Published in final edited form as:

J Immigr Minor Health. 2011 October ; 13(5): 963–966. doi:10.1007/s10903-010-9368-y.

Colonoscopy Screening Information Preferences Among Urban Hispanics

Jennie Ellison, Lina Jandorf, and Katherine DuHamel

Department of Oncological Sciences, Mount Sinai School of Medicine, 1425 Madison Avenue, Suite 2-70, New York, NY, USA

Abstract

Existing disparities are evident in colorectal cancer (CRC) screening. We sought to assess preferred sources of colonoscopy screening information among Hispanics in East Harlem, NY. Face-to-face interviews were conducted among average-risk for CRC, non-symptomatic Hispanics in community-based sites and health clinics. SPSS 16 analysis explored the relationships between sociodemographic and health care variables and preferred sources of colonoscopy information for 395 participants. The top four preferred information sources were doctor/ provider, brochures, television, and from someone who speaks the same language. We found significant differences in preferred information sources by a Chi-Square analysis of age (50–64 years; 65 or older), education (0–8th grade; 9th or above), language preferred (English; Spanish), and origin (US-born; foreign-born). Using the identified preferences for sources of information among this growing segment of the US population could inform interventions to address the important public health issue of CRC disparities.

Keywords

Colorectal cancer; Screening; Hispanics; Information

Background

Colorectal cancer (CRC) is the third leading cause of cancer-related deaths in the United States (US) [1]. CRC mortality can be dramatically decreased by prevention and detection of cancer at its earliest stages through regular screening [1]. Joint guidelines from the US Multi-Society Task Forces on Colorectal Cancer, the American College of Radiology, and the American Cancer Society (ACS) recommend the use of flexible sigmoidoscopy (FS) and colonoscopy for the detection of polyps and identification of cancer for average risk individuals aged 50 or older [1].

Unfortunately, disparities in CRC screening rates exist across ethnicities, age groups, education levels, US-born versus foreign-born people, and languages spoken. For example, the 2003 HINTS data showed Hispanics have the lowest colonoscopy rate (9% vs. 38%)

compared to non-Hispanics [2]. Age and education levels are also associated with CRC screening, as women under 65 and individuals with lower levels of education [3] have lower screening rates. Shih and colleagues found disparities in CRC screening between US-born and foreign-born adults, immigrants having lower likelihoods for being screened [4]. Such disparity may be due to barriers, such as language issues, experienced by non US-born people.

Culturally competent health services can potentially reduce health disparities among linguistic, ethnic, and cultural minorities. A part of cultural competency is understanding the different venues through which people prefer to receive health information. Little is known about behaviors related to communication and media among immigrants [5] as well as Hispanics, leading to a need for better understanding of health information preferences. These preferences may then serve in the creation and tailoring of health promotion programs and interventions, such as those to increase CRC knowledge and screening adherence. In the present paper, we identify preferred sources of CRC screening information among Hispanic urban men and women, the majority of whom are immigrants, low income, and prefer Spanish as their spoken language.

Methods

Data Collection

This cross-sectional survey was approved by the institutional review board at the Mount Sinai School of Medicine and conformed to the principles exemplified in the Declaration of Helsinki. From January 2008 to January 2009, four hundred face-to-face interviews were conducted among average-risk for CRC, non-symptomatic Hispanics in East Harlem community-based sites and health clinics for a larger, parent study identifying CRC screening barriers and facilitators [6]. We had an excellent response rate, such that only 7.6% of the people approached declined to participate.

Measures

The 16 item Likert scale for preferred sources of information, derived from Cohall and colleagues [7], is reported here.

Analysis

Of the 400, five participants did not complete any of the scale questions and therefore were not included in this analysis, resulting in 395 participants for this study. For 15 of the 16 items, missing data ranged from 0 to 4 of the 395 participants. However, for the question asking the participant how they felt about internet as a source of colonoscopy screening information, the missing data was 86 (22%) out of 395 participants. This missing data was the result of participants feeling the item did not apply to them for some reason (i.e., not owning a computer). SPSS 16 Chi-Square analysis explored the relationships between selected sociodemographic and health care variables and preferred sources of colonoscopy information. For 2×2 tables in which any cell size was less than 5, Fisher's Exact Test was used to compute significance. Age was dichotomized into two groups (50–64; 65 and older); education was dichotomized based on high school entry (0–8th grade; 9th grade and above).

Screening adherence was calculated by ACS's Guidelines (FOBT annually; colonoscopy every 10 years after age 50). The preferred sources scale was dichotomized into Strongly Disagree/Disagree/Neither and Agree/Strongly Agree.

Results

Sociodemographic and health care characteristics are reported here: 59% of the participants were 50 to 64 years of age; 41% were 65 or older. The majority of the participants were female (72%), preferred to complete the interview in Spanish (83%), and were foreign-born (89%); 60% had at least a 9th grade education. In terms of CRC screening via FOBT and colonoscopy, 8% were adherent for FOBT only, 41% were adherent for colonoscopy only, 10% were adherent for both FOBT and colonoscopy, and 42% were non-adherent for either screening tests.

Chi-Square and Fisher's Exact Test results for screening information preferences according to several variables are shown in Table 1. In terms of percentages, the top four preferred sources for screening colonoscopy information among this sample were doctor/provider, health brochures, television, and from someone who speaks their language. Overall, fewer participants preferred to get their screening information from someone of the same gender or race, the church, or the internet. Preferences were significantly different among participants aged 50-64 versus participants 65 and over, those with up to an 8th grade education versus 9th or above, those who preferred Spanish to English for the interview, and foreign-born versus US-born. There was no significant result with regard to gender and CRC adherence. Highlights of the results for language spoken are reported here, as this variable produced the most significant results across information categories (14 out of 16). Spanish-speaking participants were more likely to prefer to receive information from health brochures, TV, someone who speaks the same language, family members, magazines, newspapers, someone who has been screened, radio, video/DVD, friends, someone who is the same race and gender, church, and internet than the English-speaking participants (OR's < 1.8).

Discussion

Access to health-related knowledge differs among ethnicities [8] and various cultural/sociodemographic factors can affect cancer information-seeking behaviors. Vanderpool and colleagues found that Spanish-speaking Hispanics were less likely than non-Hispanics to have searched for cancer information and felt confident they could acquire cancer information [8]. Therefore, public health professionals should consider the particular preferences for CRC information and colonoscopy related information among this population when designing educational messages, programs, and interventions to increase screening knowledge and risk perception.

HINTS found that Hispanics view health professionals as their most trusted source for health information [9], and virtually all our participants preferred to get colonoscopy screening information from a doctor/provider. Eighty percent of our sample preferred colonoscopy information from TV, supporting other research in which Hispanics identify TV as a major or preferred source of health information [10]. Even the internet, the source of information

preferred least by our participants, was preferred by 42%, a significant amount, showing that this population can be reached by a variety of information sources. However, if health professionals desire to reach a very specific population, such as Hispanics 65 or older or foreign-born Hispanics, our results can help direct them to good routes of information sharing for specific populations. Using the identified preferences for sources of information among this growing segment of the US population can serve in the creation and tailoring of health promotion programs and interventions for CRC screening.

New Contribution to the Literature

This paper adds to the limited knowledge of health information preferences among Hispanics. We identified preferred sources of CRC screening information among Hispanic urban men and women, which can inform interventions to address the important public health issue of CRC disparities.

Acknowledgments

This project was supported by Grant No. R21 CA119016 from the National Institutes of Health.

References

1. American Cancer Society. Colorectal cancer facts and figures 2008–2010. Atlanta, GA: 2008. Available: http://www.cancer.org/downloads/STT/F861708_finalforweb.pdf. [April 15, 2010]
2. Geiger TM, Miedema BW, Geana MV, Thaler K, Rangnekar NJ, Cameron GT. Improving rates for screening colonoscopy: Analysis of the health information national trends survey (HINTS I) data. *Surg Endosc Other Interventional Tech*. 2008; 22(2):527–33.
3. Hsia J, Kemper E, Kiefe C, Zapka J, Sofaer S, Pettinger M, et al. The importance of health insurance as a determinant of cancer screening: evidence from the Women's Health Initiative. *Prev Med*. 2000; 31(3):261–70. [PubMed: 10964640]
4. Shih YCT, Elting LS, Levin B. Disparities in colorectal screening between US-born and foreign-born populations: evidence from the 2000 National Health Interview Survey. *J Cancer Educ*. 2008; 23(1):18–25. [PubMed: 18444042]
5. Cheong PH. Health communication resources for uninsured and insured Hispanics. *Health Commun*. 2007; 21(2):153–63. [PubMed: 17523861]
6. Jandorf L, Ellison J, Villagra C, Winkel G, Varela A, Quintero-Canetti Z, et al. Understanding the barriers and facilitators of colorectal cancer screening among low income immigrant Hispanics. *J Immigr Minor Health*. 2009 doi:10.1007/s10903-009-9274-3.
7. Cohall AT, Cohall R, Dye B, Dini S, Vaughan RD. Parents of urban adolescents in Harlem, New York, and the Internet: a cross-sectional survey on preferred resources for health information. *J Med Internet Res*. 2004; 6(4):e43. [PubMed: 15631967]
8. Vanderpool RC, Kornfeld J, Rutten LF, Squiers L. Cancer information-seeking experiences: the implications of Hispanic ethnicity and Spanish language. *J Cancer Educ*. 2009; 24(2):141–7. [PubMed: 19431032]
9. Health Information National Trends Survey. [March 22, 2010] Brief number 1: cancer information seeking behaviors. 2005. at http://hints.cancer.gov/brief_1.jsp.
10. Kar, SB.; Alcalay, R.; Alex, S. The emergence of a new public health paradigm in the United States.. In: Kar, SB.; Alcalay, R.; Alex, S., editors. *Health communication: a multicultural perspective*. Sage; Thousand Oaks, CA: 2001. p. 21-43.

Table 1

Preferences for sources of screening colonoscopy information by selected variables

I prefer (agree/strongly agree) to get info about having a colonoscopy from:	Overall (%)	Age ^a		Education ^b		Language ^c		Origin ^d	
		50–64	65+	0–8th grade	9th grade+	English	Spanish	US born	Foreign born
A doctor/provider ^e	99	98	100	100	98	99	99	98	99
Health brochures ^{a c d}	84	87	78	87	81	64	88	71	85
Television ^{b c d}	80	82	76	85	76	54	85	62	82
Someone who speaks my language ^{b c d}	80	78	84	89	74	52	86	58	83
Family members ^{b c d}	78	77	80	85	74	61	82	64	80
Magazines ^{c d}	78	81	74	82	76	51	84	64	80
Newspapers ^{c d}	76	78	74	80	74	49	82	62	78
Another type of healthcare provider	76	79	71	77	75	73	77	78	76
Someone who has been screened for CRC ^c	75	75	74	75	74	64	77	73	75
Radio ^{b c d}	74	76	71	81	70	46	80	60	76
Videos or DVDs ^{a c}	74	80	65	74	73	55	78	67	75
Friends ^c	72	73	70	75	70	58	75	64	73
Someone who is the same gender ^{a b c}	59	53	66	68	53	46	61	49	60
Church ^{b c d}	59	56	63	71	50	34	63	40	61
Someone who is the same race/ethnicity ^{b c d}	55	52	60	69	46	34	60	29	59
Internet ^{a c}	42	48	31	44	42	28	46	43	42

^a Indicates the comparison between preferred source and age. Significant values produced by Chi-Square analyses are indicated ($P < .05$)^b Indicates the comparison between preferred source and education. Significant values produced by Chi-Square analyses are indicated ($P < .05$)^c Indicates the comparison between preferred source and language. Significant values produced by Chi-Square analyses are indicated ($P < .05$)^d Indicates the comparison between preferred source and origin. Significant values produced by Chi-Square analyses are indicated ($P < .05$)^e All 2×2 tables produced for the variable “a doctor/provider” contained 1 or more cells with a cell size of less than 5. Therefore, significances were produced by Fisher's Exact Test