

# Early detection of colorectal cancer: barriers to screening in the primary care setting

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Colorectal cancer (CRC) is one of the leading causes of illness and death in the Western world and the second most common cause of cancer morbidity in Europe.<sup>1</sup> Yet, if detected early, CRC is highly treatable. Good news has recently arrived from across the Atlantic, where decision analysis tools were employed to inform recommendation updates and ‘microsimulation modelling demonstrated that declines in CRC death rates are consistent with a relatively large contribution from screening’.<sup>2</sup>

Nevertheless, and despite the fact that U.S. CRC mortality and incidence rates have improved, CRC screening remains underused: only 77.5% of physicians report use of the national screening guidelines and only 51.7% reported recommendations consistent with the guidelines.<sup>3</sup> However, there are still European countries without a national population-based CRC screening programme, and even in those with established national screening programmes, they are underutilized. A survey in France, which has an established population-based screening programme, indicated that although 83% of the GPs were convinced of the importance of CRC screening, only 30% recommended the procedure to their patients.<sup>4</sup>

There is an ongoing debate about the role of GPs and primary care physicians (PCPs) and their potential contribution to the effective implementation of screening programmes, both opportunistic and population-based. In addition to the assessment of the risk of developing CRC, in general, the involvement and the role of the GPs and PCPs in convincing patients to participate and initiate CRC screening should be further explored and elucidated, as it is of key importance in cultural and organizational context and health policy issues.<sup>5</sup> This editorial highlights certain issues that have an impact on the early detection of CRC and focuses on barriers to screening at primary care and general practice levels.

One of the most challenging issues that PCPs encounter is to convince the individual at average risk to use a simple and inexpensive test to initially detect if any hidden blood is present in stools, constituting a strong indication of the presence of an adenomatous polyp or CRC. There is evidence indicating a low rate

of CRC screening, especially in younger patients,<sup>6</sup> while few physicians recommend screening for the majority of their patients.<sup>7</sup> Also, one-third of the PCPs use chart reminders and only 15% use outreach mechanisms to contact patients most likely to benefit from screening.<sup>8</sup> Despite the evidence that screening contributes to early diagnosis, with indicators such as reduced mortality, participation rates remain low even when there is an active nationwide screening programme.

In terms of population-wide screening, however, the GPs and PCPs might also need to receive further education and training regarding early diagnosis and prevention, including health promotion. A very interesting study undertaken in France, and published in the current issue of *Family Practice*,<sup>9</sup> employed a qualitative approach to explore GP and patient barriers to undergoing CRC screening. This study highlights several important issues: GPs reported insufficient training and some doubted the relevance of screening. They expressed concerns in terms of the time available for the test during the consultation and they, also, reported practical and administrative obstacles.

Other barriers to CRC screening reported by the GPs included the difficulties in convincing patients especially those not experiencing signs and symptoms. Aubin-Auger *et al.*<sup>9</sup> also examined barriers at the patient level, and how these are linked to the physician–patient interaction and communication. For example, cancer screening did not fit with the attitudes of some patients regarding health care, and they failed to identify benefits outside the context of familial high-risk groups.

The conflict between the personal experiences of physicians and public health implications is notable. Reflecting specificity and sensitivity issues, GPs were concerned about poor technical skills and taking ownership of the risk for performing the CRC screening test. Nevertheless, through the process of assessing doctor–patient agreements and discordances, it appears that GPs and patients agreed that the lack of symptoms and lack of familial risk were two of the main reasons for doubting the usefulness of such a test. The GPs thought that patients misunderstood the process and were worried about reactions to false-negative

results, whereas the patients complained about time, as well as the constipation effect from repeating the test, and did not express fears about such results. Further evidence<sup>10</sup> indicates that screening intentions and test ordering are adversely affected when patient and provider preferences differ. Interestingly, supporting previously reported data,<sup>11</sup> having a screening habit (e.g. a history of mammography) proved to be a positive factor for women, while increased participation was reported for those with a higher educational level, particularly for men. In addition, patients with a relative who had already performed a faecal occult blood test (FOBT) were more likely to accept the test, whereas friends and family were not identified as obstacles.

Cultural and linguistic barriers were also touched upon in the Aubin-Auger *et al.*<sup>9</sup> study; noteworthy is the fact the authors identified the importance of the wording doctors use, and its effect on uptake of CRC screening, albeit, further research is, of course, needed.

Employing culturally and linguistically relevant approaches for FOBT promotion is also important to increase screening participation in vulnerable populations belonging to low-income and/or less acculturated minority groups.<sup>11</sup> Another challenge to guideline adherence and compliance in screening is ensuring equity of access to screening. One aspect of ensuring screening access is to ensure awareness issues have been addressed for all ethnic and culturally diverse groups.

Taskila *et al.*<sup>12</sup> studied >11 000 patients aged 50–60 years registered in general practices for a UK region (West Midlands) and examined factors that contributed positively or negatively on behaviour towards screening. This study reported a great variation in attitudes, indicating there are different needs to be addressed for increasing awareness and highlighted the importance of culturally relevant strategies for designing and implementing screening programmes.<sup>13</sup> Researchers have also established that both indications for use and follow-up of a positive result varied according to the ethnicity of the GP and independently of the medical training received.<sup>14</sup> Additionally, Koo *et al.*<sup>14</sup> noted that the ethnicity of the patient and associated linguistic and cultural barriers affect screening uptake and special consideration should be given to these as they may, also, adversely affect the health of immigrant populations.

Not only CRC screening but also screening tests for cervical and breast cancer remain underutilized despite their proven effectiveness in reducing mortality and morbidity. CRC screening, similarly to other cancer screening programmes, is most likely to improve, when a health organization provides the necessary support through organizational changes in staffing and clinical procedures.<sup>15,16</sup> Organizational obstacles to screening participation have been reported by various studies,<sup>15–17</sup> with evidence that CRC screening is most likely to improve when performance is supported by

the health care organization through changes in staffing and clinical procedures; this, of course, is extremely relevant in the context of health care system sustainability.

Interventions focussing on organizational changes include the use of separate clinics devoted to prevention, use of a planned care visit, designation of non-physician staff for specific prevention activities and continuous quality improvement interventions.<sup>17</sup> For example, the importance of personalized and direct invitations to patients has been identified, as well as the importance of saving time and effort. The benefits and drawbacks of a centralized system include removing pressure from the individual GP and the organizational capacity at practice level but, as previously reported,<sup>18</sup> may result in a loss of involvement and a lowered feeling of responsibility; these factors are discussed by Aubin-Auger *et al.*<sup>9</sup>

In terms of policy, guidelines and recommendations, the first-ever set of European Union (EU) guidelines for CRC screening and diagnosis was only recently published February 2011; however, issues of interpretation still remain, and adoption practices vary greatly among different EU member states. The increasing complexity of guidelines, as well as the time and effort GPs need to invest to learn how to best implement these, also seem to play an important role. Additionally, health promotion issues are not a priority in the agenda of PCPs in some European countries; a 2005 study showed that significant gaps exist between GP knowledge and practices.<sup>19</sup> Consequently, differences exist in health care provision and health care promotion in the context of the health care systems and as determined by organizational barriers.

Investment has been made to assess the impact of quality improvement intervention programmes. Ornstein *et al.*<sup>20</sup> combined diverse components, such as performance activities, delivery system design, electronic medical record tools and patient activation, and reported promising results in the Evidence-Based Toolbox and Guide.<sup>5,21</sup> Additionally, time and effort are required on the part of PCPs and other health care practitioners to discuss options, educate their patients and engage in shared decision making (SDM).

Issues relevant to improvement of uptake of CRC screening could be explored with the use of cognitive methods and the translation of psychological theories as the Theory of Planned Behaviour and the Health Belief Model into education and training programmes for GPs and PCPs.<sup>22</sup> A closer collaboration between medical and social care scientists is needed to increase the understanding of compliance with for CRC screening recommendations. For effective and integrated partnering to translate theory into clinical practice, we must invest in frameworks and networks that support collaborative research to further elucidate the uptake of CRC screening in primary care.

Also, SDM tools, helping to bridge gaps between the perceptions of patient behaviour of the PCPs and actual patient attitudes, should be further studied as they become incorporated in general and family practice. For example, the combined use and importance of smaller quasi-interventions, such as a letter of endorsement at the primary care level and a more explicit procedural patient leaflet with decision-aid tools,<sup>23</sup> such as motivational calls in the context of tailored patient education,<sup>24</sup> should not be underestimated, and need further study.

Increasing CRC screening uptake remains a challenging general practice/family medicine and public health issue, which necessitates further research so as to elucidate its many facets, especially the role of the doctor–patient communication and cultural and organizational issues. Finally, incorporating decision analysis tools into efforts to inform recommendation updates would further substantiate the evidence on the benefits of early diagnosis and help better formulate evidence-based policy for CRC screening strategies.

## Declaration

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