

## Epidemiology of Inflammatory Bowel Disease in Iran: The Distance and Difference in the Incidence of the Diseases Are Decreasing Due to the Globalization

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### Dear Editor,

Taghavi et al. (1) reported in their retrospective analytical study, about multiple epidemiological factors of inflammatory bowel disease (IBD) in South region of Iran. They reported an increasing number of IBD patients with no significant change in lag time between the onset and diagnosis of IBD. In addition, they found a correlation between the type of disease and positive family history, and reported the age range of 20-29 years as the peak of age distribution of IBD and without any second peak at the age of 60 years. The authors' two further interesting observations are focusing on the dominance of left-sided colitis and the incredible frequent use of infliximab (57%) in Crohn's disease (CD). The prevalence and incidence of IBD seems to be stable in the high-incidence areas like North America or Northern Europe; however, an increasing number of cases is recorded in Southern and Eastern Europe and Asia. In these regions, the emergence of ulcerative colitis (UC) is followed by CD. Ng et al. (2) reported about the geographical variations of IBD in different countries. The highest incidence rates have been noted in Northern Europe, UK and North America and in the Pacific countries mainly New Zealand and Australia, which may be explained by the similar lifestyle and the grade of industrialization in these areas. The frequency of IBD is increasing in the westernized countries in Asia, like China, South Korea, India, and Iran. Obvious differences have been reported about the incidence rates of IBD between the European countries. The highest incidence has been shown in Iceland and Faroe Islands in the North and in Crete and Sicily in the South of Europe. Recent studies from Hungary showed the increasing

incidence of IBD in previously low incidence areas. The mean incidence rates were 8.9/105 person per year for CD and 11.9/105 person per year for UC, respectively. Extension of UC diagnosis was presented as proctitis in 26.8%, left-sided colitis in 50.9%, and pancolitis in 22.3%, while the first location of CD was ileal in 20.2%, colonic in 35.6% and ileocolonic in 44.2%. Stenosing or penetrating type at the time of diagnosis occurred in 35.6% of the cases. Approximately 11% of patients had a family history of IBD. They observed one peak of incidence in the 21-30-year-old population. Approximately 10 years ago, left sided colitis was the leading form in the East-central Europe area like in Iran, however, according to the newest Epicom data (3), this region, pancolitis became as frequent as in the Western part of Europe. Since the extent of the disease is one of the most important prognostic factors, more complications and operations can be expected in our region. It will be interesting to follow whether a similar tendency will follow in Iran. or not, and how much is the use of infliximab per each patient with CD. It is difficult to imagine a different, very aggressive behavior of CD in Iran, some other personal factors might be the overuse of anti-TNF there.

In conclusion, the incidence and prevalence of IBD is increasing in low incidence areas like Eastern Europe or Asia. The estimated prevalence of IBD is approximately 0.3% European population with a geographical variation (4). It is not obvious that the frequency rise of IBD can cause a real change or is a consequence of improved diagnostic techniques and awareness of physicians; however, IBD an important publichealth problem, as it may affect young population that inhibits education, work ability and social life, and may lead to decreased quality of life.

### Authors' Contribution

Concept and preparation of manuscript: Anita Balint, Klaudia Farkas, Renata Bor, Tamas Molnar. Data collection and manuscript preparation: Anita Balint, Klaudia Farkas, Renata Bor. Critical revision of the manuscript for important intellectual content: Tamas Molnar.

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All of authors have no financial or personal relationship affiliations that could influence (or bias) the author's decisions, work, or manuscript.

### References

1. Taghavi SA, Safarpour AR, Hosseini SV, Noruzi H, Safarpour M, Rahimikazerooni S. Epidemiology of Inflammatory Bowel Diseases (IBD) in Iran: A review of 740 patients in Fars province, Southern Iran. *Ann Colorectal Res.* 2013;1(1).
2. Ng SC, Bernstein CN, Vatn MH, Lakatos PL, Loftus EV, Jr, Tysk C, et al. Geographical variability and environmental risk factors in inflammatory bowel disease. *Gut.* 2013;62(4):630-49.
3. Burisch J, Pedersen N, Cukovic-Cavka S, Brinar M, Kaimakliotis I, Duricova D, et al. East-West gradient in the incidence of inflammatory bowel disease in Europe: the ECCO-EpiCom inception cohort. *Gut.* 2013.
4. Burisch J, Jess T, Martinato M, Lakatos PL, Ecco EpiCom. The burden of inflammatory bowel disease in Europe. *J Crohns Colitis.* 2013;7(4):322-37.

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