

Title:

What Is The Impact Of National Colorectal Cancer Awareness Month On Colonoscopy Screening Rates And Public Interest In Colorectal Cancer?

Background:

National Colorectal Cancer Awareness Month was established in the year 2000 to promote awareness and early detection of colorectal cancer in the month of March. The effectiveness of this public health campaign on endoscopic screening and public interest is unknown. This study aimed to determine any seasonality in colorectal cancer endoscopic screening and public interest around March following establishment of National Colon Cancer Awareness Month.

Methods/Interventions:

To examine the seasonality of colorectal cancer endoscopic screening a the Clinical Outcome Research Initiative National Endoscopy Database was reviewed from 2002 to 2014. All screening and diagnostic colonoscopies and sigmoidoscopies by month were extracted and a ratio of procedures performed for screening by endoscopist per month was examined. To determine public interest in colorectal cancer screening Google Trends search data for terms related to colorectal cancer by month from January 2004 through June 2018 were examined. Forecasting procedures were used to identify and predict repetitive patterns in monthly rates of screening colorectal cancer screening procedures and Google search patterns.

Results/Outcomes:

From January 2002 to December 2014 we reviewed a total 1,398,996 lower endoscopy procedures from the National Endoscopy Database in patients aged 18 to 85. In aggregate, 94% were colonoscopies and 6% sigmoidoscopies, with 47% performed to screen for colorectal cancer. Over the study period, a mean of 31+/-5 lower endoscopies were performed per

endoscopist per month. There was no increase in total screening procedures in March or April. In addition, the forecasting function identified no evidence of seasonal variation in screening procedures. However in contrast Google search trends demonstrated seasonality in March for terms associated with colorectal cancer.

Conclusion/Discussion:

National Colorectal Cancer Awareness month is associated with increased public interest in colorectal cancer based on Google search trends. Yet, this has not translated into a demonstrable seasonal increase in rates of colorectal cancer screening procedures. The lack of any observable screening effect for Colorectal Cancer Awareness Month demonstrates substantial challenges in increasing compliance with colorectal cancer screening recommendations.