



Counting Crohn's and Colitis

New research indicates the number of Australians living with IBD is on the rise. A study by gastroenterologist Jarrad Wilson shows the importance of knowing how many people have IBD.

INCIDENCE of a disease is defined as the number of new cases of that disease diagnosed in a given period of time. It is generally reported as the number of cases per 100,000 of population per year. The internationally reported incidence of IBD has increased dramatically over the last 50 years with significant geographical variations. Western industrialized nations are recognised to have the highest incidence, with studies from Canada, the US, Europe and New Zealand supporting this. There is a lack of data about the Australian incidence, and so we sought to remedy this by performing the first prospective population-based Australian IBD incidence study.

Accurately knowing the incidence of a chronic illness in a population is important for a number of reasons. It allows quantification of the magnitude of a given health problem, facilitating appropriate health care resource allocation and prediction of future resource requirements. It allows an estimation of the economic and other costs of the condition to the given population. It may also help to identify environmental influences that may lead to the development of the disease.

The notion of quantification of the burden of the disease is particularly important in IBD as this group of illnesses often affects adolescents and young adults and can have lifelong complications and consequences. These include not only health care service use but also major impacts on education, employment, relationships and psychosocial health.

This study was co-ordinated by the Department of Gastroenterology at St Vincent's Hospital in Melbourne, and funded by Orphan Australia, the NH&MRC and The Gusty Group. The requirements for an accurate estimation of incidence were carefully considered in this study. A population-based study is preferable to a hospital-based study to minimise the chance that some cases are not identified, or that only the most severe of cases are identified. The condition studied needs to be clearly defined and able to be diagnosed to the exclusion of other conditions, to ensure accurate numbers. There needs to be a means of checking that all cases are identified, preferably by using multiple overlapping data sources to identify the cases. The Australian IBD Incidence Study was performed in the geographically defined region of Geelong, in Southern Victoria. The population in this area is equivalent to approximately 1 per cent of the Australian population and in broad terms is demographically similar to the rest of the nation. The cases were identified using a mixture of hospital and private practitioner records,

colonoscopy reports and pathology results, ensuring complete case identification. IBD has a clear set of internationally agreed upon diagnostic criteria to allow differentiation from similar presentations such as infections. Every new case of IBD diagnosed in this population over a 12-month period was identified, allowing ascertainment of the incidence in this specified population, and therefore extrapolation to the broader Australian population. During the study period there were 76 new cases of IBD, giving an incidence of 29 cases per 100,000 people. When these figures were broken down to look at different types of IBD, the results showed incidence rates of 18 per 100,000 for Crohn's disease and 11 per 100,000 for ulcerative colitis. These incidence rates are similar to those high rates obtained from Canadian, New Zealand and European data. In comparison with other chronic health conditions affecting young adults, IBD has a similar incidence to type 1 diabetes mellitus (37 per 100,000), rheumatoid arthritis (10-30 per 100,000), schizophrenia (10-30 per 100,000), and multiple sclerosis (7 per 100,000). The biggest limitation of the study is the relatively small sample population and the short duration of only 12 months. There is a clear need for further study into the incidence of IBD using a larger population over a longer period, to allow more accurate ascertainment. This study also raises the need for a similar study of prevalence, or the total number of people in a given population at any one time with a given disease. These limitations are currently being addressed in a follow-up study, with results due to be published early next year. There are also significant health economic and resource allocation implications. Crude calculations from the data gained from this study would suggest that there are at least 70,000 Australians living with IBD.

This is a landmark study in that it shows Australia's IBD incidence to be among the highest of those reported in the international literature. It allows estimation of the burden of disease, with resultant implications for health care planning and resource allocation. It also highlights the important need for further investigation into this area.

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