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Guest editorial

Colorectal cancer screening and the challenging role of general practitioner/ family physician: an issue of quality

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Colorectal cancer is a leading cause of illness and death in the Western world, while current literature is still pondering about the screening benefits on mortality reduction and the effectiveness of population-based intervention programmes. There is also a debate on the central role of general practitioners (GPs) in cancer screening, but published papers do not sufficiently clarify whether they are effective in implementing screening programmes that are either opportunistic or population based. Nevertheless, there is promising news from some countries, including Northern America, Australia and the United Kingdom.

Despite the availability of effective screening tests for detection and treatment of early-stage colorectal cancer and adenomatous polyps, as well as the advances in genetic research leading to identification of people at risk, there are several concerns regarding the effectiveness of GPs and primary care practitioners in implementing those screening programmes as a recent systematic search in literature has revealed.[1] These concerns mainly refer to the faecal occult blood test (FOBT), the most commonly used screening test. Despite certain concerns about its sensitivity, the FOBT remains one of the most safe and inexpensive tests,[2] that leads to a reduction of colorectal cancer mortality,[3] although there is an increasing tendency to use flexible sigmoidoscopy and colonoscopy in general practice/family medicine.[4,5]

The involvement of GPs in colorectal cancer screening (CRCS) has been seen as an essential task in daily practice, and the necessity of clear and consistent guidelines as well as medical training was underpinned quite early in literature.[6,7] Despite this early recognition, some published studies convey discouraging news. In Southern Europe, approximately one-third of the GP population recommended FOBT screening[8,9] and many of them recommended inappropriate follow-up tests for patients who had a positive FOBT.[9] It has been reported that physicians seem to prefer patient-initiated screening rather than doctor-initiated screening.[7]

According to the American Cancer Society, key issues to be addressed include patient and physician barriers to screening, lack of universal coverage, lack of incentives for adherence and a need for expanded infrastructure.[10] A study protocol for a systematic review of interventions improving the uptake of population-based screening for colorectal cancer using FOBT has been published in the Cochrane Database of Systematic Reviews.[11] General practice (family medicine) has been increasingly involved in behaviour modification, mainly in the field of health habits. A current challenge for GPs and researchers to explore is to what extent the social cognitive model can be used in primary care settings to improve uptake of colorectal cancer screening. Susan Harnett *et al* suggested GP-based opportunistic screening and use of short questionnaires filled by carers and partners in the waiting room.[12] GPs are invited to review the completed questionnaires and manage patients at risk by calculating pre-test and *post hoc* probabilities, thus reducing uncertainty when a patient with a certain risk for colorectal cancer visits their practice. Thus, we should rethink opportunistic screening especially in countries where national preventive strategies have not been established. We should also identify potentially effective ways of improving uptake of screening colorectal cancer, including that of annual physical examination, wherever it exists. According to a Canadian paper, the majority of physicians reported preventive manoeuvres in the context of an annual general physical examination rather than integrating them into daily practice.[13] Patient expectations, level of perceived recommendations and the perception of harm were reported from another Canadian study as significant determinants of screening behaviour of physicians when practice guidelines for FOBT were unclear or conflicting.[14] The corresponding figure for colonoscopy

included patient anxiety, family history and the perception of the level of recommendation. Various reminder systems have been tested in increasing the uptake of FOBT and sigmoidoscopy, and phone calls to GPs seem to be effective.[15,16] Other health disciplines, such as nursing, have also attempted to increase adherence to screening by integrating theories of the Health Belief Model into education and training of healthcare providers, as well as modifying patients' perceived cancer risk.[17] Interestingly enough, the impact of a Health Belief Model-based colorectal cancer education session on adult participants reached beyond the patients who were in contact with the nurses.[18] Furthermore, delegation of selected screening tasks, such as FOBT to support staff has been shown to enhance patient access to preventive care.[19]

Colorectal cancer screening also presents an issue of quality assurance, and therefore it is useful to academic and political bodies to consider it as an essential clinical indicator, when assessing GPs' performance and quality of care. It should be valid and reliable and suitable for comparison between professionals, practices and institutions, as Wollersheim *et al* recently reported.[20] It is still unknown to what extent recommendations and evidence-based guidelines, which are widely circulated to GPs, are guiding GPs' behaviour and performance for prevention of colorectal cancer. The observed variability in the compliance of GPs in internationally accepted guidelines across Europe also requires further discussion and inquiry. It is not clear whether it can be attributed to differences in knowledge, diagnostic capacity and skills, organisational support or culture. As Grol and Buchan have underlined, many factors play a role in impeding compliance to guidelines, not only in relation to medical decision making but also to several other factors, including patient behaviour, organisational and economic conditions.[21] The evidence base of available guidelines for the diagnosis of colorectal cancer in primary care presents another challenging area. The work of Hamilton and Sharp who reviewed the research evidence of referral guidelines is an excellent example.[22]

In the complex area of healthcare utilisation, anthropologists and sociologists in health can contribute, and we can borrow ideas of the multivariate model introduced by Jean Slikkerveer.[23] Predisposing factors and particularly sociodemographic characteristics of patients have been shown to have a strong effect, with patients of higher socio-economic status showing higher screening attendance.[24] Psychosocial factors, and particularly attitudes towards healthcare, including of not smoking and taking up dental visits, were found to be significant predictors of the screening for CRCS attendance in a British study.[24] Young people, those who are seen less frequently and those without health insurance presented a low rate of CRCS in an Australian study.[25] Enabling factors, and particularly financial cost, are another variable in the multivariate models. However, the effect of costs seems to be low when CRCS screening is considered in countries like Greece where the availability and cost of colonoscopy are low.

Dealing with inequalities is also a major task and challenge for family medicine in modern healthcare systems. Screening uptake rate seems to be lower in minority groups,[26] and those with less education,[27] although some culturally adapted CRCS intervention programmes seem to be effective on FOBT uptake.[28] It remains to be seen to what extent changes in payments for performance and arrangements for clinical governance are reflected in improvements in colorectal cancer prevention.[29,30]

CRCS is yet another complex issue and a challenge for practitioners, researchers and policy makers who have an interest in primary care. This challenge could be used as a 'gold' example when quality is assessed.

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