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Hepatitis E Virus Seroprevalence in the United States: No Easy Answers

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To the Editor

We read with interest the article by Ditah et al. in which they described seroprevalence of hepatitis E virus (HEV) IgG in 7,885 samples collected as a part of the 2009–2010 National Health and Nutrition Examination Survey (NHANES).(1) Readers may benefit from additional information about this study. Firstly, seroprevalence data from this NHANES population have been presented, in part, twice before – in 2012 (2) and most recently by one of us (M.K.) at the 2013 Liver Meeting. In both presentations HEV IgG data were compared between NHANES 1988–94 and 2009–2010 and a large decline in seroprevalence was observed. A cohort effect has also been noted in other United States (US) populations.(3) Thus, it is likely that a cohort effect contributes to the difference between HEV IgG seroprevalence reported by Ditah et al. and in our study of 18,695 NHANES 1988–94 samples.(4) Second, it is important to note that the accuracy of the HEV IgG assay used in the Ditah et al. study has not been evaluated by the research community. The sensitivity and specificity estimates quoted by Ditah et al. were provided only by the manufacturer of the assay.

We also note that several details in the article by Ditah et al. are incorrect. For example, our study of NHANES 1988–94 samples did not examine all “meat consumption” as suggested by Ditah et al. Instead we analyzed NHANES questionnaire data to examine well established hypotheses related to consumption of pork products and organ meats. Aspects of the analysis are also confusing – individuals born outside the US had higher HEV

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seroprevalence in each stratum of age (Figure 1c in Ditah et al.) and yet this association was not significant in multivariate analysis. What accounted for this attenuation?

In conclusion, it is encouraging that Ditah et al. along with others are trying to better understand the epidemiology of HEV infections in the US. However, this is not a simple undertaking and there are no easy answers. Attention to detail is critical in our efforts to understand and ultimately reduce HEV-associated morbidity and mortality in the US and worldwide.

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List of abbreviations

HEV	hepatitis E virus
NHANES	National Health and Nutrition Evaluation Survey
US	United States

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