



The impact of provider-patient relationship quality and quality of care on colorectal cancer screening adherence

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Importance of Colorectal Cancer Screening

- In 2009, approximately 146,970 cases of colorectal cancer will be diagnosed; 49,920 deaths will occur from the disease (ACS, 2009).
- Screening allows for earlier detection and treatment of colorectal cancer, thus decreasing the rate of death.
- Multiple modalities are routinely recommended for colorectal cancer screening in the average risk individual over 50 years old (ex: FOBT, colonoscopy).

Adherence to Screening Recommendations

- In 2006, adherence to screening recommendations was 60.4% (either FOBT or endoscopy) (Smith, Cokkindes, & Brawely, 2009).
- Less than 2/3 of adults over age 50 are adherent to colorectal cancer screening recommendations
- Adherence to screening recommendations is suboptimal and requires the attention of both researchers and clinicians.

Provider-patient relationship and patient satisfaction

1. Provider recommendation is one of the main predictors of screening (Beydoun & Beydoun, 2008)
2. Referral for colorectal cancer screening requires the patient and provider to interact

Despite these facts, provider related influences on screening compliance may be more complex than simply being seen by a provider (Lasser et al, 2008).

Purpose

The purpose of this study is to examine the role of :

- a. provider communication quality
- b. patient satisfaction

in adherence to colorectal cancer screening.

Methods

- Data was obtained from Health Information National Trends Survey (HINTS) 2007
- Inclusion Criteria: individuals over 50 years old who had seen a health care provider in past year
- Sample was weighted to represent the national population.
- Analysis focused on predictors of having had screening, adherence to screening recommendations, and predictors of satisfaction and communication perceptions. All analysis controlled for demographic variables.

Independent Variables

- Provider communication quality
- Quality of care
- Health care needs met

*each patient provider variable entered into model individually

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- Gender
- Age
- Race
- Education
- Household income

*demographic variables entered into model simultaneously

Dependent Variables

- Colorectal Cancer Screening:
 - Have they had screening (FOBT, Colonoscopy or Sigmoidoscopy)?
 - Are they adherent to screening recommendations (ACS, 2009)?

Methods:

Provider Communication Variable

In the past 12 months how often did the provider:

1. give them the chance to ask questions
2. pay attention to their feelings
3. involve them in decision making
4. make sure they understood information
5. help them deal with uncertainty about their health

Responses ranged from 1 (always) – 4(never)

Reverse Scored for analysis

Summary Scale $\alpha = .865$



Methods: Quality of Care Variable

- In the past 12 months how would you rate the overall quality of your healthcare?
- Scores ranged from 1 (excellent) to 5 (poor)
- Reverse coded for analysis



Methods:

Health Care Needs Met variable

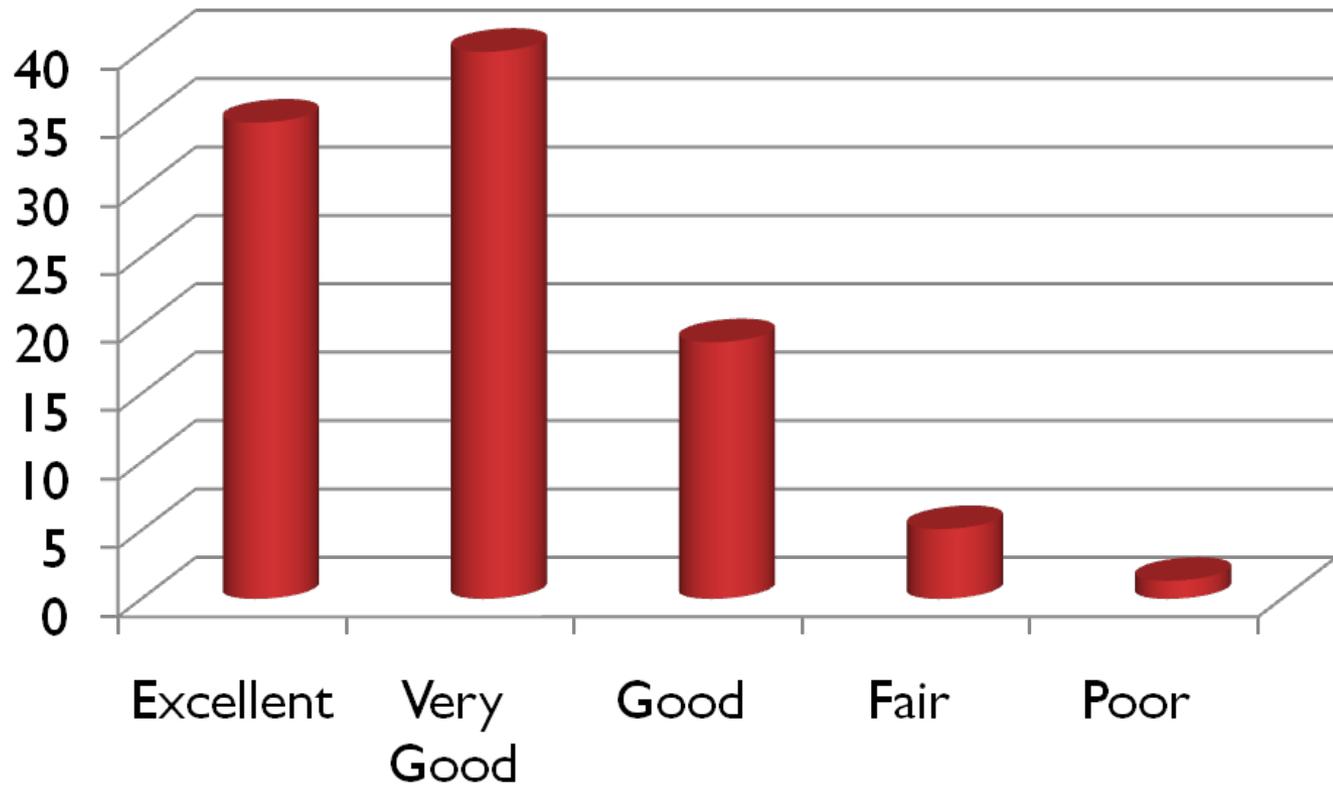
- In the past 12 months how often did you feel you could rely on your doctors, nurses, or other health care professionals to take care of your health care needs?
- 4 point scale: 1 (always) to 4 (never)
- Reverse coded for analysis

Descriptive Results

- Perception of Provider Communication
 - Mean: 3.65
 - Standard Deviation: .62

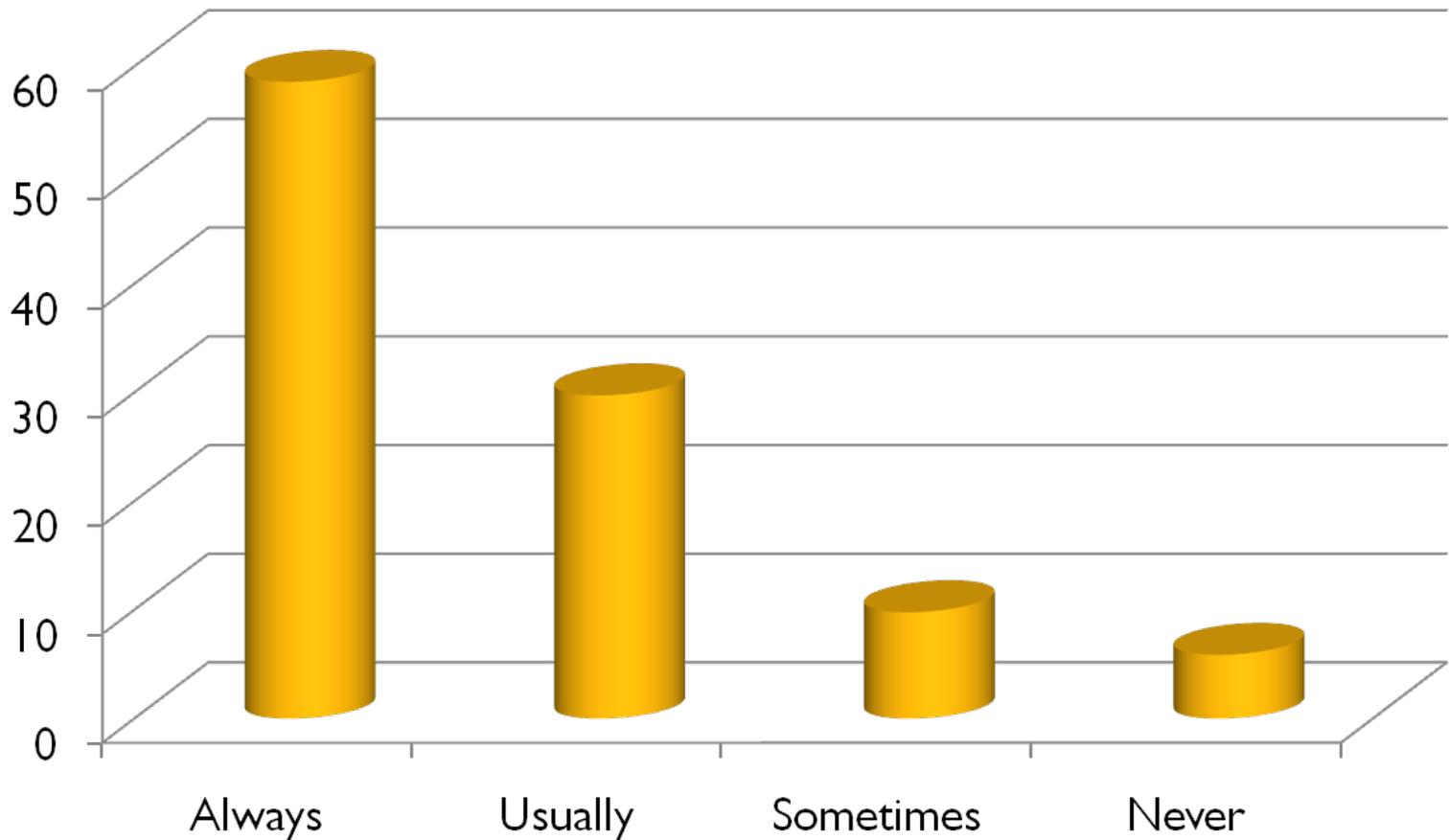
Descriptive Results: Health Care Quality

Quality of Care

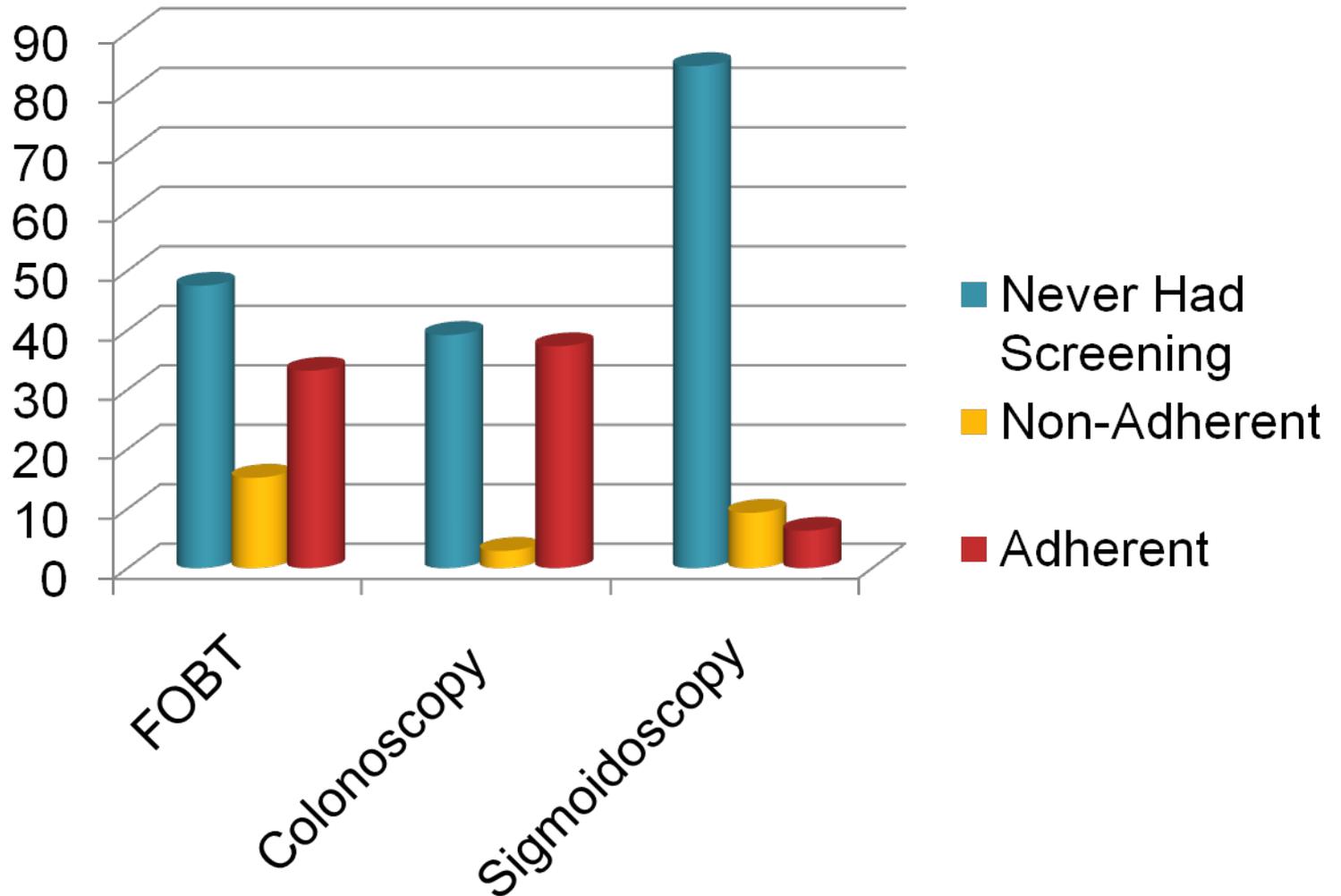


Descriptive Results: Health Care Needs Met

Needs Met



Screening Frequency



N=3835

Colonoscopy

	Had	Adherent
Communication Quality	*OR=1.13	*OR=1.3
Quality of Care	*OR=1.1	*OR=1.2
Needs Met	*OR=1.2	*OR=1.2

*Regression significant at $p < .05$

N=3832

FOBT

	Had	Adherent
Communication Quality	OR=1.0	OR=1.0
Quality of Care	*OR=1.1	*OR=1.1
Needs Met	OR=1.0	OR=1.0

*Regression significant at $p < .05$

N=3770

Sigmoidoscopy

	Had	Adherent
Communication Quality	OR=1.0	OR=1.1
Quality of Care	*OR=1.2	OR=1.2
Needs Met	OR=1.0	OR=1.0

*Regression significant at $p < .05$

What influences patients' perceptions of provider-patient communication?

- Positive perception of provider communication was related to:
 - male gender ($b=.08, p=<.01$)
 - higher household income ($b=.03, p=<.01$)
 - lower education ($b=-.03, p=<.01$)

All demographic variables entered into model simultaneously

What influences patients' perceptions of quality of care?

- Quality care was predicted by:
 - male gender ($b=.08$, $p=<.01$)
 - higher household income ($b=.06$, $p=<.01$)
 - Caucasian race ($b=.2$, $p=<.01$)

All demographic variables entered into model simultaneously

What influences patients' perceptions of health care needs being met?

- The perception of health care needs being met was predicted to be more positive with:
 - higher household income ($b=.03$, $p=<.01$)
 - lower education ($b=-.03$, $p=.06$)

All demographic variables entered into model simultaneously

Discussion

- Colonoscopy screening and adherence to screening was predicted by all provider-patient communication and satisfaction variables.
- Quality of care predicted FOBT screening and adherence, and also sigmoidoscopy screening.
- Potentially, this is due to the process of undergoing FOBT versus colonoscopy and the amount of provider-patient interaction required.

Discussion

- Lower education is a predictor of better perceived communication and satisfaction with health care needs being met.
- This could demonstrate a possible role of health literacy in developing patient perceptions of satisfaction.

Implications

- There are potential public health implications.
- Taking a patient-centered approach when tailoring communication/relationship needs may cost-effectively impact screening adherence and better patient satisfaction.
- Clinicians can be aware of the influence their communication and patient satisfaction has on screening adherence.

Conclusion

- Provider communication quality and patient satisfaction influences adherence to colorectal cancer screening after controlling for demographic variables.
- Socio-demographic factors influence patients perception of this provider-patient relationship.
- Clinicians and researchers should be aware of this when interacting with patients and developing research protocols.