

Identifying Barriers To COVID-19 Vaccination In U.S. Veterans Who Have Inflammatory Bowel Disease

Lakmal S Ekanayake¹ DO, Shaina Ailawadi¹ BS, Bahar Cheema² MD, Ronald J. Markert¹ PhD, Padmini Krishnamurthy² MD
¹Internal Medicine, Wright State University Boonshoft School of Medicine, Dayton, OH, United States.
²Dayton VA Medical Center, Dayton, OH, United States.

Introduction

- The COVID-19 pandemic has caused millions of deaths and infections worldwide, and patients with multiple medical comorbidities are more vulnerable. U.S. military veterans are diagnosed with more health conditions than the general population including higher prevalence of HTN, DM, and lung disease.
- The veteran population with IBD is predisposed to COVID-19 infection and has higher rates of associated hospitalizations and mortality. COVID-19 vaccination rates in IBD patients in community settings is 41%, lower than the general population and WHO recommendations.
- The 2020 mortality rate rose to an all-time high in US veterans, with a 13% excess or 50,299 excess deaths. We examined the vaccination rates and barriers to obtaining the COVID-19 vaccine in the US veteran population with IBD.

Methods

We conducted a cross-sectional study at our VA medical center via retrospective chart review of veterans who have IBD.



Variables collected were age, sex, race, subtype of IBD (i.e., ulcerative colitis or Crohn's disease), and biologic therapy.



All 34 unvaccinated IBD veterans completed a 15-item survey of 4 structural barriers and 11 attitudinal barriers to vaccination via a phone call.

Questionnaire

Structural-Related Barriers

- I have difficulty getting access to a medical facility for vaccination
- I have a lack of personal free time.
- My primary care doctor (PCP) or Gastroenterologist did not provide me enough information
- My primary care doctor (PCP) or Gastroenterologist did not offer the vaccine

Attitude-Related Barriers

- I do not need the vaccine because I believe that I will not get COVID-19
- I don't trust the healthcare system, providers.
- I am afraid of vaccination due: to fear of: side effects, fear of injections.
- I do not know enough about the vaccine.
- I don't think/believe the vaccine will work.
- I have had bad/traumatic experiences with other vaccinations in the past.
- I dislike government mandates about my health/vaccine.
- I do not believe COVID is serious illness.
- I am afraid to contract COVID infection by going to a medical facility.
- I have tested positive for COVID-19 in the past.
- I have been hospitalized for COVID-19 in the past

Conclusion

At our VAMC, the 83.5% COVID-19 vaccination rate for IBD patients was higher than the general population rate of 66%. Lack of counseling by providers, disagreement with government mandates, and fear of vaccines constituted major barriers to COVID-19 vaccination in our sample of U.S veterans.

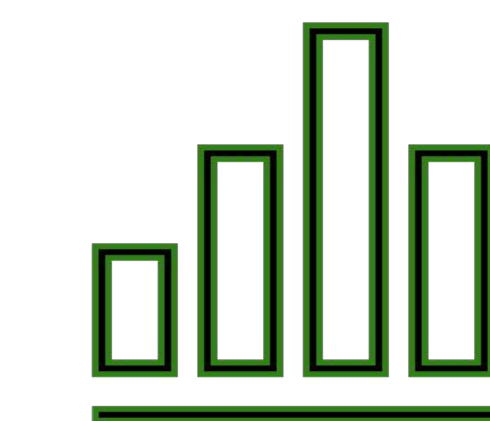
Medical providers, including gastroenterologists, at every point of the encounter with IBD patients should discuss COVID-19 immunization, inform patients of the importance of being immunized against COVID-19, and address other patient concerns including fear of vaccinations and side effects.

These conversations are imperative for patients with IBD due to their comorbidities and immunologic suppression from treatment. It is essential that vaccine hesitancy be targeted both locally and nationally, with compassion and empathy. The findings from this study can be applied to future pandemics and global health policies. Further research should examine psychosocial components that impact veterans' compliance with vaccinations.

Results



Our clinic identified 206 U.S veterans with IBD, 34 (16.5%) of whom were not vaccinated. The mean age for the vaccinated was 66 years and for the unvaccinated was 54 years (p<0.001).



The vaccinated and unvaccinated did not differ on sex (male 95% and 91%), race (Caucasian 86% and 87%), type of IBD (ulcerative colitis 63% and 55%) and biologic therapy (37% and 35%).



The leading **structural barrier** was primary care provider or GI physician *did not provide enough information about the vaccine* (41%).



The leading **attitude-related barriers** were (1) *did not agree that the government mandates were afraid of vaccinations appropriate* (91%) and (2) (62%)