

Patients' perceptions of gastroenterologists' attire in the clinic and endoscopy suite

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Abstract

Background Studying the role of gastroenterologists' attire can provide insight into patients' perceptions and help us optimize the physician–patient relationship. In this study we assessed patients' preference concerning gastroenterologists' attire, and its influence on patients' trust, empathy and perceptions of the quality of care in the clinic and endoscopic suite.

Methods A cross-sectional survey was conducted from August 2016 to February 2017. A total of 240 consecutive patients who presented to the Gastroenterology Department at the University of Florida in Jacksonville both in the clinic and endoscopic suite were included in this study. The questionnaire applied included 8 questions concerning patients' preferences regarding gastroenterologists' attire and the impact the attire had on patients' trust, empathy and perceptions of quality of care.

Results Overall, 85% of patients preferred scrubs to formal dress clothes. The preference for scrubs was higher in the endoscopic suites (89% and 93%) compared to the outpatient office (66%, $P < 0.01$). In addition, 82% of patients said they felt more comfortable speaking with gastroenterology doctors wearing scrubs and 85% of patients felt more confident about the skills of those gastroenterologists.

Conclusions Gastroenterologists' attire does influence patients' perception of the care they are receiving. There is an overall preference for the use of scrubs in the different settings of gastroenterology, both office and lab.

Keywords Patient perception, physician attire, gastroenterologist attire

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Introduction

The relationship between a patient and a physician is a complex alliance that forms the basis upon which care is provided. The role of a physician's attire in the physician–patient relationship is a topic that has been previously studied [1-5]. Despite the research that has been done, there is little evidence to show whether attire preferences are subspecialty dependent. Literature specifically looking at attire in the fields of surgery, orthopedics, obstetrics and gynecology, and emergency medicine is available [6-10]. However,

there is a lack of studies in the literature specifically addressing the attire of gastroenterologists. The aim of this study was to evaluate whether gastroenterologists' attire influences patients' perceptions of trust, empathy, and quality of care, and to assess if patients' preferences concerning gastroenterologists attire differ depending on the practice location, i.e., in the clinic or endoscopic suite.

Patients and methods

The study was a single-center, cross-sectional survey performed at the University of Florida in Jacksonville. We enrolled 240 patients, 18 years and older, who received care from members of the department of gastroenterology (GI) in one of 3 clinical settings. The clinical settings include UF Health Downtown endoscopic suite, UF Health North Campus endoscopic suite, and the Emerson outpatient clinic. Patients with non-commercial insurance undergo procedures at the Downtown endoscopy suite, whereas the North campus offers endoscopy procedures to patients with commercial insurance. Both endoscopy sites perform procedures at inpatient as well as outpatient level. The two endoscopy sites were included to evaluate if there was any

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difference in patient's approach based on their medical insurance. Emerson clinic provides outpatient gastroenterology care to patients with commercial and/or non-commercial insurance.

A survey was developed and internally validated to assess patients' preferences regarding physician attire and why they feel that way (Fig. 1, 2). The survey comprised 8 questions and specifically asked:

1. "What would you rather see your GI doctor wearing? Scrubs or dress clothes? (images are provided)"
2. "On a scale of 1-10, with 1 being the least and 10 being the most, how much does your GI doctor's attire affect the confidence you have in them?"
3. "True or False: I do not care what type of attire my GI doctor wears as long as they are neat."
4. "If your GI doctor is wearing scrubs have you ever wondered or worried if those scrubs are clean?"
5. "If your GI doctor is wearing a long white coat, have you ever wondered or worried if the coat is clean?"
6. "Please circle the attire that would make you feel the most confident in your GI doctor's abilities."
7. "Please circle the attire that would make you feel the most comfortable talking to your GI doctor."



Figure 1 Physician in suit and tie



Figure 2 Physician in scrubs and white coat

8. "Imagine a team of GI doctors seeing you while you are in the hospital. You may see some GI doctors wearing scrubs and others in dress clothes. Would you feel that the GI doctors in dress clothes: a) held a superior/senior role in the clinic, b) were likely older/more mature than those in scrubs, c) were not active in procedures, d) Would not feel any differently about the doctors in different attire."

All patient information and survey responses were de-identified. No personal patient information was used in the survey. Surveys were given randomly to all patients aged at least 18 years who presented either to the outpatient clinic or for an endoscopic procedure. The surveys were collected by the appropriate gastroenterology staff, placed in unmarked sealed envelopes and delivered to the investigators. This study was approved by the University of Florida, Jacksonville Institutional Review Board.

Statistical analysis

Descriptive summaries are reported in frequencies and percentages for categorical variables, and medians and quartiles for numeric variables. Across center comparisons were made using Pearson's chi-square test (or Fisher's exact test if some expected frequencies were small) for categorical data, and using the non-parametric Wilcoxon rank-sum tests for continuous data. The level of significance was Bonferroni-adjusted for multiple tests to preserve a family-wise level of significance of 5%. That is, a P-value was considered significant if it was <0.0045 ($0.05/11$ tests for outcomes). All analyses were performed using SAS® for Windows Version 9.4.

Results

See Table 1. Overall, 85% of patients interviewed preferred GI doctors to wear scrubs rather than formal attire, with 66% of the patients at Emerson clinic choosing scrubs, compared to 85% at Downtown endoscopy suite and 93% at North endoscopy suite ($P<0.001$). A total of 82% of patients stated that they feel more comfortable speaking with GI doctors wearing scrubs. In addition, 85% of patients stated that they feel more confident in the skills of gastroenterologists wearing scrubs. On subgroup analysis based on clinical setting, patients at the Downtown endoscopy suite were more inclined to consider that GI doctors' attire influenced their confidence in the physicians' skills (mean=8.69), when compared to patients at North endoscopy suite and Emerson clinic (mean=4.91 and 4.29, respectively; $P<0.001$) (Table 2). More patients in the Downtown endoscopy suite (45%) responded that GI physicians appearing in dress clothes were not active in the procedure compared to those at the North and Emerson clinics (17% and 25%, respectively; $P<0.01$).

Discussion

In this study, the majority of patients preferred their gastroenterologists to wear scrubs rather than formal clothes,

Table 1 Univariate analysis of patients' preference regarding gastroenterologists' attire

Variable	Total (240, 100%)	Downtown endoscopy (89, 37%)	North endoscopy (92, 38%)	Emerson clinic (59, 25%)	P-value
What would you rather see your GI doctor wearing?					
Either	18 (8)	1 (1)	5 (5)	12 (20)	<0.001 ^a
Formal dress	18 (8)	9 (10)	1 (1)	8 (14)	
Scrubs	204 (85)	79 (89)	86 (93)	39 (66)	
I do not care what type of attire my GI doctor wears as long as they are neat					
False	43 (18)	16 (18)	20 (22)	7 (12)	0.304 ^b
True	197 (82)	73 (82)	72 (78)	52 (88)	
If your GI doctor is wearing scrubs have you ever wondered or worried if they are clean?					
No	205 (85)	74 (83)	80 (87)	51 (86)	0.743 ^b
Yes	35 (15)	15 (17)	12 (13)	8 (14)	
If your GI doctor is wearing a long white coat, have you ever wondered or worried if they are clean?					
No	206 (86)	73 (82)	80 (87)	53 (90)	0.380 ^b
Yes	34 (14)	16 (18)	12 (13)	6 (10)	
Please circle the attire that would make you feel the most confident in your GI doctor's abilities					
Either	23 (10)	1 (1)	8 (9)	14 (24)	<0.001 ^b
Formal dress	14 (6)	7 (8)	1 (1)	6 (10)	
Scrubs	203 (85)	81 (91)	83 (90)	39 (66)	
Please circle the attire that would make you feel the most comfortable talking to your GI doctor					
Either	27 (11)	3 (3)	9 (10)	15 (25)	<0.001 ^b
Formal dress	16 (7)	8 (9)	1 (1)	7 (12)	
Scrubs	197 (82)	78 (88)	82 (89)	37 (63)	
Would you feel that the GI doctors in dress clothes held a superior/senior role in the clinic					
No	75 (84)	76 (83)	45 (76)	196 (82)	0.448 ^b
Yes	14 (16)	16 (17)	14 (24)	44 (18)	
Would you feel that the GI doctors in dress clothes were likely older/more mature than those in scrubs					
No	87 (98)	89 (97)	54 (92)	230 (96)	0.235 ^a
Yes	2 (2)	3 (3)	5 (8)	10 (4)	
Would you feel that the GI doctors in dress clothes were not active in procedures					
No	10 (11)	41 (45)	10 (17)	61 (25)	<0.001 ^b
Yes	79 (89)	51 (55)	49 (83)	179 (75)	
I would not feel any differently about the doctors in different attire					
No	23 (26)	48 (52)	21 (36)	92 (38)	0.001 ^b
Yes	66 (74)	44 (48)	38 (64)	148 (62)	

Data is counts (percentages)

^aFisher's exact test; ^bPearson's Chi-square test

Table 2 Univariate analysis of the influence of gastroenterologists' attire on patients' confidence (score from 0-10)

	n	Mean	SD	Lower quartile	Median	Upper quartile	P-value*
Downtown endoscopy	89	8.69	1.91	8.00	10.00	10.00	<0.001
North endoscopy	92	4.91	3.25	1.50	5.00	8.00	
Emerson clinic	59	4.29	3.44	1.00	4.00	7.00	

*Wilcoxon rank sum test

Summary Box

What is already known:

- Literature specifically looking at attire in the fields of surgery, orthopedics, obstetrics and gynecology, and emergency medicine is available
- Despite the research that has been done, there is little evidence as to whether attire preferences play a role in the field of gastroenterology

What the new findings are:

- Scrubs are the preferred gastroenterologist attire overall
- The use of scrubs also positively influences patients' perception of the medical care they are receiving

with a greater preference for scrubs among patients in the endoscopic suites compared to those in clinics. Interestingly, patients felt more comfortable speaking with GI doctors wearing scrubs and expressed greater confidence in the clinical skills of physicians using scrubs.

Previous studies, such as the TAILOR investigation [1], performed a systematic review of the existing literature to examine the influence of attire on patients' perceptions of trust, satisfaction, and confidence. They found that factors such as patient age, location, and clinical setting influenced patients' perceptions. Since cultural influences play a large role, it has been a topic of international interest, with investigations occurring at centers in the US, the UK, Italy, and South Korea [2-5]. However, these studies did not evaluate patient perceptions over practitioners in gastroenterology, a subspecialty of medicine with a great interface between procedures, such as upper endoscopies and colonoscopies, and clinical office visits where patients present with a vast array of complaints. Studying the role of physician attire specifically in the subspecialty of gastroenterology provides insight into patients' perceptions and is a useful tool in order to optimize the physician-patient relationship in GI practice.

Our study has important clinical implications. Scrubs are the preferred gastroenterologist attire overall. In addition, the use of scrubs positively influences patients' perception of the medical care they are receiving. Standardizing scrubs in the gastroenterology practice could help the development of a stronger physician-patient relationship.

There are limitations to our study, no socioeconomic information was collected from the questionnaire applied. It could be important to evaluate whether the preference for the use of scrubs is related to age group, sex or economic status. Moreover, a large number of television talk shows frequently have their hosts wearing scrubs. It would be of value to assess in the questionnaire whether patients watch such type of health-and-wellness programs, as a tool to evaluate whether attire preference is linked to underlying exposure to doctors in scrubs on television.

Prospective studies are recommended to assess the impact of patients' perceptions on gastroenterologists' attire and procedure outcomes, stratifying the data based on socioeconomic status as well as age and sex.

In conclusion, our study showed that a clear majority of patients at the University of Florida Jacksonville Campus prefer the use of scrubs rather than formal suit and tie, in both the outpatient setting and procedural areas. Scrubs are associated with a greater sense of clinical competency and professionalism for gastroenterologists.

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