

Short communication**Colorectal cancer screening in Malaysia: a critical situation that must be addressed***Soo Huat Teoh¹, Karen Christelle², Hui Zhu Thew³, Mastura Mohd Sopian⁴***Abstract:**

In Malaysia, colorectal cancer is the second most common cause of cancer. Early detection through screening programmes is one of the most important public health initiatives in reducing cancer-related death. For decades, Malaysia has a colorectal cancer screening program in government-funded primary care facilities. However, screening uptake is minimal and numerous theories have been postulated. The aim of this article is to explore the possible reasons for low colorectal screening uptake among primary care physicians.

Keywords: Colorectal cancer; screening; primary care

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Colorectal cancer (CRC) is the third most common malignancy, with the second-highest mortality rate worldwide.¹ In 2018, these rankings equated to 1.8 million new CRC cases and 860 thousand CRC-related deaths. In Malaysia, CRC is the second leading cause of cancer cases from 2012 to 2016, and it is also the most prevalent cancer among men.² According to a report published by The Malaysia National Cancer Registry in 2019, merely 15.5% of the CRC cases were indentified in stage I compared to 63.7% in late stages (III and IV).² The expense of treating CRC at an advanced stage is higher (up to RM30,000 per year for each patient) and the survival rates are poorer.^{3,4} CRC screening, according to multiple experts, is the best strategy to detect CRC early and enhance survival rates.³⁻⁶

CRC screening modalities include the immunochemical faecal occult blood test (iFOBT), colonoscopy, computed tomography (CT)

colonography and stool DNA test.⁵⁻⁸ In Malaysia, the most frequently recommended screening tests are colonoscopy and iFOBT.⁶⁻⁸ The decision between iFOBT or colonoscopy, as well as the screening intervals, are dependent on the patient's risk assessment based on their age and family history of CRC.⁷ Malaysia, in general, employs an opportunistic screening strategy wherein walk-in patients to health institutions are advised about CRC screening.^{5,6} As a result, primary care, whether in the form of a private general practitioner's (GP's) clinic or government-subsidized primary care clinic, is critical in the implementation of the CRC screening program.⁶ Because these institutions accounted for up to 80% of overall healthcare usage for all acute and chronic disorders.^{9,10} It allows primary care physicians to assess, discuss, and recommend CRC screening.

Multiple studies were undertaken in Malaysia to evaluate CRC screening uptake. On the bright side,

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studies (with large sample sizes of over 2000 people) revealed high CRC screening uptake (iFOBT) rates ranging from 79.6% to 94.7%.¹¹⁻¹³ Following that, these subjects had 60% good compliance rate with confirmatory colonoscopy. The willingness of patients to participate in CRC screening will definitely enhance uptake. According to two local studies, over 80% of patients are eager to undertake CRC screening, which is consistent with the CRC screening uptake statistics.^{14,15}

In contrast to the encouraging uptakes and follow up test reported¹¹⁻¹⁵, some studies found otherwise. Malaysia had the lowest rate of CRC screening (3%) among the 14 Asia-Pacific countries studied. With over 8000 participants, it was a large scale cross-sectional study.¹⁶ This result is consistent with Yusoff et al.'s findings from 44 primary care clinics, which found that just 0.7% (13 out of 1905) average risk participants had undertaken CRC screening in the previous five years.¹⁷ The disparities in CRC screening uptake could be explained by variations in research methods across these studies. Different viewpoints, on the other hand, should be investigated in order to provide a holistic picture.

A recurring element from earlier studies was the importance of doctors' recommendations in CRC screening.^{14,16,17} Both patients and doctors felt that the doctors' recommendation is critical in encouraging the patients to embrace CRC screening. In addition, a systematic review, which analyzed over a hundred qualitative studies that looked into patients' barriers to CRC screening discovered that a lack of clinician endorsement and explanation was preventing patients from undergoing CRC screening.¹⁸ Despite the role of doctors, Koo et al. revealed that just 20.4% of eligible respondents in his multinationals study had received CRC screening recommendations.¹⁶ Furthermore, only 1% of Malaysian respondents were advised to undergo screening, the lowest percentage in the Asia-Pacific region. Research conducted among primary care physicians to review their practice in screening CRC discovered that only about 20% of primary care physicians screened or recommended the tests to eligible patients.^{19,20} Because CRC screening is a standard service in primary care, this is a call to action.

Various initiatives have been made to investigate the challenges of implementing CRC screening worldwide. However, there is a scarcity of research from the primary care practitioners and Malaysia. Poor knowledge (perceived and actual

knowledge score) in CRC screening and restricted test kit availability were identified as obstacles in two questionnaire-based cross sectional studies conducted among Malaysia's primary care practitioners.^{19,20} Furthermore, primary care practitioners observed that patients faced substantial challenges such as low awareness, refusal, difficult sample collection and time constraints.²⁰ Similar findings were also discovered in studies among primary care practitioners from Egypt and the United States.²¹⁻²⁴ Inadequate training, a lack of resources, e.g., lesser financing for primary care, staff shortage; and an unappealing financial compensation scheme for primary care practitioners were all identified as hurdles to screening CRC in these countries.

It is important to highlight that just a few research have been conducted to investigate the CRC screening issues in Malaysia. Despite efforts to report the barriers of CRC screening, the questionnaires developed and adapted from previous studies were dubious.^{19,20} Questionnaires adapted from other nations (the United States, Canada and Singapore) may not embody local practises, values and relevance.¹⁹ Furthermore, neither set of questionnaires underwent more than a basic validation procedure, and neither sought input from the primary end-users, the non-specialist primary care practitioners. In Malaysia private primary care practitioners are just as vital as primary care practitioners in government facilities. Their participation in assessing the CRC screening problem provides a comprehensive view that was previously lacking in earlier studies.

Due to limitations and scarcity of the existing research, it is crucial to evaluate current practise and experience among primary care practitioners in CRC screening. Continuing to intervene without addressing the underlying problems is both futile and costly.

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Data gathering and idea owner of this study: Teoh SH, Karen C, Thew HZ, Mastura MS (All authors).

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