

The rising burden of inflammatory bowel disease in Poland

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Recently, the evolution in the global burden of inflammatory bowel disease (IBD) has been stratified into 3 epidemiological stages: Stage 1 is Emergence with low prevalence and low incidence of IBD, typically seen in developing countries in Africa; Stage 2 is Acceleration in Incidence with rapidly rising incidence but low prevalence, typically seen in newly industrialized countries in Asia and Latin America; and Stage 3 is Compounding Prevalence with stabilizing or declining incidence but rapidly rising prevalence, which is most commonly seen in North America, Western Europe, and Oceania.¹ In this issue of *Polish Archives of Internal Medicine*, Zagórowicz et al² present a population-based, nationwide epidemiologic study that established the incidence and prevalence of IBD in Poland, as well as temporal trends from 2009 to 2020. The nationwide data from Zagórowicz et al² shed light on the evolving epidemiology of IBD in Poland, providing evidence that suggests Poland has transitioned into the Stage 3: Compounding Prevalence.

The authors demonstrated that the prevalence of IBD climbed steadily with an overall prevalence of 253 per 100 000, or 0.25% of the Polish population in 2020. The prevalence of IBD gradually increased throughout the study period, rising by 14.8% per year from 2012 to 2015 and 8.7% per year from 2015 to 2018.² IBD is predominantly diagnosed in young individuals, with no known cure and a very low mortality; this means that every year new diagnoses of IBD continue to be added to the base population with few ever leaving the clinic.³

The compounding prevalence of IBD has been reported in Canada⁴ and Scotland,⁵ with the prevalence of IBD being 0.75% of the populations in 2020 and forecasted to rise to nearly 1% by 2030.^{4,5} While the prevalence of IBD in Poland is lower than in North America and Western Europe,^{6,7} the temporal trend data suggest that the burden of IBD will continue to climb. Interestingly, the prevalence of IBD was

rising predominantly in the oldest age group (ie, >60 years). These data reflect an aging IBD population that will challenge gastroenterologists to manage IBD in the context of age-related comorbidities, such as cancer and diabetes, becoming more common in their IBD population.⁸ Consequently, the Polish health care system must contend with an escalating number of individuals living with IBD, particularly seniors with IBD. In this context, the health care system should consider the resources, personnel, and infrastructure needed to manage the rising burden of IBD. Moreover, innovation in the delivery of care for the Polish IBD population may be necessary.⁹

Zagórowicz et al² reported that the annual incidence of Crohn's disease and ulcerative colitis were 4.7 and 12.5 per 100 000 in 2018, respectively. Importantly, the data from the study highlight that the incidence of IBD is declining in Poland: decreasing by 6.7% per year from 2012 to 2018 for both ulcerative colitis and Crohn's disease. Many countries in Europe have reported that the incidence of IBD has either stabilized or declined since the turn of the 21st century.⁷ Temporal trends in the incidence of IBD may be related to environmental factors associated with newly diagnosed IBD.¹⁰ Many countries in the Western world have reported population-level changes in risk factors that may lead to fewer diagnoses of IBD.¹¹ For example, over the past few decades, smoking rates have decreased, breastfeeding has increased, and antibiotic use in children has decreased in the general population.¹² These population-level shifts in environmental exposures associated with the onset of IBD may lead to a reduction in the incidence of IBD.¹⁰

Alternatively, epidemiological data must be interpreted in the context of methodological limitations of observational research that utilizes administrative health care databases.¹³ The most important is a misclassification bias that results in errors in coding IBD in databases, leading to missing cases of IBD (eg, not including private health

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insurance) or calling a case IBD when it is not.¹³ The use of validated coding algorithms may partly mitigate the misclassification bias.¹⁴ One example of the misclassification bias that leads to errors in temporal trends is mixing of prevalent cases with incidence cases (ie, labeling a prevalent case an incidence case).¹⁵ In the early years of a database, mislabeling prevalent cases as incident cases is more common because the washout periods are shorter, which can lead to a false appearance of a drop in the incidence of IBD over time.¹⁵

Nonetheless, the nationwide data provided by Zagórowicz et al² shed light on the epidemiological patterns of IBD in Poland. If these patterns observed in Poland follow those of Western Europe, the incidence of IBD will continue to stabilize, the prevalence of IBD will continue to rise, and the IBD population will advance in age.¹ Gastroenterologists, health care administrators, and the IBD community can use these data to understand and plan for the rising burden of IBD in Poland.⁹

ARTICLE INFORMATION

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