

## Toward better control of colorectal cancer

“There is so much in life we can’t control. But here’s something we can: colorectal cancer”, said Academy Award winning actress Meryl Streep in the USA’s Screen for Life: National Colorectal Cancer Action Campaign. Her comment on colorectal cancer might not be entirely accurate, but it has some merit with regard to prevention of this disease. As discussed in a Seminar by Hermann Brenner and colleagues in today’s *Lancet*, colorectal cancer offers much better opportunities for secondary prevention by early detection and screening than do most other cancers.

Worldwide, colorectal cancer is the third most common cancer and fourth leading cause of death from cancer. Most cases develop slowly over many years from adenoma to carcinoma, and the precursor lesion—adenoma—can be readily detected and removed. Hence, the disease is an ideal target for early detection and prevention by screening. Consistent evidence has shown that colorectal screening reduces colorectal cancer incidence and mortality, and is cost effective. Furthermore, guidelines already endorse several screening strategies, including faecal occult blood tests, flexible sigmoidoscopy, and optical colonoscopy.

Despite the supporting evidence, recommendations, and availability of screening tests, the uptake of screening of colorectal cancer is disappointingly low in most countries, even in developed regions of the world. In England, recent figures stated that among the eligible 60–74-year-old age group only 58% were screened for colorectal cancer. Similarly, in the USA, only about 61% of adults aged 50 years and older get screened for colorectal cancer. The situation in developing countries is even more worrying. By contrast with decreasing trends for the incidence and mortality of colorectal cancer in many developed countries like the USA, the incidence and mortality in several developing countries and in previously low-risk countries, such as China, have continued to increase. This trend is related to their transition towards a so-called westernised lifestyle such as the consumption of high-fat diets and physical inactivity, people’s reluctance to participate in cancer screening, and relatively poorer health-care resources.

Several barriers to the uptake of colorectal cancer screening exist. In China, traditional cultural beliefs, such as the perception that both primary and secondary

prevention of cancer are threatening to the harmonious state of health and unnecessary, present a substantial obstacle to participation in cancer screening. Worldwide, the unpleasantness and embarrassment of procedures are major concerns, especially for sigmoidoscopy and colonoscopy because of their invasive nature. In terms of patient education, both respected society websites and popular online patient information sites on colorectal cancer are too complex for many lay people to understand, according to a study published in *Gastrointestinal Endoscopy* by Chenlu Tian and colleagues at the University of Texas Southwestern Medical Center, TX, USA, and they do not address the appropriate risks, concerns of patients, or barriers to screening. Furthermore, huge disparities exist in colorectal cancer testing; there is low uptake in groups with lower socioeconomic status, which could exacerbate existing inequalities in overall colorectal cancer mortality.

How can the uptake of colorectal cancer screening be improved? A variety of innovative methods are discussed in the Seminar. Less invasive approaches such as alternative imaging technologies, as well as non-invasive blood and stool-based screening tests have broadened screening choices. Encouragingly, the analysis of stool DNA to identify tumour-specific changes has become more sensitive and promising against the backdrop of rapid progression in molecular diagnostics of the disease. Secondly, the development of organised screening programmes, involving personal invitations, population monitoring of screening rates, and quality assurance, is emphasised. By contrast with opportunistic screening, which might be offered to people who are being examined for other reasons, organised screening holds the promise of uniformly delivered screening services to all eligible members of a population. Thirdly, screening strategies should take the social determinants of health and the heterogeneous culture of different groups of individuals into consideration.

Although highly effective new approaches offer the potential to reduce the incidence of colorectal cancer, there are still pervasive sociodemographic inequalities in screening. Therefore, colorectal cancer screening programmes must be, first and foremost, designed and implemented so that they are understandable and accessible to all eligible people, irrespective of their sociodemographic characteristics. ■ *The Lancet*



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For England’s screening figures see <http://www.beatingbowelcancer.org/news/apr2014/%E2%80%9Cunacceptable%E2%80%9D-variations-uptake-bowel-cancer-screening-revealed>

For the study by Chenlu Tian and colleagues see *Gastrointestinal Endoscopy* 2014; published online March 27. [http://www.giejournal.org/article/S0016-5107\(14\)00097-2/abstract](http://www.giejournal.org/article/S0016-5107(14)00097-2/abstract)