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Factors that Affect Consultation and Screening for Fecal Incontinence

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Abstract

Background & Aims—Fecal incontinence (FI) affects 15% of people age 70 years and older, but only 10%–30% discuss FI with their physicians. We aimed to identify barriers that prevent people from consulting with their physicians, and physicians from screening for FI.

Methods—We performed structured interviews of 124 individuals with FI (mean 56 years old, 87.9% women) recruited from 6 medical offices at the University of North Carolina Hospitals from June 2012 through March 2013. The subjects completed the Fecal Incontinence Severity Index and Fecal Incontinence Quality of Life Scale questionnaires. Interview questions aimed to determine which patients had consulted physicians for FI. Eleven of the 56 physicians with patients included in the study responded to the survey.

Results—Eighty-eight of the 124 participants consulted with their physicians about FI (consulters). These individuals had a higher incidence of depression than the 36 subjects who did not consult with their physicians about FI (non-consulters; $P=.04$), but similar Fecal Incontinence Severity Index scores. A smaller proportion of non-consulters were aware of available treatments than consulters ($P<.01$). Fifty-six percent of non-consulters said their FI was not serious enough to consult a physician. There was no difference between consulters and non-consulters in embarrassment in talking about FI. Among consulters, 88% initiated the conversation about FI with their physician. Seven of the 11 responding physicians screened for FI, and only screened

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high-risk patients. The 4 physicians who did not screen for FI were unaware of its prevalence, viewed FI as a low priority, or stated that patients were responsible for reporting their own symptoms.

Conclusions—Based on surveys of physicians and patients, many patients have insufficient knowledge about the availability and effectiveness of treatments for FI. Some people with FI do not discuss it with their physician because their symptoms are mild, and most prefer physicians to ask them directly about FI. Educating patients and physicians about the prevalence of FI and management strategies may improve rates of consultation rates.

Keywords

accidental bowel leakage; fecal incontinence; FIS; FIQOL

Introduction

Fecal incontinence (FI) is the inability to control bowel movements which may result in the accidental loss of liquid stool, solid stool, or mucus. The prevalence of FI is unrelated to race or ethnicity^{2,3} and is estimated to be 7-12% in non-institutionalized U.S. adults^{1, 2}. It is more common among women than men (9.4% vs. 7.3%)³. FI affects over 15% of people aged 70 and older, and the presence of FI increases the likelihood of elderly adults being admitted into nursing homes². The impact on quality of life (QOL) depends partly on the frequency and severity of FI which varies from daily loss of all stools to infrequent staining of underwear⁴. An estimated 2.7% of adults report leakage of solid or liquid stool at least weekly². The impact of FI may include embarrassment, social isolation, job loss, and depression⁵.

Although effective treatments are available for FI, surveys suggest only 10%⁴ to 30%⁶ of patients discuss treatment options with their physician. A lack of systematic screening for FI by clinicians compounds this problem⁷. The study goals were (1) to identify reasons patients fail to consult their physician about FI and (2) identify reasons physicians fail to screen for FI. We tested the following hypotheses:

1. Patients with FI may fail to consult physicians because:
 - a. Non-consulters are less aware of treatment options for FI than consulters
 - b. Non-consulters are more likely to have higher scores on the Charlson Index of Disease Comorbidity⁸.
 - c. Non-consulters have a lower expectation that FI can be improved
 - d. Non-consulters are more embarrassed than consulters about discussing FI
2. Physicians may fail to screen for FI because:
 - a. Non-screener are more likely than screeners to believe FI is rare
 - b. Non-screener believe FI has less impact on the patient's QOL
 - c. Non-screener rate FI as less important to screen for than elevated triglycerides, diabetes, excessive use of alcohol, or urinary incontinence.

3. Through open-ended questions, we also sought to identify novel differences between patient consulters and non-consulters, and between physician screeners and non-screeners that may explain possible barriers to obtaining treatment for FI.

Methods

Based on an a priori power analysis, the targeted enrollment was 128 patients with FI, which is based on t-tests with an alpha of 0.05, power of 0.80, and an effect-size of 0.5 standard deviations. Patients were recruited from six waiting rooms of the University of North Carolina Hospitals over 20 weeks. These included primary care clinics (family medicine and internal medicine) and specialty clinics (gastroenterology, geriatric medicine, urogynecology, and rheumatology). To minimize embarrassment, patients completed an anonymous checklist by identifying general gastrointestinal symptom(s) they experienced in the past month (Table 1), and those who answered positively to FI and were at least 18 years of age were invited to participate.

After giving written consent, patients and/or caregivers completed the modified Fecal Incontinence Severity Index (FISI)⁹ and Fecal Incontinence Quality of Life (FIQOL)¹⁰ questionnaire. A structured interview was also completed in the clinic or by telephone. Family caregivers were permitted to assist in answering questions. Medical records were reviewed to collect data to permit calculation of the Charlson Index of Disease Comorbidity⁸. Upon completion of the study, patients received a check for \$25.

Fecal Incontinence Severity Index

The FISI consists of 4 questions about the frequency of different types of bowel leakage: solid, liquid, mucus, and gas. The answer choices for the frequency of leakage were one to three times per month (coded 1), once per week (2), two or more times a week (3), once per day (4), and two or more times per day (5). Scoring of the FISI was previously explained⁹. Because we believe patients are better able to judge subjective qualities such as embarrassment and disruption of activities, patients' weighted scores rather than physician weighted scores were summed to obtain a total FISI score.

The FISI was modified by adding questions related to volume of solid, liquid, and mucus leakage. The possible responses were coded as: "Never" (0), "Stain only on underwear or pad" (1), "Small amount – 1-2 teaspoons" (2), "Moderate amount – 3-5 teaspoons" (3), "Large amount – ½ cup to 1 cup" (4), and "Full bowel movement" (5). Questions related to sound and odor for gas leakage were added, and the answer choices were coded as: "None" (0), "Not noticeable" (1), "Somewhat noticeable" (2), and "Definitely noticeable" (3). Responses of "Refused" and "Don't know" were treated as missing values.

Fecal Incontinence Quality of Life

The FIQOL questionnaire consists of a total of 29 questions to assess the patient's quality of life. There are four categories: lifestyle (10 questions), coping/behavior (9 questions), depression/self-perception (7 questions), and embarrassment (3 questions). The responses are coded as: "Most of the time" (4), "Some of the time" (3), "A little of the time" (2), and "None of the time" (1). Higher numerical responses indicate a poorer QOL. The first

question, which evaluates general health, was reverse coded for consistency. A mean score was calculated for each category. The response “Does not apply” was coded as a missing value. The FIQOL total score was calculated by adding the responses for all four categories.

Patient Interviews

Patients and/or caregivers were interviewed to assess beliefs and experiences regarding FI. The interview included questions on whether patients had discussed FI with their physician. A follow-up question inquired whether the patient or physician initiated the discussion about FI. Non-consulters chose from a list of pre-hypothesized reasons for not disclosing their FI to a physician (Table 4). All patients rated how much embarrassment was caused by consulting with their physicians about FI on a scale from 0 to 10, with 10 indicating extreme embarrassment. Patients also answered questions to assess their awareness and knowledge of FI treatment options and their expectation for treatment success. Additional qualitative questions elicited how patients coped with FI and their suggestions for improving open-communication with their physicians about FI.

Physician Interviews

The physicians treating these patients were e-mailed questions about their screening practices. They were also asked questions eliciting demographic information, their knowledge of FI prevalence in their patient population, whether FI affects quality of life, whether they actively screened for FI and what were their criteria (if any) for screening, and frequency for screening. Open-ended questions inquired about preferred treatment options and potential barriers for their patients to obtain treatment. If physicians were non-screeners, they provided reasons for not screening and compared the importance of screening for FI to screening for other health conditions.

Ethics Review

The study was approved by the Institutional Review Board of the University of North Carolina at Chapel Hill on May 21, 2012.

Statistical Analysis

The consulters were compared to non-consulters on a variety of characteristics using t-tests for independent samples. An alpha level of 0.05 was used for each 2-tailed test without correction for multiple comparisons. Descriptive analyses were employed to characterize the non-consulters and to explore reasons for not consulting.

Results

A total of 1373 patients were screened using the anonymous checklist, of which 195 (14.2%) reported experiencing FI within the past month. Of this subgroup, 129 (66%) consented to participate, but only 124 completed all parts of the study. A comparison of consented patients to patients who withheld their consent showed that study participants were representative (Table 1): The number of gastrointestinal symptoms reported by individuals who consented to participate (4.4 ± 1.9 ; mean \pm SD) was not significantly different compared to those who withheld their consent (4.0 ± 2.2 ; $p=0.2$).

Anonymous gastrointestinal symptom checklist

Table 1 compares the total number of gastrointestinal symptoms on the anonymous checklist reported by patients with and without FI. The average number of gastrointestinal symptoms per person without FI was 1.4 ± 1.7 compared to 4.3 ± 2.0 for people reporting FI ($p=0.0001$). Each gastrointestinal symptom on the checklist was endorsed more frequently by patients with FI compared to patients without FI ($p=0.0001$). Consulters were more likely than non-consulters to report diarrhea (68.2% vs. 33.3%; $p=0.002$).

Demographic characteristics

Demographic characteristics of the 124 participants and their clinics of origin are summarized in Table 2. This table also compares consulters to non-consulters on the Charlson Index of Comorbidity, FISl, and FIQOL. Contrary to our hypothesis, there were no significant differences in the Charlson Index of Comorbidity between consulters and non-consulters (2.2 ± 2.5 for consulters and 2.4 ± 2.8 for non-consulters, $p=0.6$). Also, no significant differences were found on the FISl and FIQOL except on the depression subscale of the FIQOL (i.e., greater impact on depression in consulters; $p=0.04$).

Knowledge of Treatments and beliefs about their effectiveness

As predicted, non-consulters were less likely to know of any available treatments for FI ($p=0.001$). Participants who responded “Don't know” were grouped with those whose responses were “No”: 29 of 36 non-consulters (81%) were unaware of available treatment compared to 41 of 88 consulters (47%, $p=0.002$). Consulters were aware of the following treatments: over the counter medication (59%), biofeedback therapy (27%), surgery (23%), exercise (35%), and diet modification (36%); while non-consulters were aware of biofeedback (8%), over the counter medication (14%), and surgical treatments (3%). Approximately, half of the participants (48%) knew about more than one available treatment.

Five out of 7 non-consulters who knew of available treatments believed these treatments were effective: 2 believed available treatments could completely cure FI, and 3 believed they are very effective. Only 2 remaining non-consulters believed treatments to be not effective. Among the 47 consulters, 3 viewed treatments as able to produce a complete cure, 19 viewed them as very effective, 22 as somewhat effective, and 3 as not effective. There were no significant differences between consulters' and non-consulters' views on effectiveness of available treatment for FI ($p=0.45$).

Self-help strategies

Self-help strategies used to minimize the impact of FI were grouped into five categories (Table 3). Only 17% of consulters and 22% non-consulters did not use any self-help strategies, $p=0.51$. Consulters were more likely than non-consulters to take over-the-counter medication ($p<0.01$) and to limit food intake before leaving home ($p=0.05$). Consulters used more self-help strategies (1.7 ± 1.2) compared to non-consulters (1.2 ± 0.9), $p=0.01$.

Embarrassment and other reasons for not discussing FI with physicians

There was no significant difference between non-consulters and consulters when participants rated how much embarrassment was caused by discussing FI. On a ten point scale with zero being no embarrassment and 10 being extreme embarrassment, non-consulters averaged 3.6 ± 3.7 compared to 3.4 ± 3.6 for consulters ($p=0.87$). The embarrassment subscale of the FIQOL questionnaire similarly showed no difference: 2.7 ± 0.9 for non-consulters compared to 2.5 ± 0.9 for consulters (Table 2, $p=0.40$).

In addition to embarrassment, other reasons that non-consulters reported for not discussing FI with their physicians are listed in Table 4. Non-consulters were more likely to view FI as a natural process of aging in comparison to consulters ($p=0.0001$). In line with our predictions, 36% of non-consulters mentioned embarrassment as one reason for not consulting.

Non-consulters who reported their FI as “serious” vs. “not serious”

The 56% of non-consulters who did not think their symptoms were serious enough to seek medical care was unexpected. We explored this with a post-hoc analysis comparing the severity of FI between non-consulters who viewed their FI as “not serious” to non-consulters who viewed their FI as “serious” (Table 5). The “not serious” non-consulters had significantly fewer bowel accidents consisting of liquid stool ($p=0.04$) and mucus ($p=0.02$), and the overall FISI scores tended to be lower (21.9 ± 9.6) compared to the “serious” non-consulters (26.1 ± 13.3 ; $p=0.07$). “Not-serious” non-consulters were also more likely to view FI as a natural progression of aging ($p=0.0001$) and to use an over-the-counter medication to manage FI ($p=0.04$) compared to “serious” non-consulters.

How to improve consultation rates

Participants provided suggestions for ways to facilitate consultations by future patients with FI (Table 6). Both consulters (57%) and non-consulters (72%) thought physicians should directly ask their patients about FI. Also, 49% of all participants recommended that medical personnel use questionnaires or insert questions about FI in the patient history collected before physician visits. Study participants indicated that physicians rarely screen for FI. Only 12% of the participants were asked by their physicians about FI in specialty clinics while 13% were screened by their physicians in primary care clinics. Among the consulters, 88% said the discussion(s) about FI were initiated by themselves.

Participants stated physicians should be aware of other issues that may lead to FI. In both consulters and non-consulters, 52% believed their FI was due to another medical issue, 27% due to surgical complications, and 23% due to medication side-effects. Participants mentioned other factors that may have caused their FI: 25% believed they had weak pelvic floor muscles, 22% stated they have poor diet habits, 21% viewed FI as a natural part of aging, 19% of female participants experienced difficult vaginal deliveries, and 17% were unsure of what caused their FI.

Physician characteristics and responses

Fifty-six physicians were emailed the survey. Eight geriatricians, one rheumatologist, one general internist, and one gastroenterologist responded. Among these 11, two geriatricians, the rheumatologist and the general internist were non-screeners. There was no significant gender difference between the screeners and non-screeners ($p=0.08$). Of the four non-screeners, three reported that FI was rare ($<5\%$ prevalence) in the general patient population. Though both screeners and non-screeners viewed FI as having a significant impact on the patient's QOL, non-screeners considered FI as less important to screen for compared to other health issues such as elevated triglycerides, diabetes, excessive use of alcohol, and urinary incontinence. Half of the non-screeners acknowledged time restriction as the major barrier to screen. All non-screeners reported the patient or caregiver is responsible for addressing FI issues if the symptoms become severe enough to seek medical care. Among the seven physicians who screened for FI, only one believed FI is rare while the remaining six believed that at least 10% of the general population experiences FI. All stated they screen only selected patients with other conditions and/or symptoms considered to be risk factors for FI. All screeners prescribed different treatments based on the etiology and severity of the patient's FI. When asked about barriers for screening or addressing FI, 50% of screeners stated that accessibility to subspecialty care is limited and that medical costs may outweigh the benefits of receiving expensive treatments such as biofeedback or surgery.

Discussion

The purpose of this study was to identify reasons why fewer than 30% of people with FI discuss this problem with their physician. We were able to confirm several a priori hypotheses. For example, non-consulters are less aware of treatment options available for FI. Due to this knowledge deficit, non-consulters have lower expectations for medical treatment methods to improve FI. This knowledge deficit issue could be addressed by public awareness programs and patient educational brochures in clinic waiting and examination rooms.

Our a priori hypothesis that embarrassment is a major deterrent to seeking medical care for non-consulters was not confirmed. There was no significant difference in the self-reported embarrassment ratings between consulters and non-consulters. Non-consulters were more likely to view their FI as a natural part of aging compared to consulters ($p=0.0001$). The reasons they gave for not consulting (Table 4) and what they believe caused their FI (i.e., FI caused by another medical illness, post-surgical complication, and medication side-effects) provide possible explanations for the failure to find a strong association between non-consulting and embarrassment.

An unexpected finding was that 56% of non-consulters did not think their FI was serious enough to consult a physician. A post hoc comparison between consulters and the subgroup of non-consulters who viewed their FI as “not serious enough to consult” suggests these non-consulters actually have less severe FI: their total FISI scores were lower than those of the consulters ($p=0.04$), and they reported significantly fewer bowel accidents consisting of liquid ($p<0.02$) and mucus ($p<0.002$) FI. These data suggest that a subgroup of people with FI do not consult physicians because their FI is less severe and they view it as a normal part

of aging and/or not a medical problem; these individuals are distinct from other non-consulters who find it embarrassing to discuss FI with their physician, and are less knowledgeable about treatments for FI. The 56% of “not serious” non-consulters may not be targets for intervention; however, other individuals whose failure to consult physicians may be related to a lack of awareness of treatment options, may benefit from screening and treatment programs.

Most people with FI employ self-management strategies such as pad use and non-prescription medications to control diarrhea and constipation whether they are consulters (87%) or non-consulters (78%). Consulters use significantly more of these strategies than non-consulters (Table 3), probably because more than half of non-consulters have milder symptoms of FI which they do not regard as serious enough to consult physicians for. The self-help strategies used more often by consulters than non-consulters were medications to control diarrhea or constipation, and restricting food intake to minimize FI. Food restriction is a maladaptive method of managing FI that is employed by 32.4% of people with FI.

We predicted non-consulters would have higher Charlson Comorbidity Index scores than consulters, because patients with multiple chronic illnesses may be more concerned about other pressing health issues. Thus, they would be less likely to consult for FI and view FI as a normal sequel to other disease processes. However, the Charlson Index was not significantly higher in non-consulters compared to consulters.

The purpose of the physician surveys was to learn what influences their decision to screen for FI. Seven of the 11 physicians reported that they screen for FI, but all indicated they screen only high-risk patients. They indicated that limited access to subspecialists who treat FI and the high costs of treatments such as biofeedback, surgery, or surgical implants, discourages them from screening. As predicted, non-screener were less knowledgeable about FI: 50% thought FI is less prevalent than epidemiological studies suggest and they think it is the patient's responsibility to bring up FI during consultation. Also non-screener believed FI is less important to screen for compared to other health conditions. Though 7 of the 11 physicians indicated they were regular screeners for FI, the responses of the patients in this study do not support this: 88% of consulters stated they initiated the conversation about FI with their physician.

This study has several limitations. The participation rate was 63% for people who reported having FI on the anonymous gastrointestinal symptom checklist; this is acceptable but relatively low. However, the non-participants with FI reported similar rates of gastrointestinal symptoms compared to participants without FI, which suggests that the sample is probably representative of all people with FI. A second limitation is that the physician sample size was too small and the proportion of physicians who provided data was low at 19.6%. Clearly inferences about physician screening behavior will need to be confirmed. A third concern is that the proportion of people with FI who reported consulting physicians was higher than expected: 71% in this study compared to 30% or less in previous reports⁶, which raises a concern that the sample could be biased by self-selection (i.e., non-consulters may be less willing to participate in the study). A possible explanation may be

that the majority of recruited patients were from specialty clinics. Further studies, especially in primary care clinics, are needed to confirm our findings.

Implications for clinical practice

A key finding of our study is that non-consulters with FI are not a homogenous group; there is a subset who do not consult because they are unaware that effective treatments exist, and there is a different subset of patients who do not consult because they do not believe their symptoms are severe enough to require medical management. Post hoc analysis confirmed that people with FI who do not believe their symptoms are serious enough to require treatment actually have fewer liquid and mucus bowel accidents than people who list other reasons for not consulting. This supports the concept that costly and aggressive treatments for FI should be reserved for people with frequent bowel accidents while those with infrequent and milder symptoms may be satisfied with conservative self-management practices. Further research is needed to define severity thresholds that can guide practice.

Another key finding of this study is that most people with FI (61%) prefer that their physicians screen them for the presence of FI, although this is not current practice; instead many physicians believe it is the patient's responsibility to bring this up. People with FI also expressed a strong preference that screening for FI be done by questionnaire rather than direct questioning, perhaps because they find it embarrassing to discuss this symptom.

Acknowledgments

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Abbreviations

FI	fecal incontinence
FIQOL	Fecal Incontinence Quality of Life Scale
FISI	Fecal Incontinence Severity Index
QOL	quality of life

Table 1

Anonymous questionnaire results.

	Consulters	Non-Consulters	Non-Participants with FI	Non-Participants without FI	Total
Abdominal Pain	54.5% 48/88	69.4% 25/36	50.7% 36/71	24.2% 285/1178	28.7% 394/1373
Bloating	48.9% 43/88	61.1% N=22	42.3% 30/71	18.2% 214/1178	22.5% 309/1373
Constipation	52.3% 46/88	52.8% N=19	45.1% 32/71	25.8% 304/1178	29.2% 401/1373
Diarrhea	68.2% 60/88	36.1% N=13	60.6% 43/71	16.1% 190/1178	22.3% 306/1373
Fecal Incontinence (Accidental Bowel Leakage)	100.0% 88/88	100.0% 36/36	100.0% 71/71	0.0% 0/1178	14.2% 195/1373
Heartburn	44.3% 39/88	52.8% 19/36	35.2% 25/71	23.7% 279/1178	26.4% 362/1373
Nausea	42.0% 37/88	58.3% 21/36	40.8% 29/71	19.3% 227/1178	22.9% 314/1373
Vomiting	22.7% 20/88	27.8 10/36	23.9% 17/71	8.8% 104/1178	11.0% 151/1373

Table 2
Patient Characteristics

	Consulter	Non-Consulter
Sample Size	88	36
Mean Age (years)	55.7	57.1
Mean Onset Age (years)	47.7	52.5
Gender (%)	89.8% Female 79/88	83.3% Female 30/36
Race (%)	67.0% Caucasian (59/88), 20.5% African American (18/88), 5.7% Native American (5/88), 6.8% Hispanic (6/88)	69.4% Caucasian (25/36), 25% African American (9/36), 5.6% Native American (2/36), 0.0% Hispanic (0/36)
Clinic of Origin (%)	37.5% GI Clinic (33/88), 30.7% Urogynecology (27/88), 17.0% Geriatrics (15/88), 10.2% Internal Medicine (9/88), 3.4% Family Medicine (3/88), 1.1% Rheumatology (1/88)	27.8% GI Clinic (10/36), 36.1% Urogynecology (13/36), 27.8% Geriatrics (10/36), 8.3% Internal Medicine (3/36), 0.0% Family Medicine (0/36), 0.0% Rheumatology (0/36)
Who provided information? (%)	92.0% Patient (81/88), 5.7% Caregiver (5/88), 2.3% Both (2/88)	88.9% Patient (32/36), 8.3% Caregiver (3/36), 2.8% Both(1/36)
Charlson Index (mean ± SD)	2.2±2.5	2.4±2.8
Patient FISI (mean ± SD)	27.3±12.4	23.8±11.4
FIQOL Lifestyle (mean ± SD)	2.7±1.0	2.9±0.9
FIQOL Coping (mean ± SD)	2.1±0.8	2.3±0.9
FIQOL Depression (mean ± SD)	2.9±0.8	3.3±0.9
FIQOL Embarrassment (mean ± SD)	2.5±0.9	2.7±0.9
FIQOL Total Score (mean ± SD)	10.4±2.9	11.3±3.2

Table 3

Self-help methods for managing FI.

	Consulters (%)	Non-Consulters (%)	Significance
Use pads	53.4 47/88	38.9 14/36	0.14
Use medication	44.3 39/88	8.3 3/36	0.00
Limit food intake	37.5 33/88	19.4 7/36	0.05
Routine restroom breaks	26.1 23/88	30.6 11/36	0.62
Avoid leaving home	15.9 14/88	25.0 9/36	0.24

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Table 4

Reasons non-consulters gave for not consulting their physician about FI.

Response	Non-consulters
Do not think it is serious enough *	55.6 20/36
Think it is normal with aging *	41.7 15/36
Personal embarrassment *	36.1 13/36
Do not think it is a real medical problem *	36.1 13/36
Uncomfortable with specific physician (gender) *	20.0 7/36
Do not think treatment exists	13.9 5/36
Patients believe physicians are unable to help with FI symptoms	13.9 5/36
Not enough time to discuss because of other health problems	11.1 4/36
Uncomfortable with any physician *	5.7 2/36
Think physician would be embarrassed *	2.9 1/36
Want a natural solution	2.9 1/36
Expected medical side effect	2.9 1/36

* Options given to non-consulters as reasons for not disclosing FI to their physicians.

Comparison of FISI and FIQOL between consultants, non-consulters whose FI was serious, and consultants and non-consulters whose FI was not serious.

Table 5

	Consulters		"Serious" Non-Consulters		"Not Serious" Non-Consulters	
	Mean	S.D.	Mean	S.D.	Mean	S. D.
Solid FI Freq	1.6	1.6	1.6	1.5	1.6	1.3
Liq FI Freq	1.9	1.5	2.0 [‡]	1.4	1.1 [*]	1.2
Mucus FI Freq	1.3	1.5	1.1 [‡]	1.1	0.3 [*]	0.5
Gas Freq	3.1	1.7	2.5	1.9	2.6	1.8
FISI Total Score	27.3	12.4	26.1	13.3	21.9 [*]	9.6
FIQOL Lifestyle	2.7	0.9	2.9	0.8	2.0	1.0
FIQOL Coping	2.1	0.8	2.4	0.9	3.4	0.8
FIQOL Depression	2.9	0.8	3.2	0.9	3.3	0.9
FIQOL Embarrassment	2.5	0.9	2.7	0.8	2.7	1.0
FIQOL Total Score	10.4	2.9	11.3	2.8	11.2	3.5

[‡] Significant difference between "serious" non-consulters and "not-serious" non-consulters.

^{*} Significant difference between consultants and "not serious" non-consulters.

Table 6

Patient suggestions for improving FI consultation.

	Consulter	Non-Consulter	Total
Doctors need to speak directly to patients	56.8 50/88	72.2 26/36	61.3 76/124
Patients prefer to use questionnaires or answer routine questions about FI	45.5 40/88	58.3 21/36	49.2 61/124
Relationship with doctor influences decision to consult	30.7 27/88	27.8 10/36	29.8 37/124
Doctors should be sensitive to medical costs	30.7 27/88	11.1 4/36	25.0 31/124
Doctors should overcome negative stigma	20.5 18/88	16.7 6/36	19.4 24/124
Discuss with physician if symptom is more severe	N/A	55.6 20/36	17.7 22/124
Doctors should use every day terminology	15.9 14/88	11.1 4/36	14.5 18/124
Patients need more information: brochure	8.0 7/88	5.6 2/36	7.3 9/124
Patients will discuss only with a specialist	4.5 4/88	8.4 3/36	5.6 7/124

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