

Exploring the competencies of inflammatory bowel disease nurses in Italy: a cross-sectional survey

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Abstract

Background Nurses are essential in the care of patients with inflammatory bowel disease (IBD). However, the competencies of IBD nurses in Italy still need to be studied. This research assessed Italian IBD nurses’ fundamental and advanced skills, providing a baseline for future professional development.

Methods This cross-sectional study used an online survey developed by a multidisciplinary expert panel, including gastroenterologists and IBD nurse specialists. The 53-item survey covered sociodemographics, professional characteristics, institutional context and competencies (fundamental and advanced), assessed via a 5-point Likert scale based on Nurse European Crohn and Colitis Organisation guidelines. Distributed nationwide from June to August 2024, descriptive statistics summarized participants’ profiles, while inferential analyses, including Pearson’s correlations and ANOVA, explored associations between competencies and variables such as experience, education, and institutional factors.

Results The study analyzed responses from 50 IBD nurses, predominantly female (92%), with a mean age of 48.38 ± 9.7 years. Fundamental competencies showed consistently higher mean scores compared to advanced competencies. High proficiency was noted in establishing empathetic relationships and recognizing the emotional impact of IBD (mean score: 4.06/5). Advanced competencies with the highest scores included caregiver education and multidisciplinary support (3.56/5 and 3.40/5, respectively). Significant correlations were observed between years of IBD-specific experience and competencies such as therapeutic management and stress handling.

Conclusions Italian IBD nurses demonstrate fundamental solid and moderate skills in advanced competencies. Enhancing educational programs and multidisciplinary collaboration can improve the quality of care for IBD patients. Future studies should address integrating digital health tools to support self-management and patient outcomes.

Keywords Inflammatory bowel disease, nurse, competence, multidisciplinary care team, nursing competency

Ann Gastroenterol 2025; 38 (XX): 1-8

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Conflict of Interest: None

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Received 20 December 2024; accepted 9 April 2025;
published online 25 June 2025

DOI: <https://doi.org/10.20524/aog.2025.0981>

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Introduction

Inflammatory bowel disease (IBD) is characterized by recurrent chronic intestinal inflammation, which can lead to flare-ups, severe complications, and functional, physical and psychological disability [1,2]. In industrialized countries, the incidence and prevalence of IBD are steadily increasing, highlighting a significant healthcare and socioeconomic impact [3]. Optimal management of IBD requires a multidisciplinary approach, where healthcare professionals, particularly nurses, play a crucial role in empowering and supporting patients in managing their condition [4].

Nurses, often the first point of patient contact, are central in organizing care. Nursing management of IBD involves a combination of fundamental and advanced clinical skills, leadership abilities, and a profound understanding of the psychological and social dynamics influencing patients’ quality

of life [5]. Within this context, nursing leadership emerges as a key element, with nurses actively coordinating care, fostering effective communication and promoting high standards of care [6]. Nursing leadership is reflected in competencies such as timely and informed decision-making, efficient healthcare resource management, continuous professional development and patient advocacy [7].

The chronic nature of IBD requires patients to adapt to long-term therapies and incorporate these new demands into their lifestyles [8]. Specialized IBD nurses, with advanced training in areas such as IBD pathophysiology, diagnosis and treatment, provide holistic support that addresses clinical conditions and individual patient needs. Recent studies highlight that employing specialized IBD nurses reduces patients' need for outpatient visits, emergency department access and hospital admissions, while improving their mental health and overall satisfaction [9].

The Second Consensus of the Nurse European Crohn and Colitis Organisation (N-ECCO) clearly outlines the fundamental and advanced competencies of the specialized IBD nurse, including the ability to deliver health education, emotional support and practical guidance [10]. However, this professional role tends to be undervalued and underused, probably because of limited awareness among patients and within the healthcare system [11]. Operating in accordance with updated clinical guidelines, IBD nurses exhibit a deep understanding of disease pathophysiology, together with advanced skills in education, organization and research [12,13].

In Italy, the IBD nurse is gradually gaining recognition. There is a growing focus on specific training and expanding competencies [14,15]. This professional is increasingly present in various settings, including outpatient clinics, endoscopy units, clinical trials and surgical wards, significantly contributing to integrated IBD management and improved patient outcomes [15]. There is no formal training for becoming an IBD nurse in Italy. There are only educational courses, such as the N-ECCO program and other dedicated ECM courses, but no specific certification training exists.

This study aimed to analyze and evaluate the competencies of IBD nurses in Italy, focusing on their current level of training, clinical practice, and the implementation of this professional role within IBD units. The study sought to identify areas for improvement and opportunities for development within the national healthcare context.

Materials and methods

A cross-sectional observational study was conducted using an online survey administered through the Google Forms platform from June 5 to August 14, 2024. An anonymous electronic questionnaire was developed and distributed. IBD nurses participating in this survey were selected from the Internal Database of the Italian Group for the Study of Inflammatory Bowel Disease (IG-IBD). The survey was emailed, asking recipients to share it with other colleagues not yet included in IG-IBD.

The survey was designed *ad hoc* (Supplementary material) by a panel of experts, based on the statements of the Second N-ECCO Consensus. The expert panel included 2 nurses (ES and DN) with recognized expertise in IBD care and 2 experienced gastroenterologists (FS and DP) with numerous publications.

All Italian IBD Nurses who had played that role for at least 6 months were enrolled in this survey. It consisted of 53 questions divided into 4 sections:

Section 1: Sociodemographic and professional characteristics

This section comprised 9 questions. Three questions collected sociodemographic data, such as age, gender, and region of residence. The remaining 6 questions addressed professional characteristics, including years of general nursing experience, years explicitly dedicated to IBD care, involvement in endoscopy or research activities, and active participation in scientific societies or related events.

Section 2: Institutional and clinical features

This section included 11 questions exploring the type of healthcare facility, patient characteristics (adults, pediatrics, or both), the presence of a multidisciplinary team and support protocols, and the nurse's specific role within the IBD unit. Questions also addressed the nurse's interactions with patients, such as managing biological therapies and providing educational support. Additionally, the section investigated the nurses' academic background, the reasons for their assignment to the IBD service, and their participation in IBD-specific training programs.

Section 3: Fundamental nursing competencies

This section contained 16 questions designed to evaluate the fundamental competencies required by IBD nurses. Using a 5-point Likert scale (1 = minimum; 5 = maximum), the survey assessed nurses' awareness, knowledge and practical skills related to the foundational aspects of IBD management. Key areas included knowledge of IBD pathophysiology and complications, empathy in nurse-patient interactions, management of biological therapies, and the nurse's educational and supportive roles.

Section 4: Advanced nursing competencies

The final section comprised 17 questions on advanced competencies, also measured using a 5-point Likert scale (1 = minimum; 5 = maximum). Topics included active participation in multidisciplinary meetings, involvement in clinical decision-making, and advocacy for patient interests,

including promoting participation in research projects. The section also assessed nurses' commitment to continuous professional development through congresses and training courses, familiarity with current regulations and technological advancements, and ability to provide patients with telematics support. Additional areas included educating patients and caregivers on coping strategies, supporting travel organization, managing pain, and ensuring adherence to recommended vaccinations. Nurses were also asked about their ability to evaluate the need for vitamin supplementation and their collaboration with colleagues from other specialties. Lastly, the section explored competencies in handling complex clinical situations, such as managing pediatric patients, facilitating the transition to adult care, and supporting patients during critical periods, including pre- and post-pregnancy phases.

Statistical analysis

Descriptive statistics summarized demographic and professional characteristics using mean \pm standard deviation for continuous variables and frequencies (%) for categorical variables. Pearson's correlation coefficient (r) was calculated to assess relationships between professional characteristics and perceived competencies, with significance set at $P < 0.05$. All analyses were conducted using Jamovi software. Missing data were managed through pairwise deletion.

Results

The sample analyzed consisted of 50 participants, predominantly female (92%), with an average age of 48.38 ± 9.7 years. From a geographical perspective, the participants were relatively evenly distributed across Italy's 3 central regions: specifically, 30% from the North, including areas such as Lombardy, Piedmont, Veneto and Emilia-Romagna; another 30% from the Center, represented by regions such as Lazio, Tuscany, Umbria and Marche; and 40% from the South and Islands, encompassing regions like Sicily, Sardinia, Campania and Puglia.

In terms of academic background, the educational level was notably high. Most participants (94%) held a bachelor's degree, 6% had earned a master's degree, while none possessed a PhD. This highlights the intense academic preparation of the group (Table 1).

Institutional and clinical features

Among the 50 participants, 64% were dedicated IBD nurses, while the remaining 36% were involved in managing IBD patients, primarily through the administration of biological therapies. These nurses often worked in broader clinical settings, providing care for patients with other chronic conditions requiring similar treatments, such as rheumatology

Table 1 Sociodemographic and professional characteristics

Characteristics	Total (n=50)
Region of residence N (%)	
North	15 (30%)
Center	15 (30%)
South and Islands	20 (40%)
Sex N (%)	
Female	46 (92%)
Male	4 (8%)
Age (years), mean \pm SD	48.38 \pm 9.7
Academic education N (%)	
Bachelor's degree	47 (94%)
Master's degree	3 (6%)
PhD	0
Professional experience in the IBD field N (%)	
0-1 years	12 (24%)
2-5 years	14 (28%)
Over 5 years	24 (48%)
Years of work experience, mean \pm SD	24.56 \pm 9.78
Years of experience in the IBD unit, mean \pm SD	8.28 \pm 7.54

SD, standard deviation; IBD, inflammatory bowel disease

or dermatology units. Most worked in hospitals (52%), but 78% needed more and better resources and protocols to work with this disease. Engagement in endoscopy (36%) and research (32%) was relatively low (Table 2).

Fundamental nursing competencies

Fundamental competencies generally had higher average scores than advanced competencies, which is to be expected given their more specialized nature.

In the assessment of nurses' fundamental competencies (Fig. 1), the highest average scores were observed for "awareness of the emotional and psychological impact of IBD on patients" (4.06) and the "ability to establish an empathetic relationship with the patient" (4.06), followed closely by "awareness of the physical impact of IBD" (3.94). The lowest average scores among fundamental competencies were found in "competence in managing perianal disease" (2.72) and "knowledge of sexual health aspects related to IBD" (3.06).

Advanced nursing competencies

In the evaluation of advanced competencies (Fig. 2), the highest scores were achieved for the ability to provide "health education to caregivers" (3.56), followed by competence in "providing multidisciplinary care" (3.40), the ability to "inform and educate patients to recognize and develop coping skills" (3.38), and recognizing symptoms related to chronic anemia (3.36). These represent the areas of most substantial advanced competence. The lowest-scoring advanced competencies were the "ability to manage a pediatric patient with these conditions"

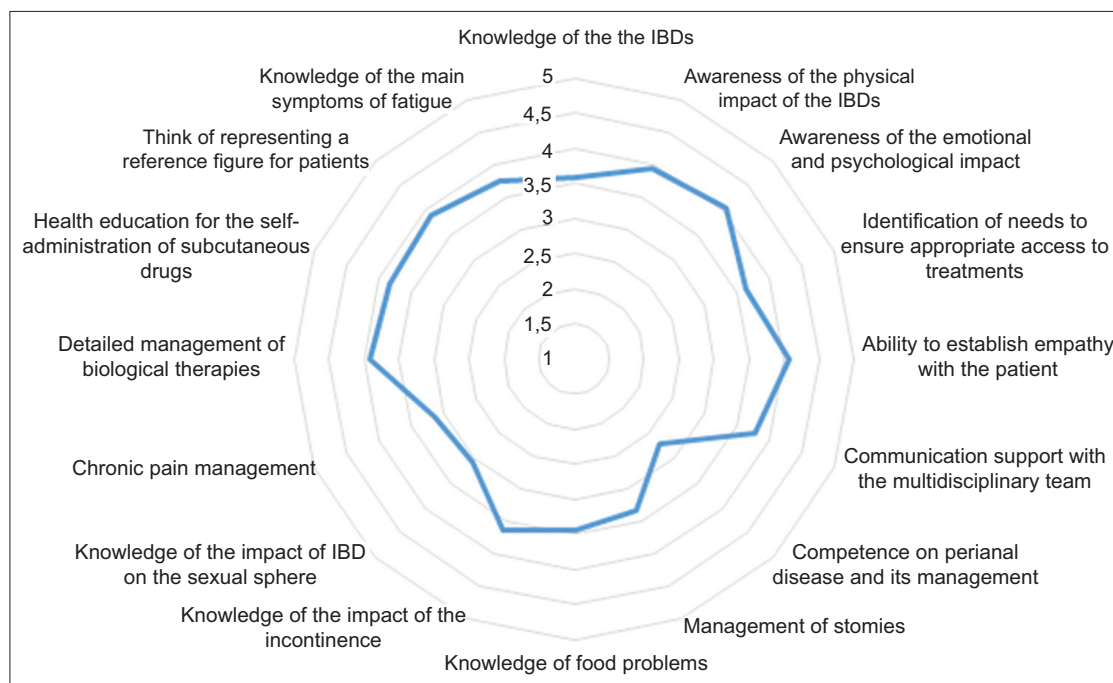


Figure 1 Fundamental skills

Table 2 Institutional and clinical features

Characteristics	Total (n=50)
Endoscopy activity	
Yes	18 (36%)
No	32 (64%)
Research activity	
Yes	16 (32%)
No	34 (68%)
Type of patient–nurse interactions	
Managing biological therapies and educational support	17 (34%)
Other types	33 (66%)
Work context	
Dedicated IBD nurse	32 (64%)
Other roles	18 (36%)
Type of healthcare structure	
Hospital	26 (52%)
Other structures	24 (48%)
Resources and support availability	
Protocols and comprehensive resources	11 (22%)
Limited or no resources	39 (78%)
Presence of a multidisciplinary team	
Yes	37 (74%)
No	13 (26%)

IBD, inflammatory bowel disease

(2.30) and the “ability to provide support during the transition from pediatric to adult care” (2.46), highlighting areas that require particular attention and development.

Several other advanced competencies, such as supporting the management of patients in the pre- and post-gestational phases

(3.1), informing patients about travel and treatment needs away from their residence (3.12), knowledge of vaccination requirements for these patients and the ability to provide related information (3.18), and understanding significant comorbidities and extraintestinal manifestations associated with these conditions (3.24), exhibited relatively uniform distributions around a score of 3. This indicates an average level of competence with room for improvement. The competence related to “knowledge of clinical research guidelines and the ability to manage a patient enrolled in a research protocol” (2.72) demonstrated a polarized distribution, suggesting significant variability in proficiency among participants. These detailed insights can be leveraged to identify strengths and areas needing improvement, aiding in designing targeted and effective training programs for IBD nurses.

The analysis revealed several significant correlations between participants’ professional characteristics and their perceived competencies in IBD management. Years of work experience in IBD units were positively associated with greater awareness of the physical impact of IBD on patients ($r=0.40$, $P=0.034$) and, to a lesser extent, with awareness of its emotional and psychological effects ($r=0.22$, $P=0.042$). Additionally, experience in IBD units correlated with an enhanced ability to support patients in managing chronic pain ($r=0.21$, $P=0.047$).

Knowledge of therapeutic pathways for IBD was strongly linked to awareness of the physical impact of the disease ($r=0.54$, $P=0.006$) and the perceived ability to assist patients in pain management ($r=0.45$, $P=0.009$). These relationships suggest that a deeper understanding of therapeutic processes improves practical and supportive care capabilities.

Competence in providing telematics support, such as email or phone-based services for patients, was strongly correlated

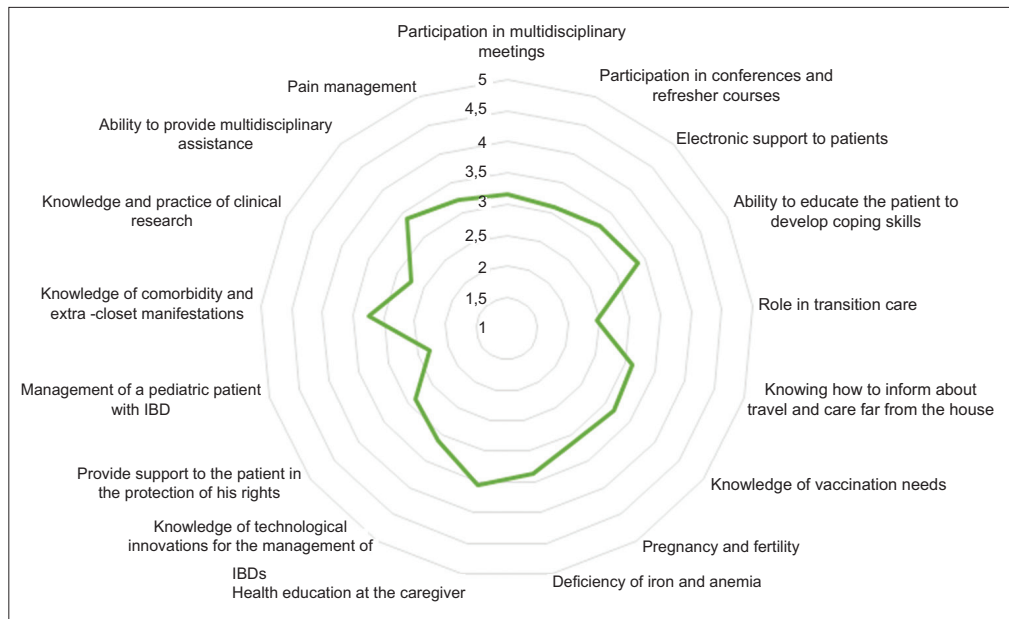


Figure 2 Advanced skills

with the ability to educate patients in developing coping strategies ($r=0.75$, $P<0.001$) and proficiency in managing technological innovations ($r=0.74$, $P<0.001$), underscoring the importance of digital tools in modern patient care.

Finally, knowledge of patients' vaccination needs was closely associated with an understanding of comorbidities and extraintestinal manifestations ($r=0.78$, $P<0.001$) and the ability to guide patients regarding travel and treatment requirements ($r=0.75$, $P<0.001$).

Discussion

The study aimed to provide a snapshot of the "state of the art" of the IBD nurse in Italy. The objective was to have a starting point for defining this professional figure, given that there is currently no validated instrument capable of providing information about the skills such an experienced figure should have. For this reason, our questionnaire was based on the Second N-ECCO Statement, the official document of the N-ECCO. The sample analyzed showed good geographical representativeness, with a slight predominance of southern regions and islands. The average age of the participants was 48.38 years, a sign that these are personnel with experience behind them—though not necessarily specific to the sector, as the average number of years of service in the IBD unit was 8.28 years—and this result is partly correlated with the percentage of study participants who were selected for this type of work because of the skills they had acquired (36%) or because they were exempt from other services (22%). The prolonged stay of the nurses in the specific field showed a correlation with the acquisition of certain specific skills, also due to greater motivation, as demonstrated in other studies [16].

Another significant finding is the academic training of the sample, as none of the respondents had a PhD, and only 6% had a Master's degree. This finding represents the lack of involvement of IBD nurses in clinical research, confirmed by the questionnaire result, which depicted participation in this field as a deficient area of work [17,18]. However, a good percentage of the sample stated that they participate in refresher courses (11%), continuing medical education courses on the topic (22%) or both (46%), or with the addition of Master's courses on the subject (4%).

An analysis of the data showed that the competencies defined as fundamental had proportionally higher and more uniform average scores than those for advanced competencies, where a more significant variability of scores was evident. This is in part due to these skills being those most commonly used in patient management—so much so that even the official document used to draw up the questionnaire has undergone structural changes, casting as fundamental skills that in principle should be considered advanced (such as the management of biological therapies) [10,19,20].

The core competencies that registered the highest averages were the ability to establish an empathic relationship with patients and the awareness of the emotional and social impact these pathologies have on patients' lives, as already demonstrated in other studies [21,22]. The core competence with the lowest score was related to the knowledge and management of perianal disease. This result is worthy of further investigation, but it is also in line with the rest of Europe, where the role of the nurse in the management of perianal disease often consists of facilitating communication between the patient, gastroenterologist and surgeon, representing the patient's interests in multidisciplinary meetings and exercising an educational role in the prevention of sepsis [13,23]. The participation of the IBD nurse in multidisciplinary discussions

is, therefore, an essential source of learning and increased knowledge in managing these diseases. On the other hand, as previously mentioned, the competencies perceived as more complex, particularly those related to advanced clinical skills, showed greater variability in responses, suggesting differences in training, exposure, or institutional roles that may influence nurses' confidence and proficiency in these areas.

Interestingly, the advanced skill for which the highest average was recorded was the educational role of caregivers, a further sign that the academic role is predominant in nursing [24,25].

Another preponderant role is communication. Indeed, the other advanced competence that reached higher averages was collaborating with colleagues of different specialties to provide multidisciplinary care to patients. This was followed by the one related to educating the patient in developing coping strategies. Empathic communication, a core competence in which high averages were recorded, is a characteristic of the nursing profession that enables these professionals always to protect the interests of patients when necessary [26].

Interestingly, the inferential analysis revealed a significant correlation between work experience in IBD units and a good percentage of core and advanced skills, with a strong component of communication skills. In particular, the 2 core skills that correlated most strongly with unit-specific years of service were those related to understanding the social and work impact of these diseases on patients' lives, and those associated with managing biological therapies. This confirms the need for a prolonged presence in the service in order to better understand the type of patient, and how to manage the various aspects of the pathology in a correct and timely manner.

On the other hand, regarding advanced skills, the item most significantly correlated with specific years of service was competence in stress and emergency management skills. This finding also confirms the need for staff members who are well acquainted with these pathologies, through experience favored by prolonged periods of service that provide opportunities to increase personal knowledge. Another important aspect concerns the integration of telematics support in the management of IBD. Digital platforms and telenursing can improve access to care, reduce waiting times and improve therapeutic adherence [27]. The results of the present study show a strong correlation between the provision of telemedicine support and the ability to educate patients in developing coping strategies. However, despite the acknowledged importance of telemedicine, there is a need to develop the technological skills of nurses further in line with the recommendations of the N-ECCO guidelines to exploit the full potential of these tools in managing IBD.

Another strength is the correlation between demographic and professional variables and perceived competencies, which indicates the impact of work experience on the quality of care. This kind of data is beneficial for developing targeted training and retraining programs. Finally, integrating technological skills, such as telematics support, represents an innovative dimension of the study, in line with emerging trends in digital health care.

The role of specialist nurses in IBD is an area of growing interest globally, with numerous studies highlighting their importance in managing chronic bowel disease. The existing literature has highlighted how specialist nursing care can improve not only patients' clinical outcomes, but also their quality of life, by reducing the number of hospital admissions and improving the management of flare-ups [24]. In this context, this study's results align with previous research highlighting the importance of psychological and emotional support in managing IBD [14]. Previous studies have shown that empathic support from nurses can significantly reduce anxiety and depression in patients, improving adherence to treatment and management of the acute stages of the disease [28,29]. In line with these findings, the ability of Italian nurses to establish an empathic relationship with patients emerges as an essential component of nursing care. It increases with increasing years of service in the IBD unit, making them specialized nurses.

Advanced skills, such as managing pediatric and adult patients, require constant updating and specific training. Managing the transitional phases from childhood to adulthood is crucial to ensure continuity of care and prevent long-term complications [30,31]. However, the study results show that Italian nurses' advanced skills are still limited, particularly in managing pediatric patients and transitions. This finding is consistent with other research suggesting that nurses often receive less training on specific patient populations, such as pediatric patients [6].

Finally, the literature highlights the importance of the nurses' role in the multidisciplinary team. Nurses have been identified as central figures in the interdisciplinary management of IBD, facilitating communication between gastroenterologists, surgeons, nutritionists and psychologists [15,32,33]. The results of this study confirm the importance of the multidisciplinary role of Italian nurses. However, there is still room for improvement in their ability to interact with other specialties and to manage complex clinical situations. This is a crucial aspect in ensuring integrated and comprehensive care for patients with IBD.

One of the main strengths of this research is its ability to provide a comprehensive overview of the competencies of IBD nurses in Italy. The questionnaire used, based on N-ECCO guidelines, allowed the collection of detailed data on a broad spectrum of competencies, both fundamental and advanced, clearly indicating areas of strength and weakness. In addition, the study benefited from the participation of a heterogeneous group of nurses from different Italian regions, which increases the representativeness of the results and makes it possible to identify geographical differences in the implementation of nursing competencies.

This study represents a starting point for future targeted education initiatives and professional development programs for IBD nurses. Investing in advanced skill development, improving continuing education and promoting more structured multidisciplinary collaboration could significantly improve the quality of care for IBD patients.

Despite its strengths, this study has some limitations that must be considered. Firstly, the sample size is relatively small, with 50 participants, which may limit the generalizability of the results nationally. However, the reduced sample size aligns

with the limited representation of the IBD nurse role across Italy. Nearly 140 IBD centers have been officially registered in the country, yet only 50% of them have a dedicated IBD nurse. This limitation reflects the early stage of the profession's development in Italy, which we hope to address in future studies. Furthermore, the self-reported nature of the questionnaire responses may introduce a subjectivity bias, with participants possibly overestimating their skills. Thus, another limitation concerns the need for an objective assessment of competencies, based on direct observation or practical tests, which could have provided a more accurate measure of nurses' actual skills. Lastly, the predominance of advanced skills in managing pediatric patients as an area of weakness suggests the need for further investigation focused on this specific population, which may need to be adequately represented in the study sample.

This research has provided an in-depth overview of the competencies of IBD nurses in Italy, highlighting areas of strength and areas for improvement. The role of the IBD nurse is evolving, and their importance in the holistic management of patients is being recognized more and more. However, data suggest that further efforts are needed to improve continuing education and the implementation of advanced skills, especially in complex clinical settings and in the management of patients with special needs. Although patient involvement could offer valuable insights, our study focused on nurses' self-assessment of their professional skills—an essential component of competency development and self-awareness. Future research should incorporate multi-source evaluations, including patient feedback and objective assessments, to comprehensively understand IBD nurse competencies.

Summary Box

What is already known:

- The inflammatory bowel disease (IBD) nurse is critical in the management of this disease
- A specialist nurse can reduce patient anxiety and depression
- Telemedicine is important in the care of IBD patients and is an important instrument for improving their knowledge
- Many studies show that IBD nurses are an important part of a multidisciplinary team

What the new findings are:

- Prolonged experience in the IBD unit is essential for developing important skills for the management of these diseases
- Limited reported experience in managing pediatric patients is a starting point for further studies
- Telemedicine is the future for the faster treatment of these patients
- This study also shows the important role of the nurse in the multidisciplinary meeting

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Supplementary material

IBD Nurse Competency Questionnaire

Dear Participant,

Thank you for agreeing to participate in this study. Your contribution is extremely valuable in gaining a better understanding of the competencies and practices of IBD (Inflammatory Bowel Disease) nurses. Please answer all questions sincerely and accurately. All information provided will be treated confidentially and used exclusively for research purposes.

Region of Affiliation: _____

Characteristics of Patients in Your Center:

- Adults
- Pediatric
- Mixed

Number of IBD Patients Treated in Your Center:

- 0-100
- 101-500
- 501-1000
- More than 1000

Types of Nurse-Patient Interactions (multiple answers possible):

- Only visit management
- Management of biological therapies
- Educational role for IBD patients

Work Setting:

- Dedicated IBD nurse
- Care/case manager nurse
- Circulating nurse, not dedicated to the IBD center
- IBD center coordinator

Type of Healthcare Facility:

- Hospital
- University Hospital
- Local Health Authority (ASL)
- IRCCS (Institute for Scientific Hospitalization and Care)

Availability of Resources and Support for IBD Management (multiple answers possible):

- IBD protocols
- IBD procedures
- Specific IBD training for staff

Reason for Assignment to the IBD Unit:

- Exemption
- Selection based on competencies
- Personal request

Academic Qualification:

- Bachelor's Degree
- Master's Degree
- PhD

Professional Experience in Inflammatory Bowel Disease:

- 0-1 years
- 2-3 years
- 4-5 years
- More than 5 years

Participation in Specific IBD Training Programs (multiple answers possible):

- Master's Degree
- Continuing Medical Education (CME) courses on IBD
- Training courses

Presence of a Multidisciplinary Team in the IBD Center:

- Yes
 - No
-

Nurse Description

Age: _____

Gender:

- Male
- Female

Years of Work Experience: _____

Years Working in the IBD Unit: _____

Performs Endoscopic Activities:

- Yes
- No

Engages in Research Activities:

- Yes
- No

Participates in Scientific Society Events in the Field of IBD:

- Yes
- No

Member of One or More Scientific Societies in the IBD Field:

- Yes
 - No
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Fundamental Competencies

Do you believe you understand the differences between the diagnoses and therapeutic pathways of IBD? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you aware of the physical impact of IBD on patients? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you aware of the emotional and psychological impact of IBD on patients? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you believe you can identify patient needs and ensure appropriate access to optimal care? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you consider yourself capable of establishing an empathetic relationship with patients? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you able to facilitate communication within the Multidisciplinary Team? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

How would you assess your competency in Perianal Disease management? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you able to manage a stoma or refer patients to appropriate specialists? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you knowledgeable about dietary issues related to IBD? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you aware of the impact of incontinence on patients' quality of life and able to provide guidance and support? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you able to recognize sexual health issues related to IBD that may require support and provide necessary guidance? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you able to recognize the chronic pain associated with IBD? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you have in-depth knowledge of biological therapy management, including necessary screening tests and administration protocols? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you educate patients on self-administration of subcutaneous medications? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you consider yourself a reference figure for patients attending the clinic? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Advanced Competencies

Do you feel responsible for participating in multidisciplinary meetings and contributing to clinical discussions while representing patients' interests? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you attend conferences and training courses organized by major scientific societies to enhance your knowledge in IBD? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you provide telephone or email support services to IBD patients in your center? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you able to educate and support patients in developing coping strategies to live with their disease using educational materials if necessary? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you provide health education to patients' caregivers? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you familiar with technological innovations that improve IBD management? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you knowledgeable about current regulations and able to assist patients in protecting their rights? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you feel adequately trained to support pediatric patients with IBD? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you prepared to assist patients in transitioning from pediatric to adult care? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you have expertise in supporting female patients during pre- and post-pregnancy periods? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Do you inform patients about necessary precautions for travel and long-distance care? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent

Are you aware of vaccination requirements for IBD patients and able to provide relevant information? 0 = Poor 1 = Sufficient 2 = Fair 3 = Good 4 = Excellent