

VPD in IBD: Assessing COVID-19 vaccination rate among patients with inflammatory bowel disease on biologics

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Background

Patients with inflammatory bowel disease (IBD) are considered particularly vulnerable to severe illness with COVID-19. Furthermore, immunocompromised IBD patients receiving biological therapy are considered particularly at risk for developing severe infection due to weakened immune response to vaccinations secondary to immunosuppressive therapy. As part of the Australian Government COVID-19 vaccination roll-out, IBD patients were identified as 'Category 1b' meaning that vaccination was available to patients from February 2021. The Australian Technical Advisory Group on Immunisation (ATAGI) also states that vaccination is strongly encouraged for people with immunocompromise who are in an eligible age group, since the benefits of vaccination are considered to outweigh any potential risks. Despite this, vaccination rates of those who attend our state-wide Gastroenterology service was unclear.

Aims & Objectives

- To determine the rate of COVID-19 vaccination among IBD patients under the care of our state-wide gastroenterology service receiving biological therapy
- To determine if vaccination rate aligns with current recommendations by the Australian Technical Advisory Group on Immunisation (ATAGI) and the Gastroenterology Society of Australia (GESA)

Method

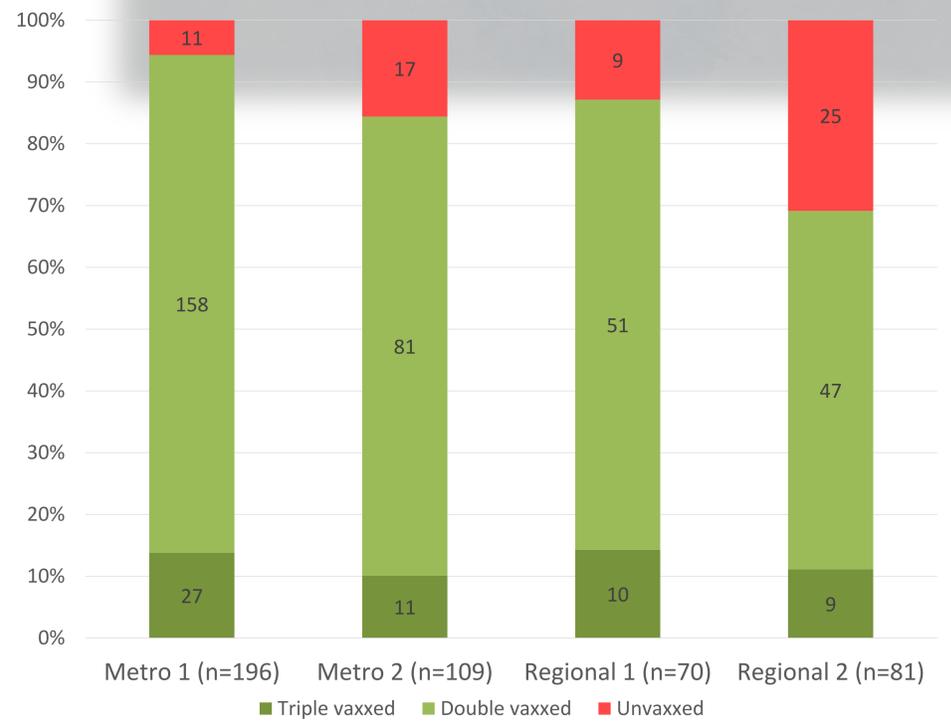
The study was conducted on 19/12/2021. Any patient with IBD receiving biological therapy (Adalimumab, Ustekinumab, Infliximab, Vedolizumab or Tofacitinib) under the care of our state-wide gastroenterology service was eligible for inclusion. There were 4 eligible sites included in the study: metro 1, metro 2, regional 1 and regional 2. Individual patient immunisation status was determined using the Australian Immunisation Register (AIR). Any patient with no vaccination record (or inaccessible record) was excluded from the study.

Results

As of 19/12/21, 86% (394/456) of patients receiving biological therapy under the care of the Gastroenterology service were vaccinated against COVID-19. The rate of COVID-19 vaccination differed between regions whereby patients living in non-metropolitan catchments had lower vaccination rates (77% , n=117/151) compared to metropolitan areas (90.8% , n=277/305). A chi square test demonstrated a statistically significant difference in the proportion of people who were vaccinated in metropolitan vs. regional centres ($p < 0.001$).



COVID-19 vaccination rate as of 19/12/21

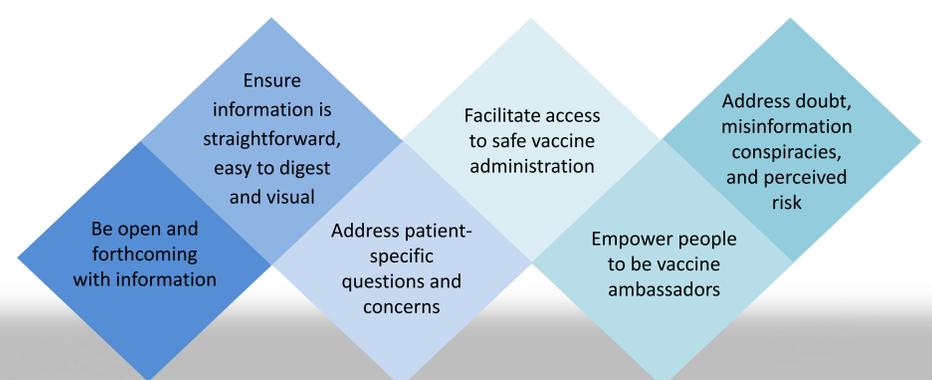


Item 1: COVID-19 vaccination rate by area

Discussion

The reduced vaccination rate at non-metropolitan sites could be due to a number of factors, including but not limited to: limited access to healthcare, vaccine hesitancy (due to any number of factors) and differences in perceived risk due to geographical location.

Some strategies for health professionals to increase engagement with patients in this area may include:



Item 2: Strategies to increase vaccination engagement

Conclusion

Although the overall rate of COVID-19 vaccination amongst IBD patients receiving biological therapy was in-line with national recommendations, the rate of COVID-19 vaccination differed between regions whereby patients in non-metropolitan catchments had lower vaccination rates. There are many complex factors that may influence vaccination rate in regional areas and this research has identified an at-risk population which can be targeted for engagement activities to address barriers to vaccination. Addressing barriers is critical to achieving vaccine equity and decreasing COVID-19-related illness and death.

