

How to raise the interest for neurogastroenterology among young gastroenterologists?

INTRODUCTION

Gastroenterology is one of the most popular specialities in medicine. During gastroenterology speciality training, trainees can decide to further specialise in a sub-speciality. In 2015, a survey performed among gastroenterology residents in the Netherlands reported that the subspecialities most often chosen were 'advanced' endoscopy, hepatology, oncology and inflammatory bowel disease. The interest in neurogastroenterology was very limited. This contrasts with the prevalence of disorders of the gut brain-interaction (DGBIs), affecting 40% of the worldwide population.¹ DGBIs are also the most frequent cause of consultation in patients presenting gastrointestinal symptoms in general practice.² The lack of interest in irritable bowel syndrome (IBS), one of the more well-known DGBIs, is blatant and imbalance with patients' expectations.³

NEUROGASTROENTEROLOGY: THE FORGOTTEN DISCIPLINE?

There could be multiple reasons for this apparent lack of interest in neurogastroenterology. One of the most important is related to the mediocre treatment effects in DGBIs, often resulting in dissatisfaction both on the side of the patient and the practitioner. This is related to the absence of biomarkers, effective treatment options but also lack of disease recognition.^{4,5} Patient dissatisfaction often leads to repeat consultations, with the useless repetition examinations⁶ and the persistence of symptoms increases healthcare costs.⁷ One recent study reported that in the general population, the absence of diagnosis (self-reported IBS patients) was also associated with a higher impact on absence from work.⁸

DGBIs, as IBS, are primarily diagnosed based on a combination of characteristic symptoms, corresponding to the Rome IV criteria, associated with the exclusion of organic diseases using limited diagnostic testing.⁹ Given the fact that diagnostic criteria are anchored around specific symptoms rather than biomarkers inherently generates uncertainty on the healthcare professionals' behalf. General practitioners and general gastroenterologists are therefore less

confident to diagnose DGBIs than experts in the field.¹⁰ It is therefore imperative to improve gastroenterologists' confidence when diagnosing and managing these patients. Ideally, this should be accomplished through training. Unfortunately, it is obvious that in undergraduate and postgraduate medical education, neurogastroenterology is largely underrepresented. The European Society (ESNM) is currently supporting a survey which is assessing the differences in IBS care and training across Europe, the DICE study. Preliminary data presented at NeuroGASTRO2021 found large differences in Europe; and demonstrated among others that IBS-specific training and access to a multidisciplinary IBS team have a significant impact on doctors' confidence to manage IBS patients.¹¹ These results will help us to improve IBS management and education by identifying the gaps in IBS education across Europe. Effective training ought to be given by experts with considerable research and clinical expertise. It is illustrative that across Europe, the number of professors in neurogastroenterology has become scarce: In France, there are 7 (out of 131 professors of Gastroenterology and hepatology) and just 1 currently still active in the Netherlands. Only very few European academic centres are specialised in neurogastroenterology and are therefore not accessible to all trainees.

Perhaps the academic knowledge gap is related to a greater societal shortcoming when considering DGBIs. Disease recognition is lacking within the society. For patients, it remains difficult to talk about their symptoms. When seeking healthcare, patients often feel dismissed or not taken seriously. Often, following a round of negative diagnostic examination, they are told that 'there is nothing wrong' with them or that their symptoms are merely stress-related. Many practitioners indeed consider the term 'functional' as a synonym for psychological comorbidity and therefore the term has a negative connotation. Hence the efforts of the Rome Foundation to introduce the new terminology of DGBIs.¹² In addition, accumulating evidence suggests potential 'organic' origins of IBS and other DGBIs, related to intestinal barrier function, intestinal microbiota etc.

Furthermore, the lack of research funding is obvious. If we look to the funds provided by the European Commission in the last years, less than 1% was dedicated to neurogastroenterology, and all were addressing IBS but none of the other prevalent DGBIs such as

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functional dyspepsia.¹³ The exact reasons for this, whether it is the underestimation of DGBI burden, fewer application, insufficient quality of the project etc., remains unclear. In comparison, research proposals for inflammatory bowel disorders, which are less prevalent, obtained more than 35% of the funding; there is a big gap¹³! The lack of interest of the pharmaceutical industry is also a problem. Pharmaceutical firms are probably discouraged because the heterogeneity of the IBS has made previous pharmacological interventions of limited therapeutic efficacy, resulting in therapeutic gains of only 8%–14% in responder rates compared to placebo in several large trials.¹⁴

WHAT COULD BE THE SOLUTION?

We can take inspiration from previous programmes such as ‘Pancreas 2000’. This program was started in 1999. At that time, it was difficult to recruit residents and young medical doctors in this field and today Pancreas 2000 is the official post-graduate activity in pancreatology. Some educational programs are available in neurogastroenterology but there is still a need for improvement, and probably to reach more trainees and gastroenterologists. UEG education provides different programs: webinars, online course and postgraduate teaching.¹⁵ The Rome Foundation also offers a broad range of educational content. In addition, UEG journal recently published European consensus and guidelines on the management of patients including DGBIs.¹⁶⁻¹⁹ UEGW and NeuroGASTRO meetings organised by the ESNM also provide an important forum for neurogastroenterology. While these initiatives are step in the right direction, they are not enough to reverse the trend. Therefore, we probably need to reorganise and built a postgraduate program in neurogastroenterology comparable

to Pancreas 2000. This educational program should be organised as e-learning but also integrated small-group learning.^{20,21} For that, we need to build a strong network between the different European centres involved in neurogastroenterology. We can use this network to also share our trainees²² and encourage them to go abroad.²³ Trainees will be able to learn from multidisciplinary team meetings that take in our specialised centres.²⁴ UEG supports these fellowships with the international research fellowships and the UEG research fellowship.^{25,26} We could also learn from UEG that was able to raise the interest in young fellows with the Young Talent Group.²⁷ This neurogastroenterology network will be able to better identify, support young candidates, and match them with a good mentor; toward a successful research career for some of them (Figure 1).²⁸⁻³⁰

Cutting-edge translational research into neurogastroenterology also has the potential to raise awareness and generate the necessary public, professional/academic and commercial interest needed to advance the field further. The recent paper from Guy Boeckxstaens' team on potential mechanism of food-induced abdominal pain, published in Nature made the buzz.³¹ It has been cited 19 times and tweeted 460 times since its publication in January 2021. It also important to better communicate our ideas and research findings, for example, using social media such as twitter to give more visibility to our field.³² A recent study showed that among 250 accounts associated with the term ‘gastroenterology’, only 6.3% had a speciality interest in neurogastroenterology.³³ Improving communication strategies on DGBIs, related to both training, education and dissemination of research findings could be an important tool in closing the knowledge gap in neurogastroenterology.

In conclusion, it is imperative to improve DGBI interest among young gastroenterologists in order to advance the field further and meet patients' needs for optimal clinical management. The

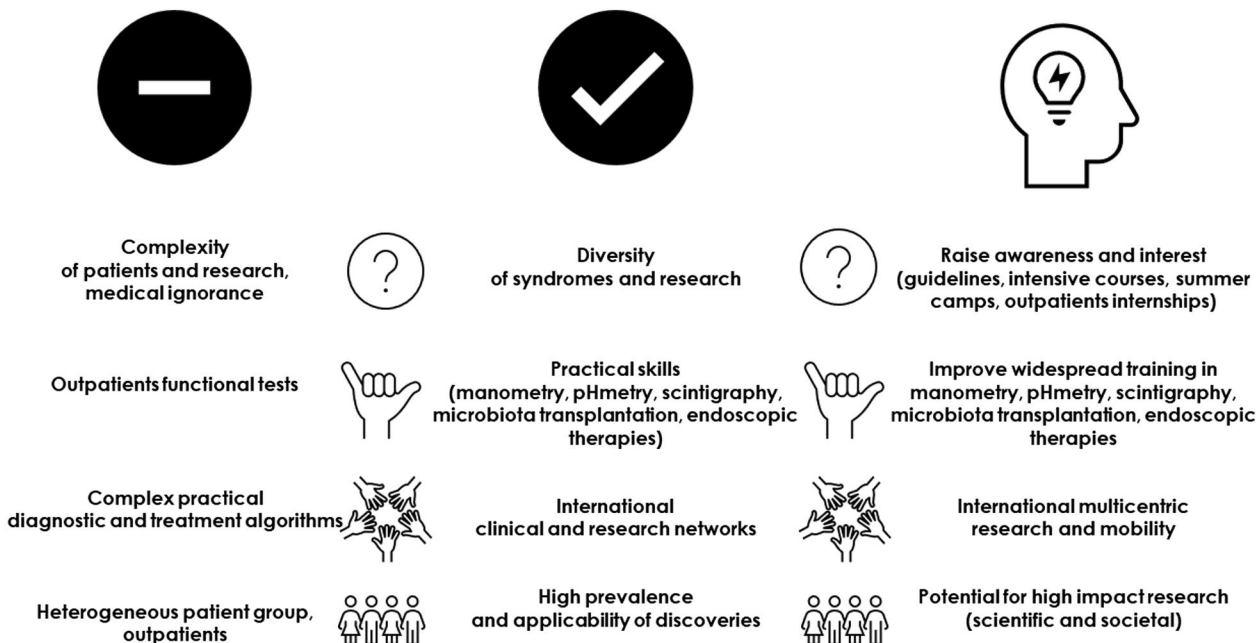


FIGURE 1 Neurogastroenterology balance and how to reverse the trends

professional gastroenterology community, such as UEG, is one of the pillars by supporting all fields in gastroenterology, and can have a pivotal role in supporting this effort.

KEYWORDS

DGBIs, gastroenterology, IBS patients, neurogastroenterology, The European Society

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the content of this manuscript.

AUTHOR CONTRIBUTION

All authors contributed equally in the conception and writing of this editorial.

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DATA AVAILABILITY STATEMENT

NA.

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