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Alimentary Tract

Unmet needs of Italian physicians managing patients with inflammatory bowel disease

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ABSTRACT

Background: Little is known about the unmet needs of physicians caring for patients with inflammatory bowel disease (IBD).
Aims: This study explored the practical difficulties and needs for professional updating of Italian IBD physicians.
Methods: A questionnaire was distributed to 600 physicians attending IG-IBD meetings.
Results: 280 physicians completed the questionnaire (46.7%). On a 5-point Likert scale (from 1, strongly disagree to 5, strongly agree), they identified the most problematic issues in managing IBD patients as increasing bureaucracy (3.9), lack of extra-gastroenterological IBD expertise (3.4), lack of diagnostic techniques (3.1) and budget limitations (2.9). The most lacking techniques, ranked from 1 (greatest need) to 9 (lowest need), were: anti-drug antibody and trough level assays (2.7), device-assisted enteroscopy (3.1), exploration under anaesthesia (3.2), MR enterography (3.2), and bowel ultrasonography (3.3). About professional updating, respondents indicated (on a 5-point Likert scale) that helpful topics were practical medicine (4.3), managing difficult patients (4.1), and guidelines (4.0). The most desired modality for updating was residential courses on clinical practice (4.3).
Conclusion: Several factors potentially limit the best management of IBD patients in Italy. Satisfying these unmet needs could improve care for IBD patients.

1. Introduction

Inflammatory bowel diseases (IBD), which comprise Crohn's disease and ulcerative colitis, are chronic, complex and disabling inflammatory disorders characterized by a relapsing-remitting course and needing continuous, multidisciplinary medical care [1]. Recently, there has been a rapid increase in medical knowledge in the field of IBD, with an ever-increasing array of diagnostic and

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therapeutic possibilities and a substantial change in disease management [2]. In particular, the aims of medical treatment now go beyond improving the clinical symptoms to focusing on the prevention of progressive, disabling intestinal damage. In this direction, new therapeutic goals and strategies have been proposed [3–5]. In order for physicians to adhere to new IBD paradigms and provide the best possible health care to patients, a multidisciplinary team, an appropriate diagnostic armamentarium, and rigorous continuing professional development (CPD) are crucial.

Despite the undeniable progresses in understanding pathogenic mechanisms and in developing new therapies, IBD remains a disabling condition associated with poor outcomes and substantial psychosocial impairment [6,7]. The psychosocial impact of IBD results in poorer patient-reported outcomes, including increased health care use and reduced treatment adherence [8]. In recent years, particular care has been taken to identify those areas still not satisfactory for IBD patients from the therapeutic and management viewpoints: the so-called unmet needs [9].

Little attention, however, has been dedicated to the unmet needs of physicians caring for IBD patients, for whom modern facilities and professional updating are particularly relevant in order to achieve the rapidly evolving concept of the "best overall management". It is well known that, on one hand, there is the ideal world of guidelines and algorithms and, on the other, there is the hard real-world reality with its limitations and deficiencies [10]. Physicians managing IBD patients must, at the same time, make optimal diagnostic and therapeutic choices and face patients' increased expectations and frustrations. The aim of the present study was to assess the unmet needs of Italian physicians managing IBD patients, by investigating their difficulties in everyday clinical practice and exploring their needs for professional updating.

2. Materials and methods

From March to December 2016, we performed a nationwide survey of physicians attending the national congress and residential courses of the Italian Group for Inflammatory Bowel Disease (IG-IBD). The questionnaire explored demographic and occupational characteristics, and both practical and professional updating needs. For some questions, respondents indicated their attitudes and opinions on a five-point Likert scale (from 1 = strongly disagree to 5 = strongly agree) while other questions asked them to rank items from 1 (high) to 9 (low) or from never to very often.

We calculated means, medians, ranges and standard deviation (SD), as appropriate. GraphPad Instat package software (GraphPad Software, San Diego, CA, USA) was used to analyze data. Statistical tests were two-tailed and statistical significance was set at $p = 0.05$.

3. Results

The questionnaire was distributed to 600 physicians and completed by 280 (46.7%) (Table 1). Respondents were 44.2% male and 55.8% female, and overall had a mean age of 44.4 years (SD = 10.7 years). The majority (84.3%) were gastroenterologists, and the remainder worked in internal medicine, surgery, paediatrics, radiology and other areas.

Physicians were asked to score seven potential problems in the clinical management of IBD patients on a 5-point Likert scale (Fig. 1A). The most problematic issues were "increasing bureaucracy", "lack of extra-gastroenterological IBD expertise", and "lack of diagnostic techniques" (all scored above 3). When asked to rank (from 1 to 9) the extra-gastroenterological IBD expertise that was lacking (Fig. 1B), the greatest need was for a surgeon (mean rank, 2.5), followed by psychologist, nutritionist and rheumatologist. Regarding the lack of diagnostic techniques in their own centres (ranked from 1 to 9; Fig. 1C), physicians highlighted as their main need anti-drug antibody and trough level assays (mean rank, 2.7). No significant differences were observed when physicians were stratified according to geographic provenience (northern vs. southern Italy), type of hospital (academic vs. nonacademic), age, years of clinical practice, or number of IBD visits per month (data not shown).

Table 1
Demographic and occupational characteristics of the study participants.

Characteristic	Value
Gender, n (%)	
Male	124 (44.2)
Female	156 (55.8)
Age, years, mean (SD)	44.4 (10.7)
Specialty, n (%)	
Gastroenterology	236 (84.3)
Internal medicine	22 (7.9)
Surgery	5 (1.8)
Paediatrics	4 (1.4)
Radiology	3 (1.1)
Other	10 (3.5)
Hospital type, n (%)	
Academic hospital	95 (33.9)
Nonacademic hospital	185 (66.1)
Geographic provenience, n (%)	
Northern Italy	156 (55.7)
Southern Italy	124 (44.3)
Patient visits per month, median (range)	
Crohn's disease	20 (1–400)
Ulcerative colitis	28 (1–420)

The questionnaire then addressed professional updating needs. Physicians indicated that the most helpful topics for professional updating were practical medicine, management of difficult patients, and guidelines (scored >4 out of 5; Fig. 2A). Regarding modalities of educational updating (Fig. 2B), they indicated that the most desired were courses on clinical practice, courses in groups, and courses with real cases; web-based courses and distance learning ranked low.

When questioned about attending scientific congresses, all physicians indicated that absence from work was a limiting factor (Fig. 3). Lack of a sponsor and family problems also ranked high. For international meetings, only 8% indicated that language was a barrier to attendance.

Again, no significant differences in professional updating needs were observed when physicians were stratified according to geographic provenience (northern vs. southern Italy), type of hospital (academic vs. nonacademic), age, years of clinical practice, or number of visits per month (data not shown).

Attendance at national meetings was high, with 51% of respondents indicating very often. Attendance at international meetings was more varied, with only 9% indicating very often and 11% indicating never. The majority of respondents attend national courses (55% indicated very often or often). Residential case-based courses and web-based courses were less used, with only 34% and 14%, respectively, indicating very often or often.

Finally, the ideal scientific event for physicians was a 2-days, Friday–Saturday, international meeting.

4. Discussion

Few studies have focused on the needs of physicians managing IBD patients. The present survey shows that Italian IBD specialists have several problems in managing IBD patients, particularly the increased bureaucracy, the lack of extra-gastroenterological

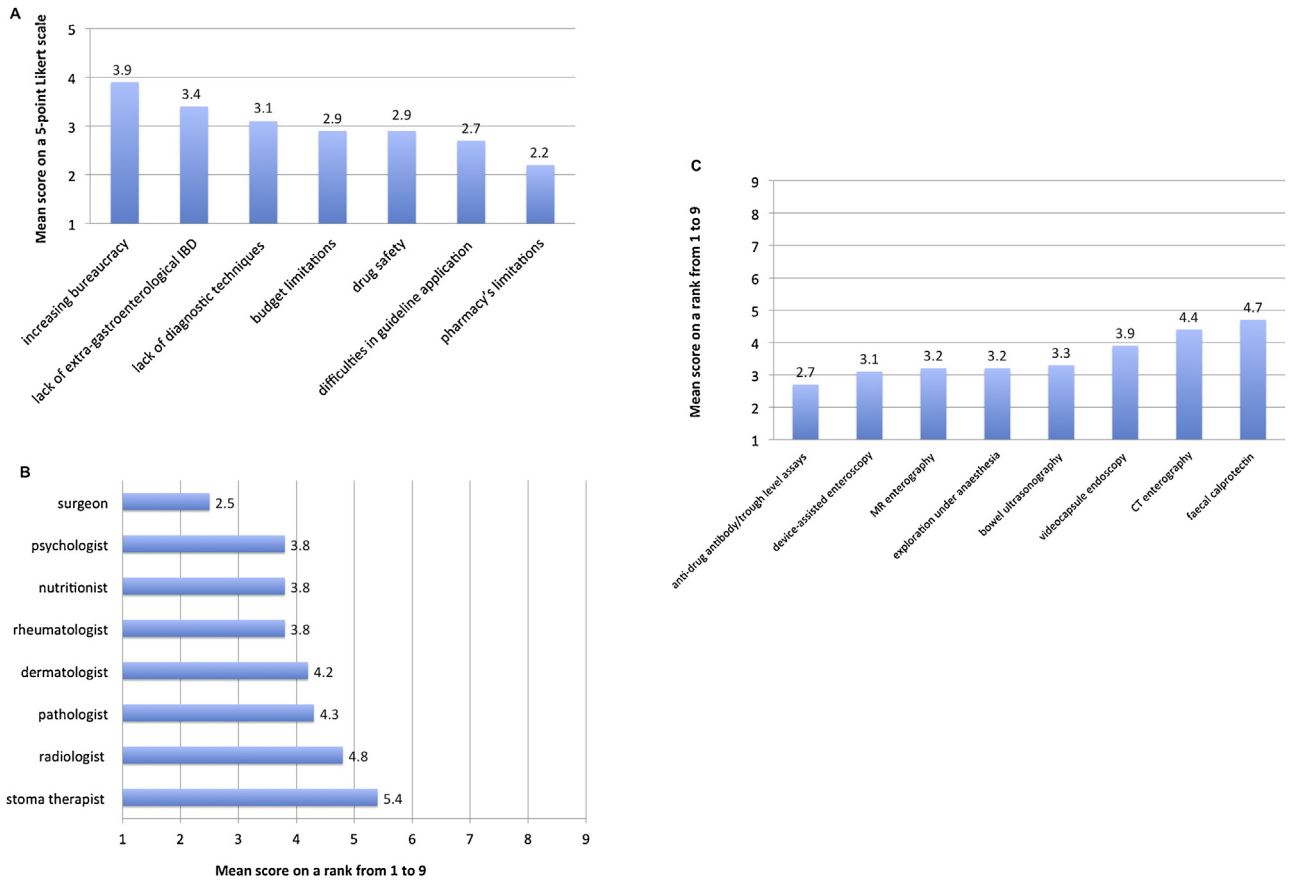

Fig. 1. Practical needs in managing IBD patients. (A) Problematic issues in managing IBD patients. (B) Lack of extra-gastroenterological IBD expertise. (C) Lack of diagnostic techniques (imaging and laboratory tests).

IBD expertise, and the absence of some diagnostic techniques. It is intriguing that these unmet needs are shared by all respondents, regardless of their demographic and occupational features, suggesting that these problems are common in Italy and are related to the complexity of IBD.

Economic restrictions and various administrative and bureaucratic barriers [11] have led physicians to conclude that the usual way of practicing medicine is under threat, as revealed by McCann Health's "Truth About Doctors" study [12]. That survey of nearly 2000 doctors across 16 countries found that the pressures of today's world have not only stolen time and autonomy from physicians, but have simultaneously demanded they do more on someone else's agenda. Medicine has changed "from a caring business to a business of care" [12], and other studies agree that bureaucratic duties contribute to suboptimal care [11,13]. Furthermore, because budget limitations and costs are important causes of unsatisfactory quality of health care among physicians managing IBD, there is an underestimation of physicians' competences in this area [14].

The present survey also shows that Italian IBD specialists often lack a true multidisciplinary team. As has been shown for other chronic and complex diseases, multidisciplinary team-driven care may support the best clinical decision-making and management of IBD patients [15,16]. For example, high-volume IBD centres have been shown to provide better surgical outcomes than non-specialist ones [17]. IBD units are thought to be an important step towards harmonizing care for IBD across Europe, establishing standards for disease-management programmes, and providing better care [18]. It is therefore not surprising that, according to our survey's respondents, the extra-gastroenterological IBD expertise most lacking from Italian centres is a dedicated IBD surgeon. Only a few centres had all the suggested extra-gastroenterological IBD specialists, and most respondents indicated that they lacked access to other important figures, such as a rheumatologist, nutritionist, psychologist and dermatologist. The most lacking diagnostic techniques in centres were anti-drug antibody and trough level assays, device-assisted enteroscopy and exploration under anaesthesia. However, despite not investigated by the present survey, we remember the recognized relevance of a dedicated nurse staff [19].

Overall, this survey shows there are important unmet needs in the everyday clinical management of IBD patients in Italy. Indeed, for robust monitoring, it is recommended to use different modalities of disease assessment (clinical exams, endoscopy, laboratory assessment of inflammatory biomarkers, and cross-sectional imaging) [20,21]. Cross-sectional imaging is fundamental for determining the prognosis and course of disease [22,23]. This lack of extra-gastrointestinal IBD expertise and diagnostic procedures could have a negative impact on the quality of health care provided to patients. Poor quality health care could in turn contribute to adverse outcomes and increased costs [24,25]. These observations are in agreement with the findings of a previous Italian study in which physicians rated the overall quality of care significantly less satisfactory than patients rated it [14] and with the fact that IBD units are relatively uncommon in Europe [18]. The Italian National Health Service should help IBD physicians to establish IBD units, which are essential for providing the best care to patients with Crohn's disease and ulcerative colitis.

This survey also focused on professional updating. Italian IBD physicians indicated that the most important topics regarded everyday clinical practice, while basic research was not appealing. The most desired learning modality was direct participation in

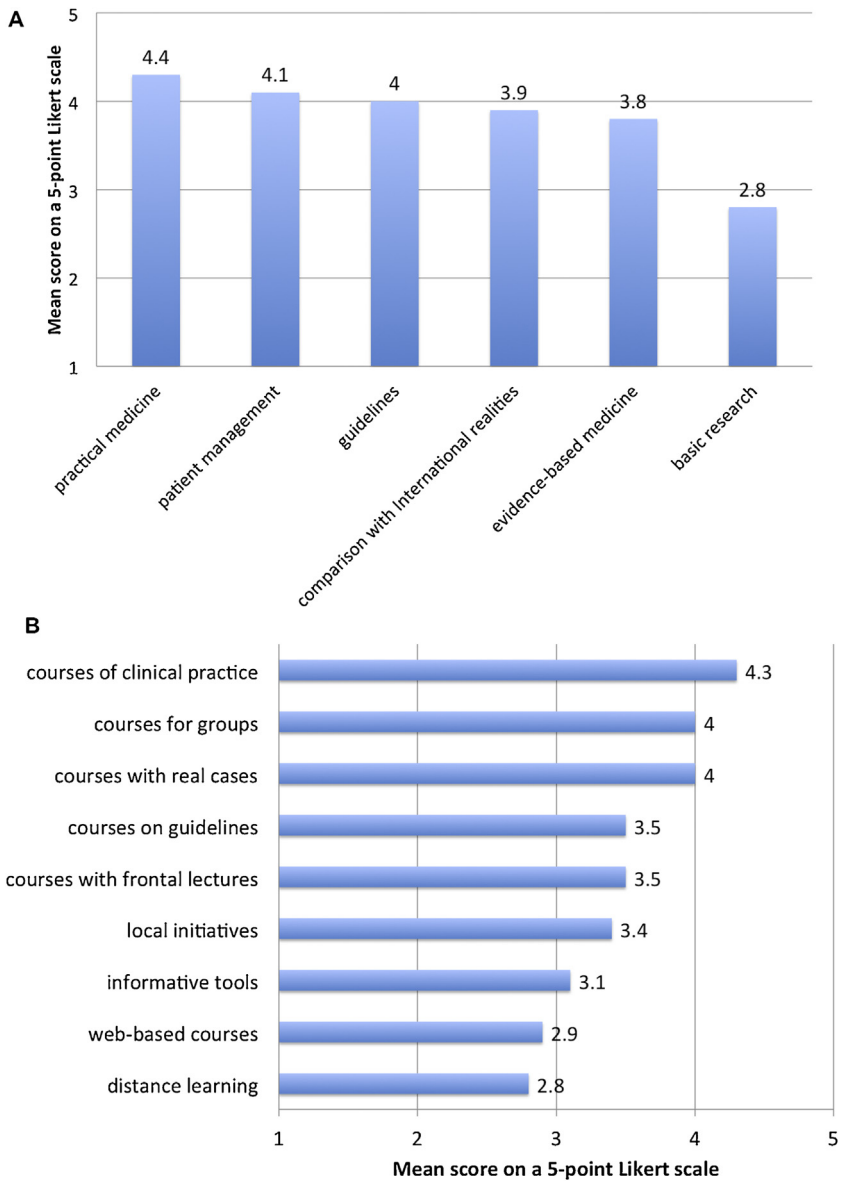

Fig. 2. Professional updating needs. (A) Helpful topics for professional updating. (B) Desired modalities of updating.

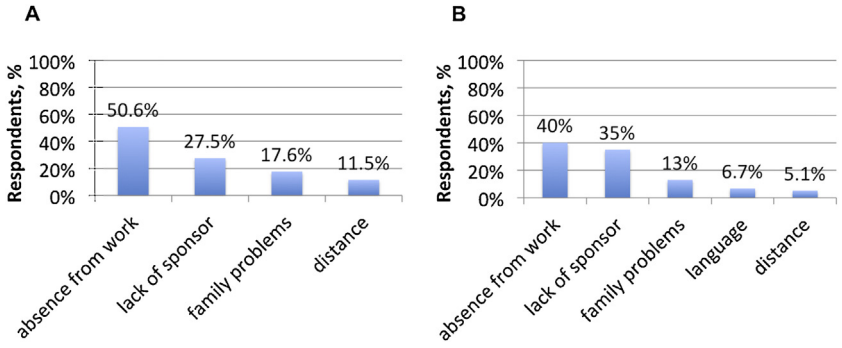

Fig. 3. Difficulties that limit attendance at national (A) and international (B) meetings.

courses, while other modalities (e.g. web-based and distance learning) were less appealing. The "ideal" meeting consists in a two-day event, held on Friday and Saturday, in an international setting.

There have never before been so many therapeutic choices, diagnostic techniques, monitoring modalities and surgical innovations for IBD. Therefore, IBD physicians must continually learn, compare, and strengthen and share their experiences to improve patient management and care. Our findings are in agreement with previous data indicating that national and international meetings are the most preferred modalities for medical updating. Indeed, these

meetings, more than web-based courses, allow health care professionals to keep up to date with research, learn directly from others' experiences and "trials and errors", share best practices, and develop new skills [26,27]. However, it should be kept in mind that some interactions between physicians and pharmaceutical industry representatives can improperly influence medical decisions, through bias and conflicts of interest [28,29].

The present survey shows that difficulties in taking time off work and in finding a sponsor are the most relevant limitations to attending national and international scientific meetings. The available time for professional updating appears to be reduced, likely due to a progressive increase in the clinical and bureaucratic workload, in turn due to the parallel progressive reduction in the number of doctors [30]. These difficulties may impair the success of professional updating, which is the first step to providing the best care to IBD patients. This problem was raised by a previous Italian survey in which the "competence" dimension, defined as the ability to understand and manage problems, was judged significantly less satisfactory by physicians than by patients [14]. Scientific societies and regulatory authorities should consider the needs of IBD physicians in order to facilitate access to professional updating: responding to these needs should lead to better professional updating and, consequently, better management of IBD patients.

This survey has some limitations. First, only Italian IBD specialists attending a national conference or courses were invited to participate: although the sample appears to adequately represent the Italian situation, our results cannot be generalized. Further studies that directly compare physicians from different countries are needed to establish similarities and differences in IBD physicians' unmet needs. Furthermore, the questionnaire we used has not been validated. We believe that this is a relative limitation, since there are no standardized tools for our study aims.

In conclusion, this study suggests that, in Italy, several correctable unmet needs of IBD physicians are limiting the quality of care of IBD patients and complicating the physicians' ability to access professional updating.

Conflict of interest

Cristina Bezzio, Nicola Imperatore, Gianpiero Manes: no conflict of interest

Alessandro Armuzzi: consulting and/or advisory board fees from AbbVie, Allergan, Amgen, Biogen, Celgene, Celltrion, Ferring, Hospira, Janssen, Lilly, MSD, Mundipharma, Pfizer, Samsung Bioepis, Sofar and Takeda; lecture and/or speaker bureau fees from AbbVie, AstraZeneca, Chiesi, Ferring, Hospira, Janssen, MSD, Mitsubishi-Tanabe, Medtronic, Mundipharma, Nikkiso, Pfizer, Otsuka, Samsung Bioepis, Takeda, Tigenix and Zambon; and research grants from MSD and Takeda.

Fernando Rizzello: research grant and fees from Abbvie, Takeda, Ferring, Chiesi, Pfizer

Emma Calabrese: fees from Abbvie, Janssen

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