



## Letter to the Editor

## On what to do where prodigal daughters might be increasing?



Recently we read the article entitled *Alcohol and the Liver: The Return of the Prodigal Son* [1] and wished to reply some of the unanswered questions with emphasis in the epidemiological and preventive aspects of alcohol-related liver disease (ALD) by providing the sociodemographic context of Yucatan, one of the 31 states of Mexico.

The complex environment in Yucatan might involve certain factors that Campollo [1] associated with ALD. According to the National Institute of Statistics and Geography (INEGI), in 2016, 487 deaths occurred due to alcoholic cirrhosis (ALC) in the state of Yucatan. ALC deaths in Mexico (nationwide) occurred among women at age 60, but in Yucatan women died at a mean age of 51 (Fig. 1).

In Yucatan, Mayan and mestizo ethnicity represent over one-third of the inhabitants, and evidence suggests that genetic factors may inflict certain proneness to obesity and metabolic syndrome (MS) [2]. MS is common in ALC and potentially may interact as an overlapping factor contributing to the severity of ALD and vice versa, suggesting the co-existence of ALD and non-alcoholic fatty liver disease (NAFLD) [3]. This synergy may be valid for other pathologic mechanisms such as infection, autoimmunity or drug-related liver damage [4].

Yucatan is according to the latest National Survey of Addiction (Encodat), among the regions with the highest alcohol consumption in the previous years, with 46.2% prevalence of which 26.1% are women; this percentage is greater than the national female average of alcohol consumption. Nationally, women represent 8.99% of all ALC-related mortality cases, but according to INEGI in Yucatan, women represent 11.76%.

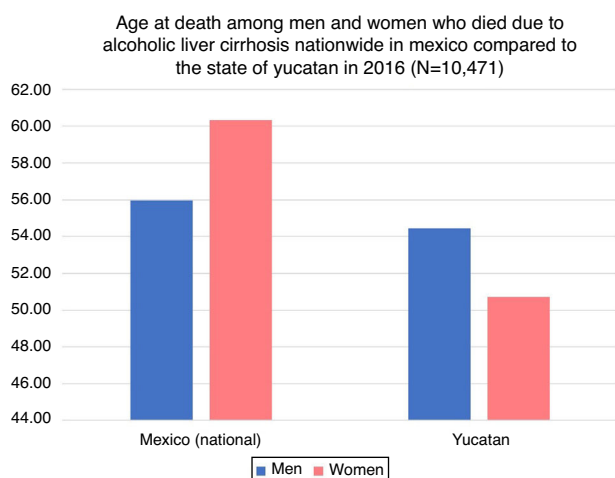


Fig. 1. Age at death among men and women who died due to Alcoholic Liver Cirrhosis nationwide in Mexico and Yucatan during 2016 (N = 10,471).

Source: Open access mortality database retrieved from INEGI.

As stated in Campollo's opinion, women are more susceptible to alcohol effects and this phenomenon becomes even more important when understanding its clinical and epidemiological implications which are not restricted to ALD. Alcohol consumption in women can facilitate violent affective relations [5] and, during pregnancy, it correlates with adverse neonatal outcomes. Alcohol drinking prevention campaigns in the US have now turned to target the Hispanic female population, as a result of the identification of an increase in their alcohol consumption [6].

Perhaps an answer to Campollo's question *shall we focus our efforts on preventing ALD is – Yes, we certainly should!* and particularly among women from environments where excessive alcohol consumption may be socially normalized, such as in Yucatan. So, let's prevent from having a prodigal daughter!

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