

## PREVENTION AND SCREENING

### 1404P Colon cancer screening by fecal immunochemical testing in Iran

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**Background:** Colorectal cancer (CRC) is the third-most common cancer in Iran. We aimed to measure the uptake and feasibility of a pilot CRC screening programme based on fecal immunochemical test (FIT) in population aged between 45 and 75 years and the implications for scaling-up at the national level.

**Methods:** This pilot study was conducted in Tehran and individuals aged between 45 and 75 years in rural and urban areas were enrolled in the screening programme. The FIT was offered by health navigators in primary health centers by collecting one single sample directly in to buffer kits by each participant. Health navigators aimed at increasing uptake and handled the whole screening programme from invitation to the referrals and provided the participants with information regarding the nature and importance of the CRC screening and details as to how to collect stool samples and send them back to the laboratory for analysis. If the first kit was not returned within 48 hours, a reminder call was sent. Those participants who had a positive FIT were referred to undergo a colonoscopy.

**Results:** A total of 1044 asymptomatic average-risk individuals were enrolled. The age mean was 54.1 and nearly 63.0% (n = 657) were female. Only small fraction of participants had awareness about CRC (13.7%) or polyps (8.3%) or screening tests (9.2%). Likewise their prior screening practice was extremely weak (2.2%). In multivariate regression analysis, awareness about CRC and screening tests significantly varied according to the ethnic groups, years of schooling, and family history of cancers (P < 0.05). In sum, 1002 returned the FIT kit, of which stool sample in six participants (0.6%) was deemed unsatisfactory for testing. The FIT uptake was 96.0%, the positivity rate was 9.1% and the detection rates were 11.9% for adenomas and 7.1% for advanced adenomas. No cancer was detected.

**Conclusions:** This is the first study on minimal quality metrics within a CRC screening process for the pilot phase and indicates that FIT modality as a test of choice is a safe and highly acceptable method of CRC screening in average-risk asymptomatic people. We suggest FIT as an initial CRC screening tool along with other preventive services in primary health care system in the nation.

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