of more resources needed to strengthen screening services and inform governmental policy

The global incidence of colorectal cancer (CRC) is one million per year with a high annual mortality of more than 500 000.[1] It accounts for a substantial public health burden and is the leading cause of years of potential life lost.[2] It is becoming more common in many western nations and there is evidence that it increasingly affects Asian populations, including that of Hong Kong.[3] Locally, there are approximately 4000 cases of CRC diagnosed each year. The age-standardised incidence rates were 45.8 for males and 30.5 for females, respectively, per 10 000 standardised population in 2008[4] as compared to around 3000 new cases a decade ago. Moreover, its incidence in Asia Pacific countries is now comparable to western countries like Canada, the United States, and in Europe.

Screening for CRC based on faecal occult blood testing (FOBT) has been shown to lower mortality by up to 33%.[5,6] Moreover, many international guidelines,[7-9] including consensus statements from Asia Pacific countries,[10] have unanimously recommended that average-risk subjects aged 50 to 70 years undergo screening. While many Asian countries including Japan, Singapore, Korea, and Taiwan have adopted national screening policies for their citizens, so far no governmental screening initiative has been implemented in Hong Kong.

To assess local knowledge, attitudes, and practice of CRC screening, Tam et al[11] conducted a cross-sectional survey among more than 1600 patients aged 50 to 74 years in four primary care clinics, and its findings are published in this issue of the journal. The overall screening uptake rate was low, despite a high level of awareness about the usefulness of FOBT and colonoscopy as screening tools. The majority of subjects assessed were keen to participate in free-of-charge CRC screening programmes using either screening tool should they be offered the opportunity. The authors identified factors associated with screening uptake and keenness to join screening programmes. They also rightly pointed out that the actual implementation of CRC screening programmes in the community will require considerations from different angles, including concerns about its impact on the infrastructure and service utilisation of the local health care system.

In 2010, the Cancer Expert Working Group on cancer prevention and screening concluded that there was insufficient evidence to implement population-based CRC screening programmes in Hong Kong.[12] Some of the suggested reasons for the committee's recommendation included low public acceptance in terms of a low level of knowledge and uptake about this topic. Other reasons included uncertain cost-effectiveness of the programme, inadequate readiness and capacity of the health care system to cope with screening and management of those screened positive, as well as the impact of population-based CRC screening on the whole health care system. Possible pressures on local health care services would extend to laboratory capacity and available colonoscopic facilities. This is conjecture since there is an absence of local data. If other developed Asian communities are used as a benchmark, then Hong Kong is lagging behind in introducing population-based CRC screening.

How did other countries put screening programmes in place? How did they overcome barriers to start up their respective programmes? Perhaps we could learn from their experience. In order for a screening programme to succeed, a few crucial components need to be considered. These are commonly referred to as programmatic performance indicators, and consist of its uptake rate by the general population, compliance to screening over the years, time to colonoscopy, and so forth.

What is the optimal strategy for screening recruitment? There have not yet been large-scale studies comparing various conduits on their success rates when it comes to inviting participants to be screened. Such conduits include: physician referrals, open recruitment following public health educational campaigns, screening invitations to different age-groups, to name but a few. Apart from the problems identified in a recent local study on screening uptake,[13] what are the obstacles to sustaining compliance over time? Do we know the preference for screening tools (eg FOBT vs colonoscopy) not only from self-referred screening participants,[14] but also of the general public? One study showed that the major reason for screening referral by primary care physicians (PCPs) in Hong Kong was the patient's family history of CRC.[15] Conceivable therefore, PCPs practising CRC screening referrals may do so based simply on clinical cues instead of recommending it routinely. Incentives to encourage more PCPs to refer

patients for screening as part of anticipatory care are yet to be explored.

A number of forces promote decision-making on establishing a population-based programme of CRC screening. First, the general public needs more education about CRC and its screening, so as to facilitate their willingness and keenness to undergo the procedure. Second, within our local health care system, better access for the general population to undertake CRC screening needs to be subsidised by the government. Third, Hong Kong needs to join other Asia Pacific countries in offering community-based screening programmes.

It must be emphasised that without support for screening services in different regions of Hong Kong, researchers will be denied opportunities to study the feasibility, participant compliance, and cost-effectiveness of CRC screening programmes in the real world. Understandably, implementing a population-based screening programme needs to be undertaken with caution, but the absence of such services means their potential effectiveness cannot be studied.

Thus, a step to promote CRC screening in Hong Kong would be for the government to invest more resources in setting up community-based screening programmes and for the academics to assess the epidemiological reality of offering them to the general public. Other Asia Pacific countries did not insist on the presence of local data to start CRC screening programmes in their localities. It is time for public health practitioners to enlist more support from the government and other community stakeholders to encourage implementation and substantiation of the screening initiatives in Hong Kong.

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References

1. Herszényi L, Tulassay Z. Epidemiology of gastrointestinal and liver tumors. Eur Rev Med Pharmacol Sci 2010;14:249-58.
2. Cancer burden fact sheets 2003. Centers for Disease Control website: http://www.cdc.gov/cancer/CancerBurden/ny.htm. Accessed 1 Jul 2010.
3. Sung JJ, Lau JY, Goh KL, Leung WK; Asia Pacific Working Group on Colorectal Cancer. Increasing incidence of colorectal cancer in Asia: implications for screening. Lancet Oncol 2005;6:871-6.
4. Hong Kong Centre for Health Protection, Department of Health, HKSAR. 4. Centre for Health Protection website: http://www.chp.gov.hk/en/content/9/25/51.html. Accessed 3 Sep 2011.
5. Hardcastle JD, Chamberlain JO, Robinson MH, et al. Randomised controlled trial of faecal-occult-blood screening for colorectal cancer. Lancet 1996;348:1472-7.
6. Winawer S, Fletcher R, Rex D, et al. Colorectal cancer screening and surveillance: clinical guidelines and rationale—update based on new evidence. Gastroenterology 2003;124:544-60.
7. Winawer SJ, Fletcher RH, Miller L, et al. Colorectal cancer screening: clinical guidelines and rationale. Gastroenterology 1997;112:594-642.
8. Rex DK, Johnson DA, Lieberman DA, Burt RW, Sonnenberg A. Colorectal cancer prevention 2000: screening recommendations of the American College of Gastroenterology. American College of Gastroenterology. Am J Gastroenterol 2000;95:868-77.
9. Smith RA, Cokkinides V, Eyre HJ; American Cancer Society. American Cancer Society guidelines for the early detection of cancer, 2003. CA Cancer J Clin 2003;53:27-43.
10. Sung JJ, Lau JY, Young GP, et al. Asia Pacific consensus recommendations for colorectal cancer screening. Gut 2008;57:1166-76.
11. Tam TK, Ng KK, Lau CM, Lai TC, Lai WY, Tsang LC. Faecal occult blood screening: knowledge, attitudes, and practice in four Hong Kong primary care clinics. Hong Kong Med J 2011;17:350-7.
12. The Cancer Expert Working Group (CEWG) on Cancer Prevention and Screening. Recommendations on Colorectal Cancer Screening. Centre for Health Protection website: http://www.chp.gov.hk/files/pdf/recommendations_on_crc_screening_2010.pdf. Accessed 23 Aug 2011.
13. Sung JJ, Choi SY, Chan FK, Ching JY, Lau JT, Griffiths S. Obstacles to colorectal cancer screening in Chinese: a study based on the health belief model. Am J Gastroenterol 2008;103:974-81.
14. Wong MC, Tsoi KK, Ng SS, et al. A comparison of the acceptance of immunochemical faecal occult blood test and colonoscopy in colorectal cancer screening: a prospective study among Chinese. Aliment Pharmacol Ther 2010;32:74-82.
15. Wong MC, Lam AT, Li DK, Lau JT, Griffiths SM, Sung JJ. Factors associated with practice of colorectal cancer screening among primary care physicians in a Chinese population: a cross-sectional study. Cancer Epidemiol 2009;33:201-6.