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Source / Izvornik: **Journal of Gastrointestinal and Liver Diseases, 2020, 29, 247 - 250**

Journal article, Published version

Rad u časopisu, Objavljena verzija rada (izdavačev PDF)

<https://doi.org/10.15403/jgld-2407>

Permanent link / Trajna poveznica: <https://urn.nsk.hr/urn:nbn:hr:184:729268>

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Download date / Datum preuzimanja: **2025-02-07**



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Recent Data on Irritable Bowel Syndrome from some Central and East European Countries

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Received: 17.04.2020
Accepted: 05.05.2020

ABSTRACT

There is scarce information on the prevalence of irritable bowel syndrome (IBS) in East Europe. Most countries have small, local studies or studies that to our knowledge are not published in internationally available journals. This is a report from the NeurogastRO 2019 meeting held in Iași, Romania, 7-9 November 2019. During the meeting, specialists from 12 East and Central European countries presented data on IBS epidemiology in their countries. We report the stage of knowledge in each of these countries. .

Key words: Central Europe – East Europe – epidemiology – functional gastrointestinal disorders – IBS – neurogastroenterology.

Abbreviations: FGID: functional gastrointestinal disorders; IBS: irritable bowel syndrome; IBS-C: IBS with predominant constipation; IBS-D: IBS with predominant diarrhea; RSN: Romanian Society of Neurogastroenterology.

INTRODUCTION

Every two years the Romanian Society of Neurogastroenterology (RSNG) organizes their international meeting of neurogastroenterology, called NeurogastRO. In November 7-9, 2019 in Iași, it was the second time that our society used this meeting in order to offer the possibility of invited lecturers from Central and East Europe to present the available data from their countries on irritable bowel syndrome (IBS) and other functional gastrointestinal disorders (FGID). In this report the main information is listed from the attending countries in alphabetic order. These data are either unpublished before or less well disseminated. Missing countries are those which did not express interest in participating in the Iași meeting. This meeting's report is aiming to add more data to the scarce information on IBS in this part of Europe [1].

Albania

There are no published data on IBS in Albania. Therefore

Galica & Galica searched for prevalence data in the area of Korce, in East Albania in a single center pilot study, on female subjects only (oral communication). Given that females with abdominal surgery develop more frequently IBS [2], they compared also a random sample of females with at least one intervention of pelvic surgery with matched controls. Five from the 50 female subjects filled the Rome IV criteria for IBS, thus resulting in a prevalence of 10% (the main limitation is the small sample). There was no difference between the groups with pelvic surgery and no surgery; however, bloating was more frequent in surgical female patients. IBS with predominant constipation (IBS-C) was more frequent than IBS with diarrhea (IBS-D).

Belarus

This country has also no publicly available information in common references data bases on IBS. In a poster presentation, Rustamov and Derra showed data on IBS in Belarus. In this study, patients' histories of 6466 outpatients with gastrointestinal (GI) diseases who visited the gastroenterology service of Minsk Clinical Consulting Diagnostic Centre were analyzed. A number of 1698 of patients with IBS were selected. It was revealed that IBS has a prevalence of 26% from all digestive pathologies. In females, IBS is 2.5 times more common than in males. IBS occurred in all age groups with a small overrepresentation in the frequency of subtypes in the elderly.

Bulgaria

Bulgaria is another country with few data published on the epidemiology of IBS. Therefore, a group of young Bulgarian gastroenterologists initiated a study to fill in the gap (Dimitrova & Nakov, oral communication). The study was carried out in

the months May-August 2019. A sample of 1896 individuals (0.03% of the Bulgarian population) was surveyed with a 38 item questionnaire. A prevalence of 20% was found (379 patients) in the study population according to Rome IV criteria. Overall, mixed-IBS (IBS-M) was the most common subtype, accounting for 52.2% of all IBS patients in Bulgaria. IBS-D represented 32%, IBS-C 14% and unclassified IBS (IBS-U) 1.8%. Subjects perceived themselves as being under stress and anxious.

Croatia

Croatia is one of the few countries in the region with published data on the epidemiology of IBS and reports a high prevalence of over 20% [3]. Therefore, in this meeting no new presentation of IBS epidemiology was offered. Instead, Croatia presented a comprehensive review on IBS and obesity (Hauser, oral communication). Obesity seems to be linked to IBS [4]. Visceral adipose tissue is associated with an increase risk of IBS, mainly with IBS-D. Gut microbiota is supposed to be the main link of this association.

Hungary

In Hungary there is a project aiming to identify IBS cases correctly, to build a national IBS registry and to collate information on the epidemiology of IBS in this country (Czimmer, oral communication). Using the Rome IV questionnaire compared with a sample surveyed with a Rome III questionnaire, it was found out that the prevalence of IBS in blood donors dropped from 7 % to 0.7% [5]. These data have to be confirmed and completed by undergoing studies in this country.

Macedonia

From Macedonia we have a cooperative study on the prevalence of FGID in children and adolescents in the Mediterranean area [6]. According to this study, the prevalence of IBS in pediatric patients around the Mediterranean Sea is 4%. In the Iași Meeting a study presented the differences and overlap between IBD and IBS in an audit of a colonoscopy center (Trajkovska et al, oral communication). Both IBD and IBS patients had similar demographic characteristics, but pain and weight loss were more frequent in IBD. Between IBS patients, IBS-D was more frequent.

Moldova

Moldova has no relevant data on IBS yet. Babin presented a study where stool samples were analyzed in IBS and controls (oral communication). This preliminary study showed that in IBS-D more hemolytic bacteria were found than in controls. Symptoms improved after therapy with rifaximin.

Poland

An overview of epidemiological data on FGID including IBS in the Polish population was presented by Mulak [7] at the previous Neurogastro meeting. In a survey study conducted in 850 subjects (60% women), bloating was reported by 31% of the participants, dyspeptic symptoms by 23%, while constipation and IBS by 13% of the subjects [8]. In another

Polish study, in which 120 female university students were included, the symptoms corresponding to IBS were observed in approximately 40% of the women [9]. The occurrence of abdominal symptoms was influenced by nutritional habits in 81.7% of the subjects and by stress in 80.8% of them [9]. Stachowska et al. [10] assessed the prevalence of abdominal pain and disturbed bowel movements in 1479 young adults (56% women). Interestingly, the subjects were recruited among the participants of a big rock music festival in Poland and they were interviewed using an online application. The frequency of abdominal pain amounted to 19.2%. Psychological distress and the use of proton pump inhibitors as well as antibiotics were associated with the increased risk of abdominal pain occurrence [10]. Recently, Poland has participated in the global Rome Foundation study shedding new light on the worldwide prevalence and burden of functional gastrointestinal disorders [11].

Romania

Romania is one of the three countries from East Europe where prevalence of IBS was investigated by an internet survey in the frame of the Rome Foundation [11]. Before this, two relevant diverging studies were available from this country and presented in Iași (Dumitrascu, oral communication). One was published only as an abstract and presented the prevalence of diagnosed IBS on the lists of family physicians [12]. On a sample of almost 25,000 subjects from the rolls of 28 general physicians (GPs,) the prevalence of the IBS diagnosis (thus, largely underestimated) was 2%, with 1:1 gender ratio. In another study by Drug et al. [13] cited in the meta-analysis of Lovell and Ford [14] carried out in an urban area of East Europe, the prevalence of IBS was 14% with a gender ratio of 1:2.

Russia

Data from Russia have been very recently presented in the Sperber study of the Rome Foundation [11]. Several more papers can be retrieved from the main data bases on IBS [15]. But epidemiological data are scarce. Therefore in Iași an oral presentation (Bordin) was submitted on FGID and data on the overlap between IBS and other FGID were reiterated. Thus, it was shown that IBS-C has a strong overlap with GERD, and functional dyspepsia [16]. More FGIDs are associated than isolated: the more conditions are associated, the more severe is IBS.

Serbia

Serbia is also making efforts to assess the burden of IBS in their country. In an oral presentation (Lukic) reported a high prevalence of IBS in urban areas (20-30%). In an audit of a main tertiary gastroenterology center between 2017-2018, from 2308 patients, the following data on IBS were found: IBS-D was diagnosed in 117; IBS-C in 250 (the most common type) and IBS-M in 62 cases. Colon carcinoma was diagnosed in only 2 instances (IBS-C and -D); pathological findings were most common in IBS-D patients: 1 carcinoma, 7 microscopic colitis, and 8 inflammatory bowel diseases (Lukic et al, in press). Treatment is addressed to symptoms and with dietary FODMAP restrictions.

Ukraine

In this country the estimated prevalence is 16-20% (Dorofeyev, oral communication). Post-infectious IBS represent 28.5% from total IBS cases [17]. In a previous study, Dorofeyev et al. [18] found that IBS-C was the most frequent subtype (43%), followed by IBS-D (35%). IBS-C was more frequent in the elderly [18]. Ukraine has a national strategy for FGID including IBS consisting of: national guidelines, reference centers, education programs, doctors' cooperation [18].

DISCUSSION

There is scarce information on the prevalence of IBS in East Europe. Most countries have small, local studies or studies that to our knowledge are not published in internationally available journals. However, the awareness on IBS is high in most of these countries and the patients benefit from management according to each nation's standards. Some East countries have societies or working groups on neurogastroenterology and a few are affiliated to the European Society of Neurogastroenterology and Motility (ESNM).

Undertaking epidemiological studies on IBS is a very challenging task [19], despite the availability of methodological guidelines [20]. Three East European countries were part of the collaborative study of the Rome Foundation on Global Survey on Functional Gastrointestinal Disorders: Romania, Poland, Russia. According to this study, general prevalence in these countries are respectively: 3.5%, 4.4%, 5.9% [11]. This study offered for the first time relevant epidemiological data based on an internet survey and the figures are lower than in many previous studies historically recorded and using other methodology (10-20%). In the meta-analysis of Lovell and Ford 2012 [14], the pooled prevalence was in all studies 11.2%, with variation from country to country (but few countries from East and Central Europe) varying from 1.1% to 45.0%. In countries not involved in the Rome Foundation Global Survey, and according to data disseminated during Neurogastro 2019, prevalence figures are higher than those reported in the Rome Foundation Global Survey.

There is a need to extend this study also in other countries, with a smaller population. Epidemiological data are the backbone for management strategies of IBS in each country. Studies on the epidemiology of IBS in each country should be based on the same methodology [21]: to be addressed to the general population, not only to in- or outpatients; to use the same questionnaire, i.e. Rome IV [22]; to use the same technique of interview (either on internet or by face to face interview). Raising funding for this project should be a task of individual countries.

The contributors of this manuscript are committed to creating a network on FGID in East Europe, using the model of the International Liaison Committee of the Rome Foundation.

CONCLUSION

This is a report from the Neurogastro 2019 meeting held in Iași, Romania, 7-9 November 2019. During the meeting, specialists from 12 East and Central European countries

presented data on IBS epidemiology in their countries. We report the stage of knowledge in each of these countries. These data were either not presented before or are not visible on the main data bases.

Conflicts of interest: None to declare.

Authors' contribution: All authors delivered presentations to the Neurogastro 2019 meeting on IBS. D.L.D. had the idea and wrote the draft; all other authors provided data, read the draft and contributed to the text and agreed the present form of the text

Acknowledgements: The authors thank Anatol V. Sikorski and Desislava Dimitrova for the support of the IBS investigations in Belarus respectively Bulgaria.

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