Realizing the need for colorectal cancer screening in Pakistan

Syed Zaki Muhammad,[1] Noor Fatima[2]

Madam, in 2018, Asia contributed the greatest burden of Colorectal Cancer (CRC) in the world, with highest proportion of incidence and mortality per 100,000 population.[1] In Pakistan, there is non-availability of recent centralized data showing incidence and prevalence of CRC from all over the country. A meta-analysis from 2018 reported prevalence to be at 5%.[2] With an aging population and prevalence of CRC risk factors, such as increased westernized diet, smoking, obesity, and inflammatory bowel diseases,[3] this low incidence might be an artifact, as supported by a recent study from 2019 reporting a rise in CRC across Asia.[1]

CRC screening not only has reduced mortality by early diagnosis, but also has reduced incidence by detection and removal of pre-cancerous lesions. CRC screening modalities include stool-based faecal occult blood testing (FOBT), faecal immunochemical testing (FIT), and multi-target stool DNA, radiography based computed tomographic colonography, blood-based detection of mutated methylated septin9 DNA, and endoscopy based flexible sigmoidoscopy (FS) and colonoscopy.[4]

The US Preventive Services Task Force recommends that options for CRC screening include an annual FOBT or FIT, FS every 5 years, and colonoscopy every 10 years starting from age 50 till age 75.[5] FOBT and FIT are simple tests while FS and colonoscopy require bowel preparation.[4] Colonoscopy is not readily available in our setup and is expensive. However, it is considered the gold standard for screening with reported high sensitivity and specificity, and the definitive test when other tests are positive.[4]

Even though the incidence of CRC is rising, there is a lack of knowledge regarding the risk factors and symptoms of CRC among the general population.[3] This is probably why patients neglect early symptoms and present with advanced stage disease. In a previous study conducted in Karachi, only 2.6% of participants aged 50 years and older had undergone CRC screening earlier, reflecting the barriers to CRC screening that include inadequate infrastructure and screening tests being expensive. Participants also considered being embarrassed by the procedure and a lack of awareness regarding screening as a barrier.[3]

Therefore, before CRC arises as a big health challenge, it is advised to devise a comprehensive prevention plan that includes CRC screening and mass awareness programmes that also address the barriers to screening. Risk stratification, using Cleveland Clinic test and NCI test that provide 10-year risk assessment, could be utilized to target individuals most likely to benefit from screening to improve cost-effectiveness.[4]

Disclaimer: None to declare.

Conflict of Interest: None to declare.

Funding Disclosure: None to declare.

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[1]2nd Year Medical Student, Dow Medical College, Dow University of Health Sciences, Karachi, [2]1st Year Medical Student, Liaquat National Hospital and Medical College, Karachi, Pakistan.
Correspondence: Syed Zaki Muhammad. Email: syedzakimd@gmail.com

https://doi.org/10.5455/JPMA.65781