

Research Article

The Relationship between Complementary and Alternative Medicine and Disease Related Concerns in Patients with Inflammatory Bowel Disease: A Mixed Methods Approach

Annelie Lindberg RN

Department of Clinical Sciences, Karolinska Institutet, Danderyd Hospital, Stockholm, Sweden

Bjöörn Fossum RNT

Department of Clinical Sciences, Karolinska Institutet, Danderyd Hospital, Sophiahemmet University, Stockholm, Sweden

Per Karlen

Department of Clinical Sciences, Karolinska Institutet, Danderyd Hospital, Stockholm, Sweden

Olle Broström

Department of Karolinska Institutet, Department of Clinical Science and Education, Södersjukhuset, Stockholm, Sweden

Lena Oxelmark RN

Department of Neurobiology, Care Sciences and Society, Division of Nursing, Karolinska Institutet, Institute of Health and Care Sciences, The Sahlgrenska Academy, University of Gothenburg, Sweden

ABSTRACT

Background: Complementary and alternative medicine (CAM) is common used by patients with inflammatory bowel disease (IBD) and they use CAM in an attempt to achieve improvement and well-being. Research has shown that IBD affects health related quality of life (HRQOL) and several aspects influenced it, such as disease activity, insufficient efficacy and side effects from treatments. Disease related concerns can also affect the HRQOL. There is little information about Swedish patients with IBD and the association between their diseases related concerns and CAM use.

Aim: To explore the possible association between disease related concerns and CAM use in IBD patients and to get a deeper understanding of IBD patients disease related concerns.

Methods: A total of 645 IBD patients from 12 different outpatient IBD clinics, were enrolled and asked to answer two questionnaires; a study specific questionnaire concerning CAM use, disease and demographic data and the Rating

Form of Inflammatory Bowel Disease Patients' Concerns (RFIPC) questionnaire. The questionnaire also contains an open question "Is there anything more that concerns you?" which the patients answer in their own words.

Results: Of the participants, 313 used CAM and expressed more concerns in 15 of the 25 RFIPC items compared to patients who did not do so/non-users. CAM use was related to younger age and female gender. The open question revealed that IBD had a major impact on everyday life and that IBD patients' worry concerned: The family and self, the burden of disease and associated factors.

Conclusion: It seems important for healthcare professional to be aware that IBD patients using CAM had more disease related concerns compared with non-users and IBD affects the whole life, especially the family and the self.

Keywords: CAM; IBD; HRQOL; Disease related concerns; Mixed method

Introduction

Inflammatory bowel disease (IBD) is a group of chronic inflammatory conditions mainly used to describe ulcerative colitis (UC) and Crohn's disease (CD). The causes of IBD are unknown. In the Nordic countries the incidence of CD is 5-8 cases/100000 inhabitants and the corresponding figure for UC is 12-14.¹ IBD is characterized by periods of increased activity (relapses) alternating with periods without inflammation (remission) but sometimes the inflammation is chronic continuously active. Common symptoms are diarrhoea, often with blood or mucus, abdominal pain, weight loss, malabsorption, malnutrition and fatigue. Manifestations of other organ disorders such as joints,

eyes, skin and liver may also occur.² Although there is still no cure for this lifelong disease, several therapeutic advances have been made in recent years. The complexity of both the acute and the maintenance medical treatment has increased and the use of new immunomodulation agents has escalated.^{3,4}

In 2006 the U.S. Food and Drug Administration introduced the Patient-Reported Outcomes Measures (PROM)⁵ concept, which provides information about how patients experience their illness and health after treatment or other intervention, including Health Related Quality of Life (HRQOL). Measurement of HRQOL provides information about physical, mental and social well-being. Validated HRQOL questionnaires can be

both generic and disease-specific. Generic questionnaires allow comparisons between different diseases and patient groups,^{6,7} whereas disease-specific ones capture important aspects of a particular disease or patient population⁸.

Numerous studies have revealed that IBD affects HRQOL⁹⁻¹² and that there are several disease-specific instruments available for IBD.¹³ HRQOL is not only influenced by disease activity and its medical management but also by insufficient efficacy and the side effects of treatment.^{3,14} Corticosteroids are one of the common treatment options in acute phase of IBD but can lead to a number of side effects such as osteoporosis, osteonecrosis, cataracts, glaucoma, diabetes mellitus, hypertension and psychological stress.¹⁵⁻¹⁹ About one third of patients with IBD will be exposed to corticosteroids within one year of diagnosis, while two-thirds will receive corticosteroids in the first ten years.²⁰ Immunomodulating treatment with tumour necrosis factor alpha inhibitor can cause serious side effects such as peripheral neuropathy as well as central nervous system and/or spinal cord demyelination.²¹ Disease related concerns can also affect HRQOL in IBD patients.²²⁻²⁴ The Rating Form of IBD Patient Concerns (RFIPC) is a self-administered questionnaire for IBD patients comprising 25 items for measuring various concerns.^{25,26} The RFIPC has been validated in Sweden and found to be reliable for both UC and CD patients.^{22,27} The strongest predictors of disease related worry in CD patients being active disease; female gender and high body mass index (BMI)²² and in UC ongoing relapse.²⁸

Complementary and Alternative Medicine (CAM) use has increased in the Scandinavian countries.²⁹ In Norway and Denmark, half and one third of hospitals, respectively, offer CAM to patients.³⁰ CAM is not easy to define, as the field is very broad and constantly changing. The World Health Organization (WHO) defines CAM as a broad set of healthcare practices, systems and products not generally considered part of the country's own tradition and not integrated into the main healthcare system.³¹ CAM can be categorized into five domains: whole medical systems, mind-body interventions, biologically-based therapies, manipulative and body-based methods and energy therapies. Whole medical systems comprise theories and practices such as homeopathic medicine, Traditional Chinese Medicine and Ayurveda. Mind-body interventions strengthen communication between the mind and body, for example meditation, prayer and healing. Biologically-based therapies involve substances found in nature, including dietary supplements and herbal products. Manipulative and body-based methods employ human touch to move or manipulate a specific part of the body, for example, chiropractic therapy and massage. Energy therapies use energy fields in the body to promote health and healing, for example qi gong, tai chi and magnet therapy.³²

The interest in CAM is growing among patients with chronic diseases^{33,34} including IBD.^{35,36} Research has shown that IBD patients using CAM report improvement in symptoms and HRQOL³⁷ However, Moser et al.³⁸ revealed that IBD patients in Austria who used CAM were more concerned about undergoing surgery, being treated differently and feeling out of control, than patients not using CAM. There is little information about Swedish patients with IBD and the association between their diseases related concerns and CAM use.

Aim

To explore the possible association between diseases related concerns and CAM use in IBD patients and to get a deeper understanding of IBD patients disease related concerns.

Methods

The study design was cross-sectional with a mixed methods approach. Data were collected by the quantitative self-administered RFIPC questionnaire supplemented with an open ended question with a request for additional items of disease related concerns. The responses to the latter were analysed using a qualitative content approach based on Krippendorff.³⁹ A combination of quantitative and qualitative methods provides an expanded understanding of the research problems compared to either approach alone.⁴⁰

Rating form of IBD patient concerns (RFIPC)

The RFIPC is a self-administered questionnaire for IBD patients. It comprises 25 items, all of which begin with "Because of your condition how concerned are you about...?" Each item is rated from 0-100 (0=Not at all, 100=A great deal) on a visual analogue scale (VAS). A higher score reflects more worries and concerns. A mean score is calculated from the total of the 25 items.

Participants

In total, 854 patients with IBD from 12 different outpatient IBD clinics in Sweden were invited to participate in the study. Of these, 163 did not respond, 41 declined participation and 5 were excluded due to incomplete questionnaires. Hence 645 patients were included (response rate 76%), 317 of whom had CD 323 UC and 5 with indeterminate colitis. Their mean age was 43 years (18-89). While 371 of the patients reported having symptoms from their disease, when 213 not reported having symptoms (Table 1).

Data collection

The patients were approached at their IBD clinic by a nurse or physician who gave them oral and written information about the study. If the patients agreed to participate they either filled out the questionnaire at the clinic or brought it home together with a pre-stamped and addressed reply envelope. At two of the centres the questionnaires were mailed out.

Table 1: Demographic data.

Participants	Total (N=645)
Male/female	334/311
Age, mean (range)	43 (18-89)
UC/CD	323/317
Disease duration, mean (range)	14 (1-57)
Symptoms from diseases Y/N	371/213
The use of CAM Y/N	313/331

Five patients with indeterminate colitis excluded from the analysis

60 patients did not state their IBD symptoms

One patient did not state the CAM use

Ethical considerations

The study was approved by the Regional Ethical Review Board in Stockholm, Sweden (no. 2008/4:6). All respondents were assured of confidentiality, and informed that participation was voluntary and that they could withdraw at any time.

Statistical analysis

Data were analysed using the statistical analysis system R, version 3.1.0. The Mann-Whitney test was employed to assess differences between CAM users and non-CAM users considering the continuous variables age, disease duration and RFIPC. The Chi-2 test was used to evaluate the difference between category variables, gender, type of disease and having symptoms or not. Statistical significance was set at $p < 0.05$.

Content analysis

Qualitative content analysis was used according to Krippendorff³⁹ Content analysis is a step-wise technique for analysing the content of a text in its context.^{39,41} The transcripts (the replies to the open ended question) were analysed using

manifest and latent content analysis. The former refers to the obvious meaning of the text while the latter comprises interpretive reading in order to capture the deep structural meaning.⁴¹ One hundred and forty five participants (95 women and 50 men), 86 of whom used CAM, commented on the open ended question: "Is there anything more that concerns you?" The replies provided explicit data comprising the meaning units, which were grouped into sub-categories, categories and a theme. In order to strengthen credibility, the analysis was conducted independently by three of the authors (AL, BF and LO), after which they discussed and achieved consensus about the findings.⁴²

Results

Quantitative results

The relationship between the demographic data of CAM users and non-CAM users.

According to the results presented in Table 2, statistically significant differences between CAM users and non-CAM users were found for age ($p < 0.001$) and gender ($p = 0.000$), but there

Table 2: Relationship between demographic variables in CAM users and non CAM users.

	CAM users n=313	Non CAM users n=331	P-value
UC/CD	147 (46%)/163 (51%)	175 (54%)/154 (49%)	0.168
Age, year, mean (range)	41 (18-78)	45 (18-89)	0.001
Gender M/F	130 (39%)/183 (59%)	204 (61%)/127 (41%)	0.000
Disease duration, year, mean (range)	14 (1-54)	15 (1-57)	0.432
Symptoms Y/N	196 (53%)/94 (44%)	175 (47%)/119 (56%)	0.053

The Chi-2 test was used for category variables and the Mann-Whitney test was used for continuous variables
Five patients with indeterminate colitis excluded from the analysis
60 patients did not state their IBD symptoms, 1 patient did not state CAM use

Table 3: IBD patients RFIPC items and CAM use or non use.

Rank	RFIPC items	CAM use (N=310)	Non CAM use (N=326)	Total (N=637)	P-value
1	Having an ostomy bag				0.25
	Mean (SD)	51.4 (36.6)	48.0 (36.8)	49.7 (36.7)	
	Median	51	45	48	0.006
	Loss of bowel control				
2	Mean (SD)	49.3 (34.4)	41.8 (34.0)	45.5 (34.3)	0.006
	Median	52.5	34	41.5	
3	Energy level				0.001
	Mean (SD)	47.3 (32.7)	38.5 (30.6)	42.9 (32.0)	
	Median	48	36	43	0.37
	Having surgery				
4	Mean (SD)	43.3 (34.0)	40.8 (33.7)	42.1 (33.7)	0.37
	Median	35	34	35	
5	Effects of medication				0.001
	Mean (SD)	43.2 (30.4)	36.0 (30.0)	39.5 (30.3)	
	Median	42	31	36.5	0.003
	Uncertain nature of my disease				
6	Mean (SD)	42.4 (32.3)	35.2 (30.8)	38.8 (31.8)	0.003
	Median	41.5	27	31.75	
7	Being a burden on others				0.04
	Mean (SD)	41.8 (34.4)	35.5 (32.6)	38.7 (33.6)	
	Median	36.5	25	30	

8	Developing cancer				
	Mean (SD)	41.8 (32.7)	36.4 (31.9)	39.0 (32.4)	0.05
	Median	38	27	31.5	
9	Ability to achieve full potential				
	Mean (SD)	41.1 (32.3)	34.8 (30.9)	37.9 (31.8)	0.009
	Median	32.5	25	28	
10	Pain or suffering				
	Mean(SD)	36.9 (29.3)	30.0 (27.9)	33.5 (28.8)	0.002
	Median	32	21	26	
11	Dying early				
	Mean(SD)	36.5 (32.7)	33.0 (31.2)	34.7 (32.0)	0.23
	Median	25	21	23.5	
12	Producing unpleasant odors				
	Mean (SD)	35.0 (34.9)	32.0 (34.3)	33.5 (34.7)	0.21
	Median	20	15	18	
13	Feelings about my body				
	Mean (SD)	34.4 (31.0)	28.9 (28.8)	31.6 (30.0)	0.016
	Median	23	18	20	
14	Attractiveness				
	Mean(SD)	33.2 (29.8)	31.3 (31.3)	32.3 (30.6)	0.02
	Median	23	19	21.5	
15	Financial difficulties				
	Mean (SD)	33.2 (33.2)	25.3 (29.9)	29.2 (31.8)	0.004
	Median	17	12	14	
16	Having access to quality medical care				
	Mean(SD)	31.9 (32.1)	25.8 (29.2)	28.9 (30.9)	0.03
	Median	18	12	14	
17	Feeling out of control				
	Mean (SD)	31.8 (30.7)	26.7 (29.1)	29.3 (30.0)	0.02
	Median	19	14	16	
18	Loss of sexual drive				
	Mean (SD)	30.9 (31.7)	28.4 (31.3)	29.7 (31.6)	0.16
	Median	17	13	15	
19	Intimacy				
	Mean (SD)	29.8 (31.6)	26.4 (30.2)	28.2 (31.0)	0.08
	Median	15.5	11	13	
20	Passing the disease to others				
	Mean (SD)	28.9 (34.0)	21.0 (29.2)	24.8 (31.8)	0.007
	Median	10	6	7.5	
21	Feeling alone				
	Mean (SD)	29.6 (29.5)	27.2 (29.7)	28.4 (29.6)	0.19
	Median	17	15	16	
22	Ability to perform sexually				
	Mean (SD)	26.8 (29.0)	25.8 (29.7)	26.4 (29.4)	0.28
	Median	14	12	13	
23	Feeling "dirty" or "smelly"				
	Mean (SD)	25.4 (30.4)	20.9 (27.3)	23.2 (29.1)	0.07
	Median	10	9	9	
24	Ability to have children				
	Mean (SD)	22.8 (30.5)	15.4 (25.2)	19.0 (28.1)	0.006
	Median	6	5	5	
25	Being treated as different				
	Mean (SD)	21.4 (25.7)	16.7 (23.6)	19.0 (24.7)	0.003
	Median	9.5	7	8	
	RFIPC total				
	Mean (SD)	35.6 (21.9)	30.5 (21.3)	33.0 (21.8)	0.004
	Median	32.12	27.08	30.44	

Statistical significance $p < 0.05$

were no differences between CAM users and non-CAM users in terms of diagnosis, disease duration and symptoms.

The relationship between CAM use and disease-related concerns.

There was a statistically significant difference between CAM users and non-CAM users, the former exhibiting more concerns in 15 of the RFIPC items (Table 3) and having a higher total RFIPC score ($p=0.0028$). The three highest rated concerns reported by patients using CAM were having an ostomy bag, loss of bowel control and reduced energy levels.

Qualitative results

The analysis revealed the theme: Inflammatory bowel disease affects the whole of everyday life based on three categories; Family and the self, Disease burden and associated factors as well as sixteen sub-categories (Table 4).

The category Family and the self comprised the sub-categories: Family members' concern, Work, Stress caused by uncertainty, the future, hereditary factors, never experiencing health, Influence on everyday life

Some of the participants were concerned due to their family members worrying about them, how the disease impacted on the family and how the children were affected by having an ill parent. Some participant felt worried about the children having to pay unnecessary attention to the fact that one parent had a chronic disease.

How my children are affected by having an ill mother.

Concerns in relation to work were expressed such as not being part of working life and fear of losing one's job. Some of the participants worried about lost career opportunities and poor retirement pension and found it difficult to accept not being able to work as much as they wished. They also worried about not feeling useful, which led to a sense of depression.

I'm mostly concerned about my ability to work. I find it difficult to accept that I'm not able to work as much as I want.

The participants reported uncertainty nature of their disease

and they also worried that the disease would become worse. Some expressed concern that no new medications would be introduced, as they had tested most of the available ones.

Not knowing when the relapses will occur.

Concerns about the future emerged in relation to work, their financial situation and the family as well as their children's future and not finding a partner.

My future. How can anyone be strong enough to love me when I'm ill and with all the complications involved?

The participants were concerned about heredity and transferring the disease to their children. They also worried that the disease would have an effect on pregnancy. Several mentioned that their doctor had not given them any clear answers with regard to heredity and worried about the effect of medication on fertility.

I'm scared to death of transmitting the disease to future children, especially as my partner also suffers from ulcerative colitis.

They also admitted concern due to the fact that inflammatory bowel disease is chronic and that they would never experience health.

That I will never get well.

The inflammatory bowel disease had a great impact on their life such as not being capable of taking care of their children or being unable to go abroad. They perceived that their symptoms ruled their life, making it difficult to lead a normal existence. The bowel symptoms appeared suddenly and unexpectedly, causing a stressful situation. One participant claimed that the disease had a negative impact on his attitude to adversity in general.

The fact that my stomach does not function puts me in a bad mood. I get annoyed and tetchy towards others because my bowels cause me trouble.

The category Disease burden comprised the sub-categories: Unable to reach a toilet in time, Fatigue, Pain, Ostomy, Fear of complications and Diet.

Table 4: Theme, categories and sub-categories.

Sub-categories	Categories	Theme
Family members' worries	Family and the self	Inflammatory bowel disease affects the whole of everyday life
Work		
Stress caused by uncertainty		
The future		
Hereditary factors		
Never experiencing health		
Influence on everyday life		
Unable to reach a toilet in time	Disease burden	Inflammatory bowel disease affects the whole of everyday life
Fatigue		
Pain		
Ostomy		
Fear of complications		
Diet	Associated factors	Inflammatory bowel disease affects the whole of everyday life
Financial worries		
Healthcare encounters and experiences		
Holistic perspective		

A concern expressed by the participants was the fear of being unable to reach restroom in time and inability to control the bowel. This was especially pronounced when travelling by public transport, which sometimes made them choose not to leave their home.

Being unable to control the bowel and that it suddenly soils my pants when among people. Not finding a toilet in time.

Fatigue was mentioned as a concern. Experiencing that the body let them down was difficult. The fatigue was perceived as considerable and as restricting their working life, social life and studies.

That my body lets me down so ruthlessly that it affects the entire everyday life of both myself and my family members.

The participants feared pain, a symptom perceived as becoming more severe with age. It was regarded as a vicious circle, where stress increased the pain and pain enhanced the stress.

I have become very afraid of pain in recent years.

A concern reported by the participants was fear of an ostomy. Some of them had previously had one and definitely did not want another, especially as they were concerned about deterioration in the quality of the bags.

My worst scenario is getting a stoma bag on my stomach. Should that happen it would feel as if life was over.

A major concern was fear of complications and the side effects of cortisone, Imurel and Remicade as well as the potential long-term bodily impact of various medications taken over a long period. Other concerns were complications such as primary sclerosing colitis (PSC), fistulas, arthritis, osteoporosis, incontinence and cancer.

I'm afraid of side effects that won't go away, such as fistulas and arthritis.

Another concern was dietary problems, for example, being careful about what one can consume and being afraid of eating the wrong type of food.

Eating the wrong things so that my symptoms will get worse.

The category associated factors comprised the sub-categories: Financial worries, Healthcare encounters and experiences as well as Holistic perspective in conventional care.

A concern mentioned was financial concern. The participants found their condition difficult in contacts with the Social Insurance Agency, as the sickness benefit application process was perceived as awkward and taking a long time.

It's so difficult being ill, contacts with the Social Insurance Agency and suchlike.

Another concern was the way in which they were encountered and their healthcare experiences. Some participants worried about not having access to a specialist physician, while several had lost confidence in physicians, expressing that they had not been encountered with respect. There was a fear of ending up in the wrong hospital as well as a wish to be treated by the same physician and having annual check-ups. Some were

disappointed that research had not resulted in better treatment options and that too little effort was devoted to research.

That so many doctors who I encountered lacked empathy and did not take my questions and reflections seriously.

The participants were concerned about the absence of a holistic perspective in conventional care. One of them stated that physicians only focus on the strictly medical aspects as opposed to the whole human being. Some mentioned a lack of social workers in the care services as well as perceiving contact with them as taboo and sensitive.

You cannot get psychological help in hospitals today as they do not treat the whole human being.

Discussion

This study used a mixed methods design to explore IBD patients' disease related worries and concerns as well as CAM use. The quantitative results revealed that CAM use was significantly correlated with more disease related concerns in 15 of the 25 RFIPC items. The five highest rated concerns associated with CAM use were: loss of bowel control, energy level, effects of medication, uncertain nature of the disease and being a burden to others. In line with others, both having an ostomy bag and having surgery were highly ranked but neither was correlated with CAM use.^{22,23,25,43}

Drossman et al.²⁵ conducted a factor analysis of the RFIPC and found four scales: Impact of disease, Sexual intimacy, Complications and Body stigma. It is interesting to note that in our study, 11 of the 15 RFIPC items that correlated significantly with CAM use were also found in the "Impact of disease" scale. It seems that IBD patients who use CAM have higher disease related concerns associated with psychological rather than physiological distress, which may explain why they require more supportive psychiatric/psychological therapy.⁴⁴

In our study mean score of the 25 RFIPC items revealed that IBD patients using CAM had generally more disease related concerns compared with those who did not use CAM. In a study carried out in Austria, Moser et al.³⁸ demonstrated that IBD patients using CAM had more concerns about surgery, being treated as different and feeling out of control but found no correlation with the total RFIPC score or CAM use. One reason for this discrepancy may be that the study by Moser et al. is from 1994 and CAM use in the general population in Sweden has increased from 22% to 49% in the period 1980-2002,⁴⁵ which trend could affect CAM use in patients with IBD.

Use of CAM in IBD may indicate psychosocial distress.⁴⁶ In line with our results, research has shown that women with IBD report more intense concerns than men.^{47,48} And, in addition, depression coping was a predictor of disease related concerns in IBD⁴⁷ as well as referral to a psychiatrist for counselling.⁴⁹ One reason why IBD patients with strong disease related concerns turn to CAM may be the absence of a more holistic approach in conventional care. Some studies indicate that when IBD patients turn to CAM they gain greater control over their disease.⁵⁰⁻⁵²

Patients who used CAM did not differ from those who did not in terms of diagnosis, disease duration or symptoms, but in relation to age and gender. This is not in line with Moser et al.²⁴

who merely found a correlation with disease duration in that the longer the disease duration, the more often IBD patients used CAM. Different factors have been shown to be correlated with CAM use, and according to Hilsden et al.⁵³ it is not surprising that CAM use in IBD patients cuts across all demographic and disease related groups.

The qualitative results of this study revealed that 86 out of 145 patients used CAM and that IBD affects the whole of everyday life, especially the family and the self. IBD patients were also concerned about work, their possibility to have children and the future. Several studies indicate that IBD affects HRQOL^{9-11,54} and it has been demonstrated that IBD patients use more anxiolytics and antidepressants than the general population.⁵⁵ Our qualitative results emphasize how disease related concerns affect the IBD patient's daily life. One of the main qualitative findings is that IBD patients worry about their symptom burden. Many expressed concerns about multiple symptoms such as fistula, primary sclerosing cholangitis (PSC), cancer, side effects of medical treatment as well as long-term effects of treatment and surgery. Symptom burden could be seen as the sum of the severity and impact of symptoms reported by a significant proportion of IBD patients.⁵⁶ Devlen et al.⁵⁷ attempted to create a patient-reported conceptual model of the impact of IBD by conducting qualitative interviews and compiling an inventory of existing patient-reported outcome measures in the literature. Such a model could be valuable for understanding the full burden of IBD.

Another important finding of the qualitative part of this study was IBD patients' concerns about healthcare encounters. Some reported that they had lost trust in physicians and experienced a lack of respect during encounters. Previous research has shown that a common reason for IBD patients wishing to change physician was a poor patient-doctor relationship (PDR),⁵⁸ as a suboptimal PDR can impair the quality of care.⁵⁹ Physicians working with IBD patients should be aware that such factors play a role.⁶⁰

In the qualitative part of this study, 145 patients, 95 of whom were women, responded to the question: "Is there anything more that concerns you?" Other studies have shown that women are more likely to report health related problems compared to men.⁶¹ These findings highlight the importance of asking men about disease related concerns, as they could have concerns that they are unwilling to express.

Strength of our study was the use of mixed methods. The qualitative results revealed IBD patients' concerns about symptom burden and long term complications as well as the importance of a respectful meeting with a holistic approach. These results could not have emerged from the quantitative part of the study. Quantitative and qualitative data provide an expanded understanding of IBD patients' CAM use and disease related concerns, as the two methods complement each other. Another strength was the multicentre design, with patients from 12 different geographic locations in Sweden, which increases generalizability.

Clinical Implications

In order to provide patient-centred care with more focus on health than on disease it seems important for healthcare

professionals (HCPs) to be aware of the fact that younger women use more CAM and express more disease related concerns.⁵³ HCPs also need to support and strengthen their communication with patients and exhibit a tolerant attitude, thus enabling IBD patients to be confident and open about discussing CAM treatments and disease related concerns. It is also essential for HCPs to discuss the concept of CAM evidence-based medicine and seek further evidence when necessary.

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ADDRESS FOR CORRESPONDENCE:

Annelie Lindberg RN, PhD, Division of Gastroenterology, Department of Clinical Science, Karolinska Institutet, Danderyd Hospital, Stockholm, SE-18288 Stockholm, Sweden, Tel +46812356854; Fax +46812357763; E-mail: annelie.e.soderstrom@sll.se

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