

ONLINE FIRST PUBLICATION

Online first papers have undergone full scientific review and copyediting, but have not been typeset or proofread. To cite this article, use the DOIs number provided. Mandatory typesetting and proofreading will commence with regular print and online publication of the online first papers of the *SMJ*.

Knowledge and practice of colorectal cancer screening in an urban setting: cross-sectional survey of primary care physicians in government clinics in Malaysia

Chor Yau Ooi¹, MD, Nik Sherina Hanafi², PhD, Su May Liew², PhD

¹Department of Family Medicine, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, Sarawak, ²University of Malaya Primary Care Research Group, Department of Primary Care Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

Correspondence: Dr Chor Yau Ooi, Lecturer, Department of Family Medicine, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak, 94300 Kota Samarahan Sarawak, Malaysia. <u>cyooi@unimas.my</u>

Singapore Med J 2019, 1–22 https://doi.org/10.11622/smedj.2019011 Published ahead of print: 16 January 2019

Online version can be found at http://www.smj.org.sg/online-first

Page 1 of 22

ABSTRACT

Introduction: Colorectal cancer (CRC) was the third most commonly diagnosed cancer worldwide in 2008 (1.23 million cases, 9.7%). CRC screening was shown to be effective in reducing 70% of CRC mortality. However, the screening rate for CRC remains poor.

Methods: A cross-sectional survey was conducted among primary care physicians (PCPs) in public primary care clinics in Kuala Lumpur, Malaysia. A 30-item self-administered questionnaire was used to assess the knowledge and practice of CRC screening.

Results: The response rate was 86.4% (n = 197/228). Less than half (39.1%) of respondents answered correctly for all risk stratification scenarios. Mean knowledge score on CRC screening modalities was $48.7\% \pm 17.7\%$. The knowledge score was positively associated with having postgraduate educational qualification and usage of screening guidelines. Overall, 69.9% of PCPs reported that they practised screening. However, of these, only 20.7% of PCPs screened over 50% of all eligible patients and only 5.2% of PCPs screened over 75% of all eligible patients. PCPs who agreed that screening was cost-effective (odds ratio [OR] 3.34, 95% confidence interval [CI] 1.69–6.59) and those who agreed that they had adequate resources in their locality (OR 1.92, 95% CI 1.01–3.68) were more likely to practise screening. Knowledge score was not associated with the practice of screening (p = 0.185).

Conclusion: Knowledge and practice of CRC screening was inadequate among PCPs. Knowledge of screening did not translate into its practice. PCPs' perceptions about costeffectiveness of screening and adequate resources were important determinants of the practice of screening.

Keywords: colorectal cancer screening, knowledge, practice, primary care physicians