Colorectal Cancer Screening Knowledge: A Qualitative Perspective from Appalachian Kentucky

Laurel A. Mills, DrPH, Department of Health Promotion and Administration, Eastern Kentucky University
Robin C. Vanderpool, DrPH, CHES, College of Public Health, University of Kentucky
Kerry L. Kilbridge, MD, Dana-Farber Cancer Institute, Harvard Medical School

Methods

- In June 2010, 35 Appalachian residents age 45 and older were recruited from a rural health clinic covering the 8 county Kentucky River Area Development District in eastern Kentucky.

- Men and women less than age 45, those who did not reside in Appalachian Kentucky, and those who had a previous CRC diagnosis were excluded from study participation.

- In-depth, semi-structured interviews were used to explore participants’ understanding of CRC-related terminology; ability to correctly identify body parts affected by CRC; and knowledge of evidence-based CRC screening procedures. Interviews lasted approximately 90 minutes.

- Interviews were audio-recorded and transcribed verbatim. Analysis of the interview transcripts were coded by two independent reviewers using definitions provided by the National Cancer Institute’s PDQ® Colorectal Cancer Screening summary and author consensus. Disagreements were resolved by discussion until consensus was reached.

Introduction

Colorectal cancer (CRC) is the third most common type of cancer in the U.S. and is the second leading cause of cancer mortality among men and women combined. Despite evidence that suggests CRC screening procedures reduce CRC incidence, morbidity, and mortality, certain segments of the U.S. population experience CRC screening disparities. During 2012 in the Kentucky River Area Development District, only 57.3% of adults age 50 and older have ever had a sigmoidoscopy or colonoscopy compared to the national average of 67.3%.

To determine how to best direct CRC educational efforts for this targeted, geographically-isolated population, we assessed CRC screening knowledge using a detailed qualitative interview protocol.

Results

Qualitative analysis of participants’ interviews showed misunderstanding in four main areas. Examples are provided below:

1. Difficulty distinguishing the difference between colon cancer and rectal cancer, and only partial understanding of CRC.
   - “Actually I think of them [colon and CRC] as the same…”
   - “[There] wouldn’t be much difference [between colon and CRC]”
   - “CRC is cancer of the rectum…”

2. Partial understanding of the function of the colon and rectum.
   - “Colon cancer would be in the walls of the intestines, where colorectal [cancer] might be in the meat or muscle”
   - “The rectum is more muscular [it has] tighter muscles.”

3. Misunderstanding of risk factors for CRC.
   - “…if’s triggered by something…from your diet”
   - “Foods you eat; fatty foods”
   - “Maybe irritation of the bowel…”

4. Confusion about different CRC screening procedures.
   - “[Barium Enema] is something you drink…and they follow it through the system”
   - “[A virtual colonoscopy is done] with a small camera that’s actually swallowed and passes through the entire length of the intestine and colon and they can see farther than they do with a colonoscopy…”
   - “A [sigmoidoscopy] is where …[that] metal thing pumped air into you”

Acknowledgements

This project was supported by internal University of Kentucky funding as well as Cooperative Agreement Number 1U48DP001932-01 from the Centers for Disease Control and Prevention (CDC). The findings and conclusions presented in this poster are those of the authors and do not necessarily represent the official position of the CDC.