

## THE PREVALENCE OF INFLAMMATORY BOWEL DISEASES IN THE REGION OF GOSTIVAR DURING THE PERIOD OF 2018-2022

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### Abstract

Lifestyle, especially nutrition, has changed over the centuries, tending to the consumption of fast foods, unhealthy lifestyles that increase the risk of many different diseases. This is expressed by the high incidence and prevalence of many chronic and acute diseases, which in different populations around the world are of different degrees. Nowadays, cardiovascular diseases and diabetes are the first diseases that have a high mortality rate, while inflammatory diseases of the gastrointestinal tract cannot be overlooked, which occupy the third place in terms of mortality rate. The aim of this paper consists in describing the pathology of inflammatory bowel diseases, presenting statistical data for cases with inflammatory bowel diseases in the region of Gostivar, in the 5-year period from 2018 to 2022. The main objectives of this paper is the identification of cases with two main inflammatory bowel diseases: ulcerative colitis and Crohn's disease, pathological description, determination of prevalence, etiology, clinical diagnosis and drug treatment of these disorders, incidence of these disorders by gender and age groups affected by ulcerative colitis and Crohn's disease.

From the total number of 376 examined patients, for the period of 5 years, from 2018 to 2022, sick with inflammatory bowel diseases were of age 15-82.

In the population included in the research, we can conclude from the data analysis in the 5-year period, according to gender, men have a higher prevalence of inflammatory bowel disease (one of the factors may be smoking), while it belongs to age. group is the age group from 31 to 50 years old.

Regarding the form of inflammatory bowel disease, in the population included in the research, 44% of patients were diagnosed with ulcerative colitis, compared to 23% of patients with Crohn's disease.

*Keywords:* prevalence, inflammatory bowel diseases, Crohn's disease, ulcerative colitis.

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### 1. Introduction

Nowadays, the incidence and prevalence of systemic and inflammatory diseases is high, affecting different systems, but also different age groups and genders.

In general, inflammatory diseases are characterized by a chronic or acute inflammation, which by nature in some cases are diseases with a severe degree of expression and affecting many systems at the same time and which can lead to a risk to life.

One of the systems affected by inflammatory diseases is the gastrointestinal system. The range of diseases involving the upper and lower gastrointestinal tract is wide and complex. Inflammatory bowel diseases (IBD) present an entity in itself and constitute a significant challenge in the treatment and control of the complications that can bring to patients who are affected.

In most cases, the inflammatory syndrome accompanying these diseases is extensive, general and non-standard. But what complicates the approach to identifying inflammatory bowel diseases, often not the symptoms or signs, is the attitude that patients have towards problems coming from the colon (large intestine), influenced by their cultural background.

Two are the main diseases that build inflammatory bowel syndrome;

1. Ulcerative colitis and
2. Crohn's disease. Their clinical appearance is approximately the same and difficult to distinguish from the patient, therefore it is recommended that the symptoms mentioned above should not be neglected but should be acted upon in time, in order for the treatment and recovery to be faster and without other consequences.

## **2. Aim**

The purpose of this study consists in describing the pathology of inflammatory bowel diseases, presenting statistical data for cases with inflammatory bowel diseases in the region of Gostivar, in the period of 5 years, from 2018 to 2022.

The incidence of inflammatory bowel diseases (IBD) is showing a global increase, with considerable variation in disease levels and trends in different countries and regions of the world. Understanding these geographic differences is essential for the formulation of effective strategies for the prevention and treatment of these diseases, which are also targeted by the World Health Organization (WHO) for their prevention and adequate treatment.

The main objectives of this paper include:

- Identification of cases with two main inflammatory bowel diseases: ulcerative colitis and Crohn's disease, pathological description,
- Determining the prevalence, etiology, clinical diagnosis and drug treatment of these disorders,
- Incidence of these disorders according to gender and age groups affected by ulcerative colitis and Crohn's disease.

## **3. Material and methods**

This study includes statistical and descriptive data of cases of inflammatory bowel disease, mainly in the population in the Pollug region, specifically in the city of Gostivar and its surroundings.

The analysis of the statistical data of cases affected by these diseases was done for the 5-year period, from 2018 to 2022, including the cases reported and treated in the Benelu Internal Medicine Ordinance, specialized in gastroenterohepatology. Including a total of 376 examinees, patients with inflammatory bowel diseases aged 15-82 (over 60) years.

Also, this paper includes data for patients of both age groups and both sexes, in order to have a more accurate overview of the incidence and prevalence of the risk and rate of occurrence of diseases based on age groups and according to gender.

The diagnosis is made on the basis of the anamnesis, clinical examination, laboratory analyzes and other diagnostic methods: ultrasonography and endoscopic diagnosis (rectoscopy, colonoscopy, oesophagus, gogastroduodenoscopy) and, if necessary, x-ray examinations, based on the previous criteria.

The processing of the data is done tabularly, according to the number of patients reported within the given period, but for the purpose of easier elaboration, the cases reported in a 1-year period within the 5-year period of the research were calculated. Due to the lack and impossibility of following patients over a longer period of time, such as during diagnosis and treatment, in this paper we will not be able to show all the analyzes of the hematological, immunological and biochemical parameters in the affected patients, which has a very great relevance for the advancement and progress of the disease, for this we will present only some data for a certain number of patients.

#### **4. Results**

From the total number of 376 patients examined, for the period of 5 years, from 2018 to 2022, sick with inflammatory bowel diseases aged 15-82 (over 60) years, we first divided them by gender.

In total, 250 patients were male and female from age groups 15 to over 60, and 126 patients were of the same age group. From the collected data, we see that the highest percentage of patients who gravitated during this 5-year study period is higher among the third (31 – 40 years old) and fourth (41 – 50 years old) age group, with a total of 26% of the total number of patients.

In terms of the clinical overview of these patients and the given diagnosis, in the specialized ordinance for gastrointestinal diseases, 76% of patients have been diagnosed positively for inflammatory gastrointestinal diseases. The incidence of ulcerative colitis and Crohn's disease was as shown below:

Gastrointestinal tract infections can be of different nature, and are not always indicators of more severe inflammatory diseases. Based on this study, 120 patients were healthy but suffering from acute inflammation of bacterial nature in 98% of the cases and seasonal (from consumption of foods with turmeric, summer time) or gastritis. While 167 patients or 44.41% of the total number of patients involved in the research were diagnosed with ulcerative colitis and 23% or expressed in numbers of patients 89 patients were with Crohn's disease.

#### **5. Conclusion**

In a meta-analysis from 2010 on mortality from intestinal diseases, based on nine population-based studies, the standardized mortality ratio was 1.39 [95%]. In terms of cause-specific mortality, a significantly increased risk of death from cancer, chronic obstructive pulmonary disease, gastro-intestinal disease and genitourinary diseases were noted. Another meta-analysis from 2007, based on 10 population-based studies [8 European countries], reported no increase in overall mortality in patients with ulcerative colitis [95%], although an excess mortality was seen in patients with untreated chronic colitis in time and in the correct manner.

These and other data have led the Health Institutes and the World Health Organization to place a particular emphasis on the topic of gastrointestinal inflammations, giving consistent recommendations on lifestyle and nutrition many.

Timely diagnosis and non-glyging of symptoms, which are often the same as other battery, gastritis and seasonal infections, is the essence of reducing the risk of complications and advancing these diseases.

In the population involved in the research, we can conclude that from the analysis of data in a 5-year period, men have a higher prevalence for inflammatory bowel disease (one of the causes may be smoking), while in terms of age group 31 to 50 years old.

In terms of inflammatory bowel disease, in the population involved in the research 44% of patients were diagnosed with ulcerative colitis, with 23% of patients with Crohn's disease.

These diseases and the complications that may come from them should be assessed, given that patients with IBD are at a higher risk of developing specific types of extra-intestinal cancers, including hematological and skin cancers.

Therefore, it is recommended to give special emphasis to the way of feeding, and secondly to the non-glycemic symptoms that are characteristic of inflammatory bowel diseases.

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