

Factors that influence compliance with follow-up recommendations after a positive colorectal cancer screening

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Background: Fecal occult blood test (FOBT) screening can reduce colorectal cancer (CRC) mortality when patients with an abnormal result undergo a complete diagnostic evaluation (colonoscopy or double-contrast barium enema with flexible sigmoidoscopy). In Japan, since 1992, a national CRC screening program was launched; asymptomatic populations over the age of 40 are recommended to participate in the screening program, which uses a 2-day immunochemical FOBT. However, fewer than 60% of screening FOBT+ patients received follow-up evaluation.

Purpose: The aim of this study was to determine factors influencing FOBT+ patients' undergo follow-up after abnormal CRC screening results.

Methods: Firstly, during a 5-month period from November 2005 to March 2006, baseline questionnaire survey was conducted with 1351 subjects participating in a community-based CRC screening program in Nagano, Japan. Study measures included intention to adhere to recommendation for clinical follow-up in the event of an abnormal FOBT result, perceived susceptibility and severity of CRC, perceived benefits and barriers related to undergoing follow-up examination, social support, knowledge of CRC risk factors, perceived health status, previous CRC screening, personality and social demographic characteristics. Secondly, FOBT+ patients were prospectively identified, and their health examination date were obtained from medical records. Lastly, at three-month end point survey, the performance of follow-up exams was determined. Descriptive statistical data were used to summarize participant characteristics. Multivariate logistic regression analyses on adherence to recommendations for follow-up were performed.

Results: Among 1209 screening patients who completed baseline questionnaires, 101 were identified with a positive FOBT, analyses were restricted to 98 FOBT+ patients. Approximately, 68 (69.4%) proceeded to undergo follow-up exams within 3 months. One-fifth of subjects 17 (17.3%) were less than 50 years of age and 34 (34.7%) were greater than 70 years of age, 47 (48.0%) were men, and 67 (75.6%) had high intention. Multivariate logistic regression analyses indicated that higher intention (aOR, 8.58; 95%CI, 1.14 - 64.83), having suggestive findings of health examination (aOR, 19.79; 95%CI, 2.05 - 191.44), and knowledge of CRC risk factors (aOR, 1.93; 95%CI, 1.09 - 3.41) were positive predictors, whereas perceived barriers (aOR, 0.72; 95%CI, 0.56 - 0.93) and gainful worker (aOR, 0.17; 95%CI, 0.03 - 0.91) were negative predictors.

Conclusions: The results of this study suggest that future effort should be made to increasing intention to adhere to CRC screening follow-up exams, reducing modifiable barriers by clarifying misperceptions about follow-up, making follow-up testing more convenient and accessible, facilitating recommendation and appointment scheduling for follow-up examination, and educating the public regarding the risk factors of CRC.