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Barriers to and requirements for a successful transition in inflammatory bowel disease from pediatric to adult care in Greece

Olga Giouleme[a], Anastasios Koutsoumourakis[b], Anastasia Katsoula[a], Marios Katsaros[a], Konstantinos Soufleris[c], Konstantina Vasilaki[d], Ioannis Xinias[d]

Hippokration General Hospital, Aristotle University of Thessaloniki; Papageorgiou General Hospital; Theagenio Anticancer Hospital, Thessaloniki, Greece

Abstract

Background The incidence of pediatric-onset inflammatory bowel disease (IBD) is rising, while the relapsing and often severe nature of IBD, and its impact on emotional and pubertal development and social maturation underline the need for a successful transition from pediatric to adult care.

Methods A web-based survey was distributed via the Hellenic Group for the Study of IBD, the Hellenic Society of Gastroenterology Department of North Greece, and the Hellenic Society of Pediatric Gastroenterology, Hepatology, and Nutrition.

Results The questionnaire was answered by 98 individuals (78 adult and 20 pediatric gastroenterologists, out of 357 and 30, respectively). The response rate was 25.3%. A higher response rate was found among pediatric (66.6%) vs. adult gastroenterologists 21.8% (P<0.001). Pediatric gastroenterologists believed that the appropriate age for transition was either 16-17 or 17-18 years, whereas 59% of the adult gastroenterologists chose the age group of 16-17 years. Both adult and pediatric gastroenterologists stated that the most significant initiators for a successful transition process were cognitive maturity and patients' ability to manage their disease independently. The lack of communication and collaboration between pediatric and adult gastroenterologists was the main barrier to the transition process, as identified by adult gastroenterologists (27.7%). In contrast, 43.5% of pediatric gastroenterologists suggested that differences in the follow up of patients with IBD between pediatric and adult clinics were the main restrictions.

Conclusion These results highlight the need for a transitional education program for pediatric IBD patients, and the importance of improving collaboration among adult and pediatric gastroenterologists.

Keywords Transition, inflammatory bowel disease, pediatric

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Conflict of Interest: None

Correspondence to: Anastasios Koutsoumourakis, MD, FEBG, MSc, Endoscopy Unit, First Department of Internal Medicine, Papageorgiou General Hospital, Ring Road, 56403, Thessaloniki, Greece, email: koutsoumourakis@gmail.com

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Introduction

The incidence of pediatric-onset inflammatory bowel disease (IBD) is rising, and 20-25% of new IBD diagnoses are estimated to be acquired during childhood and adolescence [1,2]. Childhood-onset IBD is characterized by a more complicated disease and rapid progression, which requires early treatment with immunosuppressive and biological medications, in contrast to that in adult patients [3]. The relapsing and often severe nature of IBD, and its impact on emotional and pubertal development and social maturation, underline the need for a successful transition from pediatric to adult care [4].

Transition has been defined by Blum *et al* as the purposeful, planned movement of adolescents and young adults with

chronic physical and medical conditions from child-centered to adult-oriented healthcare [5]. According to the European Crohn's and Colitis Organisation (ECCO), the aim of the transition program in pediatric patients is to achieve better compliance and fewer adverse outcomes compared to those that do not take part [6].

Greece does not have a structured transition program, except for a single transition outpatient clinic based at the Hippokration General Hospital of Thessaloniki. The structure of its transitional care program covers a 12-month period before the patient's transfer to adult IBD clinics at the age of 18 years old, in accordance with ECCO's topical view on transitional care in IBD [6]. According to the National Register Database, there is no information regarding how many pediatric IBD patients live in Greece and how many passed through transitional care. Thus, this study aimed to identify the beliefs of healthcare providers regarding the transition process and their perceptions of the requirements for and barriers to successful transitional care.

Materials and methods

This study was conducted over 5 months, from February 2018 to July 2018. It was approved by the institutional review board of the Hippokration General Hospital of Thessaloniki.

A structured, closed-ended, 10-item questionnaire was developed by adult and pediatric IBD specialists at the referral outpatient transition clinic of the Hippokration General Hospital. These questions had not been previously validated, since to the best of our knowledge there was no validated questionnaire in existence at the time to assess adult and pediatric gastroenterologists' perception of the IBD transitional care program. Thus, the web-based questionnaire was compiled by referring to previous surveys targeting both adult and pediatric gastroenterologists [7-11].

Adult gastroenterologists involved in the care of IBD patients were identified from the membership of the Hellenic Group for the Study of IBD and the Hellenic Society of Gastroenterology Department of North Greece. Pediatric gastroenterologists were identified from the Greek Society of Pediatric Gastroenterology, Hepatology, and Nutrition membership. An invitation to participate in this web survey was emailed to these specialists. Reminder emails were sent at one-month intervals to all participants who still needed to complete the survey.

The survey addressed the importance of a transitional care program in IBD, regarding improving disease outcomes as a primary outcome. Besides the primary outcome, the following topics were investigated as secondary outcomes: adequacy of preparation at the time of transfer to adult IBD clinics; appropriate age to launch the transition; factors indicating that pediatric IBD patients are ready for the transition; the existence or absence of collaboration between adult and pediatric gastroenterologists; the existence of barriers to the transition process; and proposing an effective model for a successful transitional care program in IBD.

For questions related to the importance of a transitional care program in IBD for improving disease outcomes, the adequacy of preparation at the time of transfer to adult IBD clinics, and the existence or absence of collaboration between adults and pediatric gastroenterologists, the responders had to select a forced choice response format (yes or no). For the appropriate age to launch the transition, the respondents were asked to select a single answer between the following age groups: 14-15, 16-17, and 17-18. Regarding the factors indicating that pediatric IBD patients are ready for the transition, responders were asked to grade 4 possible answers—cognitive maturity, age, education, and the patient's ability to independently manage their disease—on a Likert scale from 1-5, where 1 means not at all important and 5 means extremely important.

In addressing the barriers to the transition process, the respondents selected from among the following 4 factors: (a) lack of communication and cooperation; (b) patient's and family's reluctance to exchange protective and well-established pediatric care for an adult IBD clinic environment; (c) differences in the follow up of patients with IBD between pediatric and adult clinics; and (d) lack of appropriate adult IBD specialists throughout the country. Respondents were allowed to choose as many factors as they wanted, up to all 4.

As regards proposals for a successful transitional care program in IBD, responders had to choose 1 only of the following models: (a) development of a transitional IBD clinic; (b) healthcare providers meeting with patients in the presence of parents or guardians; (c) healthcare providers meeting with patients in the absence of parents or guardians; and (d) joint regular meetings performed with both pediatric and adult gastroenterologists 6-12 months after the transition process.

This study was approved by the ethics committee of the Hippokration General Hospital of Thessaloniki. All completed surveys were compiled, entered into an Excel spreadsheet, and used to derive descriptive data. Statistical analyses were performed using the Statistical Package for the Social Sciences version 21 (SPSS, Chicago, IL, USA).

Results

Demographics of responders

The questionnaire was sent to 387 clinicians (357 adult gastroenterologists and 30 pediatric gastroenterologists), based on the most recent records from both medical societies. Of these, 98 returned completed questionnaires, giving an overall response rate of 25.3%. Of the 98 clinicians,

[a]Second Propedeutic Department of Internal Medicine, Hippokration General Hospital, Gastroenterology and Hepatology Division Medical School, Aristotle University of Thessaloniki (Olga Giouleme, Anastasia Katsoula[a], Marios Katsaros[a]); [b]Endoscopy Unit, First Department of Internal Medicine, Papageorgiou General Hospital (Anastasios Koutsoumourakis); [c]Gastroenterology Department, Theagenio Anticancer Hospital (Konstantinos Soufleris); [d]Third Pediatric Department, Hippokration General Hospital, Aristotle University School of Medicine (Konstantina Vasilaki, Ioannis Xinias), Thessaloniki, Greece

78 (60 male) were adult gastroenterologists and 20 (4 male) were pediatric gastroenterologists. All respondents were in active clinical practice: 36 (36.7%) worked in non-academic hospital settings, 51 (52%) in academic centers and 11 (11.2%) in private practice. The length of clinical experience of the adult gastroenterologists was >20 years in 27.5%, 10-20 years in 16.6% and <10 years in 48.7%. The corresponding data for pediatric gastroenterologists were >20 years in 35%, 10-20 years in 45%, and <10 years in 20%.

Primary outcome

Importance of transition process for the disease outcome improvement in adolescent patients with IBD

All adult and pediatric gastroenterologists believed that the transition process improves IBD outcomes significantly in adolescent IBD patients (100%, n= 98/98).

Secondary outcomes

Adequacy of preparation at transfer to adult gastroenterologists

Most gastroenterologists (n=79/98, 80%) stated that adolescents were not adequately prepared before being transferred from pediatric to adult IBD clinics (Fig. 1). Subgroup analysis revealed that both pediatric (n=16/20, 80%) and adult providers (n=63/78, 80.77%) agreed that young IBD patients lacked transitional readiness skills (P=0.939).

Appropriate age to initiate the transition

The majority (53.33%) of respondents estimated that the appropriate age for transition is in the range 16-17 years, followed by 33.33% supporting the age range 17-18 years and 13.33% answering 14-15 years (Fig. 2).

Pediatric gastroenterologists were equally divided among older age ranges: namely, they believed that the appropriate age is either 16-17 or 17-18 years (50% for each). Adult gastroenterologists chose age groups of 16-17 years (59%), 17-18 years (32.1%), and 14-15 years (9%).

Since, the responses differed according to specialty, we investigated a possible correlation between the 2 variables using Spearman's rho and found a weak positive correlation, with a P-value of 0.075, which was not statistically significant. This result may be due to the small number of pediatric gastroenterologists who participated in the study.

Factors indicating that patients are ready for the transition process

Regarding mental maturity, all respondents considered it an essential factor, with 90.8% believing it to be significant

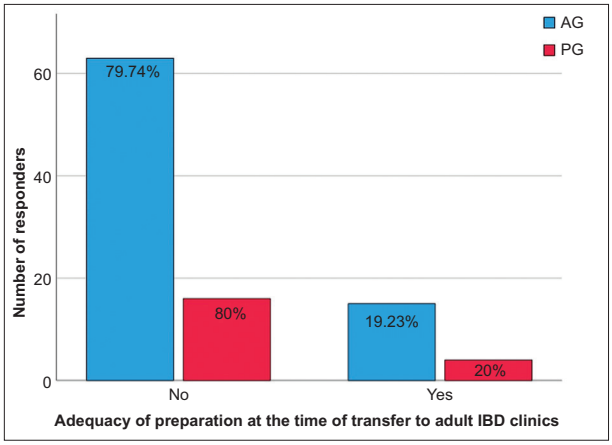

Figure 1 Belief of healthcare providers regarding the adequacy of the preparation of young patients with IBD at transfer to adult care
AG, adult gastroenterologist; PG, pediatric gastroenterologists; IBD, inflammatory bowel disease

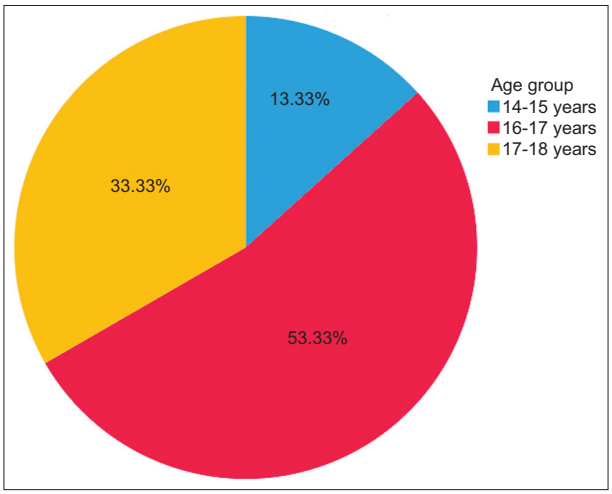

Figure 2 Belief of healthcare providers regarding the appropriate age to initiate transition for pediatric patients with inflammatory bowel disease

(Fig. 3). The same answers appeared in similar percentages by specialty.

1. Adult gastroenterologists: 8.97% answered important, 37.18% answered quite important, and 53.85% answered extremely important.
2. Pediatric gastroenterologists: 10% answered important, 30% answered quite important, and 60% answered extremely important.

Age was also considered important by the respondents, as 96.9% characterized it as a significant or an extremely important factor. The remaining 3.1% of the respondents considered age to be slightly important (Fig. 3).

Spearman's rho was used to check for a correlation between doctors' specialty and their evaluation of the age factor, revealing a slightly positive correlation with a Spearman index of 0.219 and a P-value of 0.03. This means that pediatric

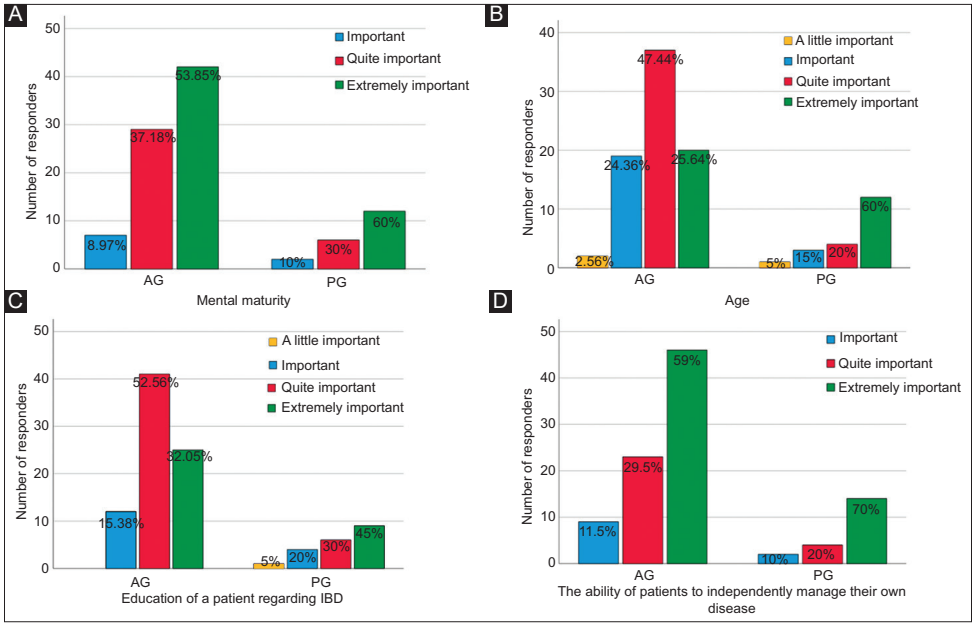

Figure 3 Belief of healthcare providers regarding patients' (A) mental maturity, (B) age, (C) education in IBD, and (D) ability to independently manage their disease as factors indicating that adolescents are ready for the transition process
AG, adult gastroenterologist; PG, pediatric gastroenterologists; IBD, inflammatory bowel disease

gastroenterologists rated age as more important than adult gastroenterologists did. The same conclusion was drawn based on the percentages per answer and specialty. Specifically, we obtained the following results.

1. Among adult gastroenterologists, 2.56% answered not very important, 24.36% answered important, 47.44% answered quite important, and 25.64% answered extremely important.
2. Among pediatric gastroenterologists, 5% answered not very important, 15% answered important, 20% answered quite important, and 60% answered extremely important.

Hence, the majority of pediatric gastroenterologists (60%) consider age an extremely important factor for sustaining a successful transition from pediatric to adult healthcare services.

The physicians viewed a patient's education regarding IBD as significant, given that 99% characterized education as an important or extremely important factor. The remaining 1% considered the education of a patient regarding IBD as having little importance (Fig. 3).

Spearman's rho was used to check for a correlation between doctors' specialty and their evaluation of the educational factor, but no statistically significant difference was found between the 2 groups. The percentages per answer and specialty led to the same conclusion.

1. For adult gastroenterologists, 0% answered not very important, 15.38% answered important, 52.56% answered quite important, and 32.05% answered extremely important.
2. For pediatric gastroenterologists, 5% answered not very important, 20% answered important, 30% answered quite important, and 45% answered extremely important.

Hence, the 2 specialties had similar evaluations of the degree of importance of this factor.

Regarding the fourth and last factor, the ability of patients to independently manage their disease, all respondents (100%) characterized it as an important or extremely important factor. More specifically, 61.2% stated that the factor was extremely important. This was followed by 27.6% who found it quite important, and 11.2% who deemed it important, as outlined in Fig. 3.

Spearman's rho was used to check for a correlation between doctors' specialty and their evaluation of the educational factor, but no statistically significant difference was found between the 2 groups. This was also confirmed by the percentages per answer and specialty.

1. For adult gastroenterologists, 11.5% answered important, 29.5% answered quite important, and 59% answered extremely important.
2. For pediatric gastroenterologists, 10% answered important, 20% answered quite important, and 70% answered extremely important.

In conclusion, the most significant initiators for a successful transition process for both adult and pediatric gastroenterologists were cognitive maturity and the ability of patients to manage their disease independently.

Collaboration between adult and pediatric gastroenterologists

Regarding this question, 42.9% believed that there was no collaboration between the 2 specialties, whereas 57.1% believed that there was collaboration. Answers by specialty revealed that the majority of pediatric gastroenterologists (85%) considered that the collaboration was not good, whereas

adult gastroenterologists were divided exactly in half (50%) on this issue.

Barriers to the transition process

According to the responses, 50% of the respondents considered that the primary barrier was the differences in the follow up of patients with IBD between pediatric and adult clinics; similarly, 45.9% considered the lack of communication and collaboration between pediatric and adult gastroenterologists, and the patient's or family's reluctance to leave a protective and well-established pediatric IBD clinic environment, as the second most important barrier; whereas the least important barrier was the absence of specialized IBD gastroenterologists in Greece. Fig. 4 presents the responses by specialty. This question revealed different answers from the respondents.

1. Adult gastroenterologists chose the lack of communication and cooperation between pediatric and adult gastroenterologists more frequently (27.7%), but with a small difference from the other barriers
2. Pediatric gastroenterologists chose the differences in the follow up of patients with IBD more frequently (43.5%), followed by patient's or family's reluctance to leave a protective and well-established pediatric IBD clinic environment (30.4%), whereas the other 2 options were not selected with particularly high percentages

An effective model for a successful transition

A higher percentage (46.9%) of respondents chose the model of joint regular meetings with both pediatric and adult gastroenterologists 6-12 months after the transition. The meeting of healthcare providers (adult or pediatric gastroenterologists) with patients in the presence of parents or guardians was chosen by 27.6%, and the development of a transition clinic by 21.4% of the respondents. Finally, the model with the lowest rate was the meeting of healthcare providers with patients in the absence of parents or guardians (5.1%).

1. For adult gastroenterologists, 21.79% answered the developing of a transition clinic, 26.92% answered the meeting of healthcare providers with patients in the presence of parents or guardians, 5.12% answered the meeting of healthcare providers with patients in the absence of parents or guardians, and 46.15% answered joint regular meetings performed with both pediatric and adult gastroenterologists 6-12 months after the transition process, as shown in Fig. 5.
2. For pediatric gastroenterologists, 20% answered the developing of a transition clinic, 30% answered the meeting of healthcare providers with patients in the presence of parents or guardians, and 50% answered joint regular meetings performed with both pediatric and adult gastroenterologists 6-12 months after the transition process, as shown in Fig. 5.

The only difference between the answers was that the meeting of healthcare providers with patients in the absence

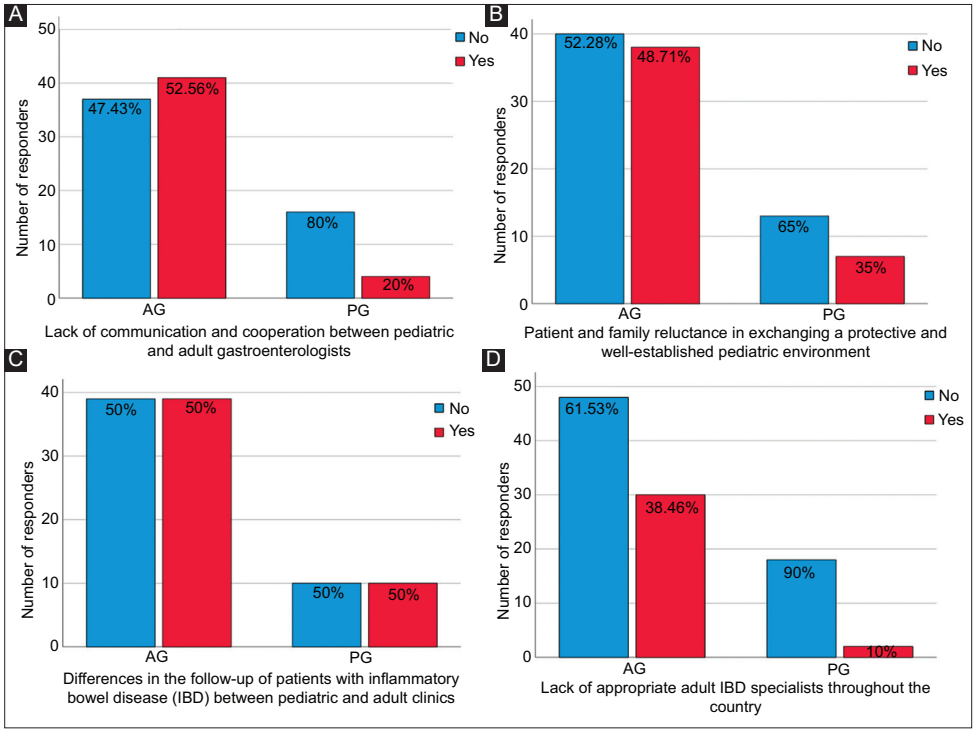

Figure 4 Differences between the beliefs of healthcare providers regarding the importance of the lack of communication and cooperation (A), reluctance of the patient and family to change a protective and well-established pediatric environment (B), differences in the follow up of IBD patients between pediatric and adult clinics (C), lack of appropriate adult IBD specialists throughout the country (D)
AG, adult gastroenterologist; PG, pediatric gastroenterologists; IBD, inflammatory bowel disease

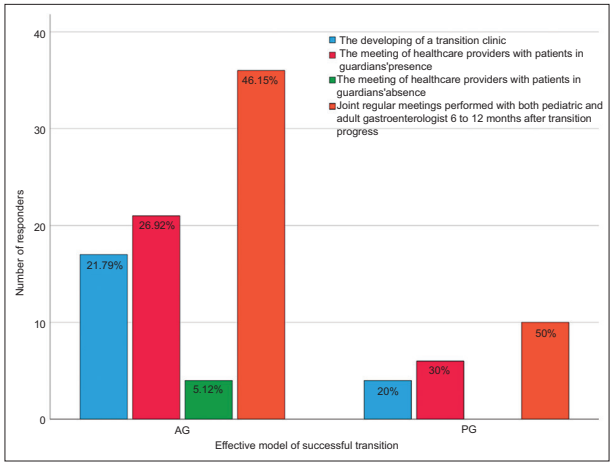

Figure 5 Responses of health care providers regarding an effective model for a successful transition for pediatric patients with inflammatory bowel disease
AG, adult gastroenterologist; PG, pediatric gastroenterologists

of parents or guardians was not selected by any pediatric gastroenterologist.

Finally, we checked for a correlation between specialty and model choice, but our initial suspicion was confirmed. Because respondents from both specialties provided similar answers to this question, no correlation was found.

Discussion

In Greece, unlike other countries, only a few tertiary healthcare services have locally operated structured transition programs to preserve the continuity of care, and national regulatory guidelines for transition care in IBD are lacking [12,13]. Transition care models in IBD demand conceptualization, foresight, and preparation. Their realization has been associated with less inflammatory activity, fewer disease- and treatment-related complications, better quality of life (QoL) and treatment plan compliance, and lower hospital admission rates and healthcare costs [14]. To the best of our knowledge, this study is the first to explore what healthcare providers believe about the transition process in Greece and to identify their perceptions of the requirements for and barriers to successful transitional care.

Our survey revealed a higher response rate among pediatric gastroenterologists (66.6%) than among adult gastroenterologists (21.8%). One possible explanation is that the questionnaire was sent not only to gastroenterologists specializing in IBD. Another possible explanation for the difference in response rates between adult and pediatric gastroenterologists is that adult gastroenterologists feel inadequately trained in adolescent care. Our observations are supported by several studies showing that adult gastroenterologists feel there is a lack of support for pediatric IBD services, because of the lack of structured IBD transition care protocols in several European countries [15,16]. Furthermore, a survey conducted among adult and pediatric gastroenterologists by Sebastian *et al* reported that 65% of adult gastroenterologists expressed indirect involvement in transitioning IBD care protocols in the United Kingdom [17]. In contrast, an online survey conducted by Gray *et al* revealed that 68.1% of pediatric providers in the United States received adequate support for transition practices in IBD care [18].

The respondents in our survey acknowledged the importance of this transition; however, 80% agreed that adolescents with IBD were often poorly prepared for the transition to adult care. Furthermore, our subgroup analysis confirmed the consensus between pediatric (n=16/20, 80%) and adult providers (n=63/78, 80.77%) that young IBD patients lacked transitional readiness skills (P=0.939). Our findings are consistent with those of previous studies. Wright *et al* revealed that only 23% of both pediatric and adult gastroenterologists reported that adolescents with IBD felt confident about their transition from pediatric to adult IBD care systems [10]. Sánchez *et al* reported that 48.1% of IBD care providers believed young IBD patients were poorly prepared at the beginning of their transition to adult care services [11]. Constanza Bay *et al* stated that the current vision of transitional care management is that when the adolescents are eligible for transmission, joint regular or alternative visits between pediatric and adult gastroenterologists should be initiated, regardless of the transition readiness skills of the pediatric patients [19].

Regarding the most appropriate age for the transition from pediatric to adult care, 53.33% of healthcare providers reported that the right age for a successful transition was between 16 and 17 years, 33.3% reported an age range of 17-18 years, and 13.33% suggested a range of 14-15 years. Notably, the health system in Greece allowed for the follow up of patients with IBD until at least 15 years of age in pediatric-operated clinics when the questionnaire was administered.

Several other healthcare services have adopted different approaches in their efforts to optimize transitional care for IBD. In Australia and New Zealand, Wright *et al* recommended a more flexible approach based on young patients' physiological maturity, self-efficiency and preparedness, although the age range of 17-19 years is considered the proper time for adolescents' transition in IBD [10]. Strohl *et al* illustrated the challenge that Canadian gastroenterologists face when patients are expected to become part of the adult system at the age of 18 years, as they are no longer eligible to be seen in a pediatric setting [7]. In Germany, Schütz *et al* described the same concerns among gastroenterologists, despite the presence of a multidisciplinary team meeting between pediatric and local adult gastroenterologists, a specialized IBD nurse and an 18-year-old patient [8]. In the United States, de Silava *et al* stated that transfer is typically initiated between the ages of 11 and 14 years and completed when the patient is between 16 and 25 years old, through joint pediatric and adult clinical visits [20]. In Japan, Kumagai *et al* reported a disagreement between adult and pediatric gastroenterologists regarding the ideal timing of adolescent transfer in adult clinics. The majority of adult care providers thought the optimal age for successful transition was 16 years. In contrast, the majority of pediatric care providers believed that the ideal age for successful

transition was 18-22 years. This argument is may be explained by the fact that 73.5% of adult gastroenterologists work in academic hospital settings [21].

Moreover, regarding the factors that affect the transition process, the present study suggested that rather than chronological age (96.9%), the most significant factors for a successful transition process were the ability of patients to independently manage their disease (100%) and the education of a patient with IBD (99%), for both adult and pediatric gastroenterologists. Our results are similar to those of other studies, such as Hait *et al*, where knowledge of the name, dose and major side-effects of medication (69%) and knowledge of one's own medical history (55%) were highlighted as the most important factors [22]. Sebastian *et al* showed that adults and pediatric gastroenterologists recognize treatment (mean score, 4.22 and 4.47, respectively) and disease understanding (mean score, 4.19 and 4.33, respectively) as the most significant factors [17]. Van den Brink *et al* revealed that adult and pediatric gastroenterologists recognized patients' ability to make decisions regarding IBD (mean score, 6.95 and 6.68, respectively) as the principal factor affecting the transition process [23].

Current recommendations also suggest that the timing of transition should be flexible and it should preferably occur during stable remission, irrespectively of age. Transition timing requires a balance between patients' individual needs, maturity, and readiness for transfer [6].

Regarding barriers to successful transition, significant differences were found in the responses of pediatric and adult gastroenterologists. The lack of communication and coordination between adult and pediatric gastroenterologists was the main barrier identified by adult gastroenterologists (27.7%), but with a small difference from other choices. In contrast, 43.5% of pediatric providers suggested that differences in the follow up of patients with IBD between pediatric and adult clinics were the main barriers.

An online survey conducted by Gray *et al* revealed that pediatric IBD providers reported the following barriers to successful transition (in order of incidence): parental resistance to transfer (95%); adolescent resistance to transfer (94.3%); patient unreadiness for various reasons, such as cognitive immaturity; medication non-adherence; lack of self-awareness (ranging from 75.7-92.1%); lack of human resources (82.9%); lack of coordination between adult and pediatric healthcare providers (70%); healthcare provider resistance to transfer (65%); and lack of appropriate adult specialists in IBD throughout the country (ranging from 31.4% to 52.9%) [18]. Our survey highlights the lack of collaboration between adult and pediatric gastroenterologists and the differences in the follow up of patients with IBD in pediatric and adult clinics—similar findings to those reported in other European countries [11,17].

In addition to the patient transition models proposed by the responders in this study, various other methods have been proposed for transition path optimization. Waschmann *et al* evaluated a novel virtual transition protocol for children with IBD and their parents to improve transition readiness skills, self-efficacy, and satisfaction. After completing the virtual workshop, adolescents with IBD demonstrated a significant increase in transition readiness skills [14]. Akobeng *et al* compared telephone consultations vs. face-to-face consultations for children with IBD in a randomized controlled trial, showing no inferiority between the 2 methods regarding improvements in QOL scores (113 vs. 106, P=0.19) [24]. Carlsen *et al* assessed a patient-managed interactive web-based disease-monitoring tool vs. usual care in adolescent IBD patients in an open-label randomized trial, which revealed no differences in QoL and medical adherence. None of the participants expressed a feeling of safety while using the web-based application. Furthermore, the authors reported no differences between the groups regarding disease activity and step-up approach in treatment [25]. In a cross-sectional study, Feingold *et al* appraised adolescent and parental perspectives on transitions in IBD care using photovoice (using photographic images to evaluate participants' personal experiences). Self-reported transition readiness, self-reported resilience, and parents' reports of children's resilience scores were high, whereas parents overrated their children's IBD-related self-efficacy [26]. Finally, Erős *et al* recently examined the currently applied transition practice in IBD through systematic analysis, and highlighted the significance of structured transition interventions based on a joint pediatric-adult clinic (with the participation of an IBD nurse, dietician, psychologist, social worker, and a family therapist) and patient education programs related to the IBD transition process, to improve patients' readiness skills, self-efficacy, and satisfaction [27].

The limitations of this study include a relatively low response rate (25%) and a small sample size. One of the most significant potential limitations of using the web for a survey is the low response rate. A meta-analysis by Cook *et al* estimated that the mean response rate for web surveys was 39.6% [28]. Zhang *et al* highlighted the low response rate of web-based surveys in the past decade, reflecting the participants' fatigue due to the spread of online surveys [29]. Clinicians who did not participate in the questionnaire either may not have believed in the transition protocol or did not participate actively. It may be explained by the fact that in this study, we focused on general gastroenterologists rather than specifically those who specialized in IBD. Moreover, participants were asked about barriers to a successful transition; this may be a limitation, because they may view transition success differently. In addition, having limited answer choices for questions and no open-ended questions could be a limitation. To our knowledge, there is no transition IBD clinic in Greece; this study aims to highlight the need to improve the active participation of gastroenterologists in a transitional care program for IBD in Greece.

The best strategy for transition in patients with IBD has yet to be determined. This survey revealed differences in the perceptions of adult and pediatric gastroenterologists regarding the transition requirements in young adults with IBD. Close collaboration between adult and pediatric professionals with adolescent patients and their families may eliminate these barriers and potentially lead to an effective transition program. Further randomized controlled trials are required to evaluate and suggest a more successful transition model.

Summary Box

What is already known:

- National regulatory guidelines for transitional care in pediatric patients with inflammatory bowel disease (IBD) in Greece are lacking
- Healthcare transition has been defined as the scheduled movement of adolescents and young adults with chronic physical and medical conditions from child- to adult-centered care to enable patients to manage their disease
- Pediatric patients with IBD transferring to adult IBD clinics are at risk of poor adherence to medication, loss of follow up, and other adverse clinical outcomes

What the new findings are:

- This study is the first to explore what healthcare providers believe about the transition process in Greece
- The results demonstrated that adult gastroenterologists chose the lack of communication and cooperation between pediatric and adult gastroenterologists as the main barrier in the transition process; in contrast, pediatric gastroenterologists chose differences in the follow up of patients with IBD
- Most respondents chose the model of regular joint meetings with pediatric and adult gastroenterologists 6-12 months after the transition

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