Family History of Colorectal Cancer: Results from the 2008 Oregon Behavioral Risk Factor Surveillance System (BRFSS)

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BACKGROUND

• Individuals with a family history of colorectal cancer (CRC) are at increased risk of developing CRC.

• Early detection of CRC among high risk individuals can reduce the burden of CRC.

OBJECTIVE

• To describe the relationship between family history status and the development of CRC among the population of Oregonians.

STUDY DESIGN

• Data from the 2008 Oregon Behavioral Risk Factor Surveillance System (BRFSS) (N=1904) were used to assess the proportion of Oregonians who has a positive family history of CRC.

• For the purposes of this study, a “positive family history” is defined as having at least one first degree relative (parent, sibling or child) diagnosed with CRC.

RESULTS

• Over seven percent of Oregonians reported having a positive family history of CRC. Of those with a positive family history, 6.9% had two or more first degree relatives who were diagnosed with CRC.

• A positive family history of CRC was associated with a five-fold increase in the prevalence of CRC (2.8%; 95% CI, 1.0%-8.0%), compared with having a negative family history (0.5%; 95% CI, 0.3%-1.0%) (P=0.003). (Figure 1)

• There was a positive association between the proportion of Oregonians with a family history of CRC and age (P=0.01) (Figure 2).

• The association between age and being diagnosed with CRC was not statistically significant (P=0.065), probably because among those surveyed, the number diagnosed with CRC was very small (total for all ages = 17) (Figure 2).

• More male first degree relatives were diagnosed with CRC than female relatives. Among those with a positive family history, 54.4% reported that their father had CRC, and 33.4% reported that their mother had CRC. (Figure 3).

CONCLUSIONS

• The Oregon BRFSS data are consistent with other data showing that a positive family history is correlated with increased prevalence of CRC.

COMMENT

• Although the US Preventive Services Task Force (USPSTF) does not include family history as a screening criterion for CRC, other clinical guidelines, such as those from the National Comprehensive Cancer Network (NCCN), state that family history is the most important risk factor for CRC and advocate for earlier screening for individuals with a positive family history.

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