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Exploring Willingness to Undergo Colorectal Cancer Screening Among the Elderly in Taiwan

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Purpose:

Cancer is one of the leading causes of morbidity and mortality worldwide, while colorectal cancer is the third most common type among all cases. Unhealthy diet, lifestyle (lack of exercise, obesity, smoking and alcoholism, etc.) and genetic factors are associated with the risk of developing colorectal cancer. Colorectal cancer screening could effectively decrease the prevalence as well as medical cost; however, the rate of colorectal cancer screening in Taiwan is rather low. The aim of this study was to assess relationship between lifestyle, knowledge about colorectal cancer and the willingness to undergo colorectal cancer screening among the elderly in Taiwan.

Methods:

A cross-sectional study examines the relationship between colorectal cancer related and other variables. All participants completed a structured questionnaire. A survey was administered to participants aged 50 to 74 to assess knowledge about colorectal cancer screening and willingness to undergo screening. A total of 141 participants were included in this study. Data collected included demographic characteristics (sex, age, education level, work status, family history, economic status, smoking behavior, exercise habits), phone calls from medical staff, knowledge about colorectal cancer screening and willingness to undergo tests. The total score of the scale for cognition was 35, with the higher scores indicating better understanding. The internal consistency (Cronbach's alpha) of the past paper ranged from 0.61 to 0.90. Colorectal cancer screening include free fecal tests once every two years and colonoscopy. Frequencies and percentages were obtained to represent descriptive data while Chi-square test was performed for inferential statistics. Binary logistic regression models were used in this study.

Results:

46.1% of the participants would undergo free fecal tests once every two years, while only 22% would undergo colonoscopy once every two years. The score for cognition was 27.82 ± 3.24 . There was no statistical significant difference between the cognition score and willingness to undergo fecal tests and colonoscopy ($t=0.05$, $P=0.96$; $t=-0.99$, $P=0.33$). There was statistical significant difference found in exercise habits, smoking, telephone calls from the medical staff and intestinal discomfort symptoms. Participants with intestinal discomfort symptoms were more likely to undergo colonoscopy once every two years than those who did not experience discomfort symptoms, and there was statistical significant difference found (41.7% vs 17.9%, $X^2=6.53$, $P < 0.01$). Participants who received phone calls from medical staff were more likely to undergo colonoscopy once every two years than those who did not, and there was statistical significant difference found (30.0%:11.5%, $X^2:6.94$, $P < 0.01$). Participants received

phone calls from medical staff were more likely to undergo fecal test once every two years than those who did not and there was statistical significant difference found (63.8% vs 23.0%, $X^2=23.19$, $P < 0.01$). Logistic regression model showed that participants who had telephone calls from the medical staff (OR =5.90, 95% CI: 2.79 – 12.51) were more likely to have undergone fecal test once every two years, and participants who had telephone calls from the medical staff (OR =3.31, 95% CI: 1.32 – 8.31) were more likely to have undergone colonoscopy once every two years.

Conclusion:

It is necessary for the elderly to improve knowledge about cancer prevention and adjust self-health behaviors (exercise regularly) to take colorectal cancer screening tests. Medical staff should proactively inform the elderly and higher risk groups to undergo colorectal cancer screening. Early diagnosis and treatment of cancer could effectively lower cancer prevalence and mortality.

Title:

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Abstract Summary:

Early diagnosis and treatment of cancer could effectively lower cancer prevalence and mortality. It is necessary for the elderly to improve knowledge about cancer prevention and adjust self-health behaviors (exercise regularly) to take colorectal cancer screening tests.

Content Outline:

1. Introduction

Unhealthy diet, lifestyle (lack of exercise, obesity, smoking and alcoholism, etc.) and genetic factors are associated with the risk of developing colorectal cancer.

1. Body
2. Colorectal cancer screening could effectively decrease the prevalence as well as medical cost; however, the rate of colorectal cancer screening in Taiwan is rather low. 46.1% of the participants would undergo free fecal tests once every two years, while only 22% would undergo colonoscopy once every two years.
3. There was statistical significant difference found in exercise habits, smoking, telephone calls from the medical staff and intestinal discomfort symptoms.
4. Logistic regression model showed that participants who had telephone calls from the medical staff (OR =5.90, 95% CI: 2.79 – 12.51) were more likely to have undergone fecal test once every two years, and participants who had telephone calls from the medical staff (OR =3.31, 95% CI: 1.32 – 8.31) were more likely to have undergone colonoscopy once every two years.

III. Conclusion

Medical staff should proactively inform the elderly and higher risk groups to undergo colorectal cancer screening. Early diagnosis and treatment of cancer could effectively lower cancer prevalence and mortality.

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