

REVIEWER REMARKS

To
The Editorial Board
World Journal of Gastrointestinal Pathophysiology

Dear Editors,

We would like to thank you for considering our manuscript for publication in *World Journal of Gastrointestinal Pathophysiology*. We would wholeheartedly like to thank the reviewers for their time and effort in helping us improve the quality of our work. We have amended the paper accordingly, addressed all of the reviewer and editor comments described below and thoroughly revised the manuscript. The changes made per reviewer comments are highlighted in red in the main revised manuscript. Additionally, we have added Dr. Madhusudhan R Sanaka, Dr. Laura Rotundo and Dr. Madhu Vennikandam as co-authors on the manuscript due to their extensive contribution in literature review, data interpretation, manuscript writing, review of the manuscript and the revisions, thereby meeting all authorship requirements. All authors agree to this addition without any objections. None of the co-authors have any financial disclosures or conflict of interest. Furthermore, no funding was received for this work

Please feel free to reach out to me personally regarding this manuscript at dush.dahiya@gmail.com

Thank you.

Yours sincerely,

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Point-by-point Response to the Reviewers

Reviewer #1

Thank you for submitting this manuscript to the World Journal of Gastrointestinal Pathophysiology. The study entitled "Increasing Thirty-Day Readmissions of Crohn's Disease and Ulcerative Colitis in the United States: A National Dilemma" shows an overall increasing trend of 30-day readmission for both CD and UC, a predominantly higher female to male ratio of readmissions for CD, a disproportionate increase in readmission rates among teaching hospitals, and a higher total hospital cost for UC readmissions, among other findings. The study was limited by the lack of data on the exact duration until readmission, the severity of the index admission, and pharmacologic treatments used, all of which might have logical explanations to the main finding of the study. While the study findings are of high value to public health officials in the United States, it may not align very well with the scope of this Journal. But overall, it is very well written, concise, and to the point.

Author Response: Thank you for your remarks. We would like to thank you for taking the time to review our work and highly appreciate your help in improve the scientific quality of the manuscript.

I still do have specific comments/issues I would like to be readdressed prior to acceptance. they mostly revolve around the explanations to the findings in the discussion section. Here are some examples: In paragraph 3 of the discussion, the author(s) suggested that the rising readmission rate can be "in part, be due to a rising prevalence of IBD in the general population". However, I would suggest to provide clear statistics that reflect the increasing rate was indeed proportionate to the rising prevalence (for example for each 2% annual increase in IBD prevalence there was a 1% increase in readmission rate).

Author Response: Thank you for your comments. We have made the appropriate changes in the manuscript. Additionally, new references have also been added.

In paragraph 3 of the discussion, the author(s) stated "an increase in the flare-ups of IBD which may account for about 50% of the readmissions or due to non-IBD related causes such as infections secondary to the widespread use of biological agents or immunosuppressants." without citing a reference to that statement. Also, this is a

speculation since the present study is limited by the lack of information on pharmacologic treatment used.

Author Response: Thank you for your remarks. We have added additional references to the manuscript.

In paragraph 3 of the discussion, the author(s) stated "a severe index admission of IBD which co-relates with higher readmissions rates may also be a contributing factor". Again, the study was limited by the lack of information on the severity of index admission, so this explanation is a speculation. It also contradicts what the results of the present study had shown with no change in mortality rates and LOS despite the increasing rates of readmission. One might expect that if severity of IBD is increasing with time, that mortality rates and LOS will increase with it as well.

Author Response: Thank you for an excellent point. We have deleted the statement from the manuscript. Furthermore, the manuscript has been thoroughly revised and parts of it have been re-written.

In paragraph 4 the author(s) stated "The mean age for 30-day readmissions increased for both CD and UC. The difference in the mean age between the two groups is approximately 7 years. These finding reflect current literature which reports that patients with CD tend to be younger and the mean age at the time of diagnosis of CD is usually 5–10 years earlier than that of UC". while this statement explains the mean age difference between UC and CD, it doesn't give an explanation of why the mean age for readmission went up from 2010 to 2018 both in CD and UC.

Author Response: Thank you for an excellent point. Although the numeric mean age for 30-day readmissions of UC and CD increased during the study period, we did not find a statistically significant trend for mean age in both the groups. This has been added to the manuscript.

In paragraph 5 the author(s) discussed some explanations to the increasingly higher proportions of readmissions to teaching hospitals. They stated "Moreover, an urban location, which has a greater population density, is more likely to yield higher readmissions compared to non-urban/rural areas". This explanation is logical for a single point in time but does not explain the percentage of teaching hospitals readmissions in 2018 compared to previous years. Instead, one might speculate that there might be demographic shifts and more people moving from non-urban/rural areas to urban locations between 2010 and 2018. But this has to be backed by scientific facts from the US consensus Bureau for example. I've included those in the attached word file as well for ease of access.

Author Response: Thank you for an excellent point. We agree with you. We have made the appropriate changes in the manuscript and added a reference from the US Census Bureau which demonstrates the demographic shift from rural to urban areas for the study period. Additionally, we have made all the changes which were suggested in the word file.

Reviewer #2

This manuscript reports an increasing thirty-day readmissions of Crohn's disease and ulcerative colitis in the United States. The methodology is straightforward. However, I think that the results are not discussed sufficiently, and conclusion are not meaningful in manuscript. 1. I think you need to clearly articulate why this study was undertaken in the introduction. Although you state that the rising prevalence of CD and UC is concerning as patients with CD and UC may frequently relapse leading to recurrent hospitalizations, you investigate "30-day" readmission as primary endpoint.

Author Response: Thank you for your remarks. The introduction section has been thoroughly revised and parts of it have been re-written to further articulate the need for this national study. Furthermore, parts of the discussion section have also been re-written and thoroughly revised.

Thank you for raising an excellent point. In this study, we primarily focus on early (30-day) readmissions of CD and UC in the US between 2010 - 2018. Prior studies have demonstrated that a majority of early IBD readmissions may be preventable and linked to quality of care. Through this study, we aimed to identify trends of early (30-day) readmissions of IBD in the US and inpatient mortality for these readmissions to determine possible improvements in management strategies. As hospitals aim to reduce readmission rates, 30-day readmission is a critical parameter to determine the improvements in the quality of care which further effect hospital reimbursements. Additionally, we also aimed to determine the burden of these readmissions on the United States healthcare system and individuals.

2. The authors should explain the first abbreviation in the manuscript; LOS and THC.

Author Response: Thank you for your comment. We have revised the manuscript and corrected the abbreviations.

3. Is your conclusion correct? "..., the total number of 30-day readmission for CD and UC increased with higher total readmissions for CD."

Author Response: Thank you for your comment. We have deleted the sentence from the conclusion section of the manuscript.

I apologize for the delay in advising you on the progress on the paper that you submitted to the World Journal of Gastrointestinal Pathophysiology. I hope these comments will be helpful.

Author Response: We would like to thank you for taking the time out to review our work and we highly appreciate your efforts to improve the quality of our work.

Science Editor

This manuscript reports 30-day readmission rates for Crohn's disease (CD) and ulcerative colitis (UC) in the United States. Please clearly state in the Introduction why this study was conducted; please discuss fully in the Discussion section based on the results of this manuscript, as well as related previously published articles.

Author Response: Thank you for your remarks. The manuscript has been added per the reviewer remarks and has been thoroughly revised. New references have also been added.

Company editor-in-chief

I have reviewed the Peer-Review Report, full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastrointestinal Pathophysiology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs

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Author Response: Thank you for considering our manuscript. Please note that the figures have been re-submitted in Microsoft PowerPoint format and the tables have been changed to meet journal guidelines.