RESPONSE TO PEER-REVIEW REPORT

Name of journal: World Journal of Gastroenterology

Manuscript NO: 40234

Title: Risk factors for liver disease among adults of Mexican descent in the United States and Mexico

Reviewer's code: 01555255

RESPONSE TO SPECIFIC COMMENTS:

1. Introduction section: I suggest to briefly report data on epidemiology of all CLDs in Mexico

Response: Thank you very much for reviewing our paper and for your kind suggestions. We have added the following information about the epidemiology of CLD in Mexico to the second paragraph of the Introduction: "An estimated 3 million individuals are infected with HBV and 400,000 to 1,400,000 people are infected with HCV[12]. In 2016, there were 38,755 deaths due to CLD in Mexico and 14,029 (36%) were attributed to alcoholic liver disease[11]." Unfortunately, there is less information available about the prevalence of different types of CLD in Mexico, than there is about CLD in the U.S.

2. Methods section: the data are comprensive of U.S.-born Mexican-American people in the whole extension of US territories?

Response: Alaska and Hawaii were added to the target population of NHANES II, which was conducted between 1976 and 1980. In order to provide additional detail, we have added the following text to the first paragraph of the Data Sources section of our Methods (page 9): "a cross-sectional, representative, examination survey of the total civilian non-institutionalized population **residing** in the **continental** U.S. **and Hawaii**."

3. Results sectionwe: I suggest to expand this section and to better explain the data

founded and reported in the tables

Response: As suggested by the reviewer, we have included additional information in the Results section to provide a better explanation of the data reported in the tables.

4. Discussion section: I suggest to report the idea that the present data can help the definition of a policy strategy adapted for ethnicity as a hispanic, for prevention of CLDs.

Response: We appreciate this suggestion and have included the following sentence at the end of the third paragraph of the Discussion section: "We hope our findings can be used to develop health policy strategies and programs to prevent CLD, by addressing the specific risk factors that affect Mexicans in both countries." Additionally, we have included the words "and policies" in the following sentence of the last paragraph of the Discussion: "These results can be used to design and implement more effective health promotion programs **and policies** to address the specific factors that put Mexicans at higher risk of developing CLD in both countries."

Reviewer's code: 03023823

RESPONSE TO SPECIFIC COMMENTS:

1. Despite appropriately referenced, it is difficult to accept Definition of Chronic Liver Disease Risk Factors Elevated aminotransferase levels: Elevated ALT was defined as >40 IU/L for males and females; elevated AST was defined as >40 IU/L for males and females This is not actually a risk factor. Please, discuss, also as a limitation, if you think that this observation is correct.

Response: Thank you very much for reviewing our paper and for this kind suggestion. In the fourth paragraph of our manuscript, we provide the following information: "Alanine aminotransferase (ALT) and aspartate aminotransferase (AST) levels are

common clinical measures used to assess liver health. Elevated aminotransferase levels can indicate sudden or acute liver injury, or they can be persistently elevated suggesting ongoing liver disease. The leading cause of mild aminotransferase levels is NAFLD, but other common causes include excessive alcohol consumption, medication-associated liver injury, infection with HVB or HCV, and hemochromatosis [27]. While not all persons with elevated aminotransferase levels have liver damage or disease, these measures can be used to detect asymptomatic disease [27]." We completely agree with the reviewer that elevated aminotransferase levels are more of a "symptom" of liver disease and less of a "risk factor" or "cause". However, there is a well-documented association between elevated levels of aminotransferase and liver disease in the literature. For example, the following information is provided on the website of the NIH National Institute of Diabetes and Digestive and Kidney Diseases for the diagnosis of non-alcoholic fatty liver disease (NAFLD) and non-alcoholic steatohepatitis (NASH) (https://www.niddk.nih.gov/health-information/liver-disease/nafld-nash/diagnosis):
Blood tests
A health care professional may take a blood sample from you and send the sample to a lab. Your doctor may suspect you have NAFLD or NASH if your blood test shows increased levels of the liver enzymes alanine aminotransferase (ALT) and aspartate aminotransferase (AST). Your doctor may perform additional blood tests to find out if you have other health conditions that may increase your liver enzyme levels.
Thus, we consider that including aminotransferase levels as a measure of potential risk of liver disease is a strength of this paper, as opposed to a limitation. In fact, we specifically designed this study to examine the two data sets we used from the U.S. (NHANES) and Mexico (HWCS) so that we could include ALT and AST measure in our analysis. We definitely consider this a strength, not a limitation, of our study.