

of UTI are caused by multidrug-resistant organisms, and that only combinations of broad-spectrum antibiotics offer adequate coverage for nosocomial infections.

**Conclusions:** For the first time in Latin America, we provide high-quality data to guide empirical antibiotic recommendations for UTI in patients with cirrhosis.

Table: Proportion (95% CI) of UTI Episodes with Susceptibility to Different Antibiotic Regimens by Site of Infection Acquisition (n=278). Adequate options for stable patients are highlighted in light gray, and those for critically ill patients are highlighted in dark gray

Antibiotic Regimen	Community-acquired n= 119	Healthcare-associated n= 69	Nosocomial n= 90
Nitrofurantoin*	82 (73-89)	66 (51-78)	55 (43-67)
Quinolones	36 (28-46)	26 (17-38)	23 (16-33)
TMP-SMX (Trimethoprim-Sulfamethoxazole)	43 (34-52)	36 (25-48)	26 (18-36)
Ceftriaxone	51 (42-60)	29 (20-41)	21 (14-31)
Cefepime	53 (44-62)	31 (21-43)	27 (18-37)
Ceftazidime	47 (38-56)	29 (20-42)	22 (15-32)
Aminoglycoside	82 (74-88)	70 (58-80)	63 (52-73)
Piperacillin-tazobactam	61 (51-69)	46 (34-58)	29 (21-40)
Ertapenem	79 (71-86)	60 (48-71)	46 (37-57)
Colistin	80 (71-87)	63 (50-75)	69 (57-79)
Piperacillin-tazobactam + Vancomycin	61 (52-70)	52 (39-63)	32 (23-43)
Meropenem or Imipenem	90 (83-94)	77 (65-85)	56 (45-66)
Carbapenem + Vancomycin	91 (84-95)	82 (71-90)	58 (47-68)
Carbapenem + Linezolid	92 (85-96)	90 (80-95)	64 (54-74)
Aminoglycoside + Colistin	85 (77-90)	71 (59-81)	80 (69-87)
Ceftazidime-avibactam	83 (75-89)	68 (55-78)	68 (58-77)
Ceftazidime-avibactam + Aztreonam	68 (59-76)	54 (42-66)	72 (61-80)
Ceftolozane-tazobactam	85 (78-91)	70 (57-80)	73 (62-81)
Ceftazidime-avibactam + Vancomycin	95 (89-98)	88 (78-94)	76 (66-84)

The data from the 278 episodes with complete information are presented. For episodes with two isolations, susceptibility was assessed considering the coverage of both. \* Nitrofurantoin was tested in 91 Community-acquired, 47 Health-associated and 65 nosocomial infections. Nitrofurantoin achieves good concentrations in urine but does not concentrate well in plasma and kidney parenchyma.

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**P-58 PILOT STUDY OF HEPATITIS E VIRUS SEROPREVALENCE IN HEPATITIS B AND DELTA CARRIERS IN THE WESTERN AMAZON**

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**Conflict of interest:** No

**Introduction and Objectives:** Hepatitis E virus (HEV) is a zoonotic virus transmitted via the fecal-oral route with a generally favorable prognosis. However, higher risks exist for pregnant or immunocompromised patients. Infection occurs through contaminated food, water, or direct contact with infected blood. Its asymptomatic nature and favorable prognosis likely contribute to underreporting in Brazil, especially in peri-urban and rural areas with limited healthcare access. **Objective:** To evaluate the seroprevalence of HEV in patients with mono-infection of Hepatitis B and co-infection with Delta virus in Rondônia.

**Patients / Materials and Methods:** An exploratory cross-sectional study using the Dia.Pro HEV Ab total ELISA kit for serological evaluation of 177 samples from the serum bank of the Molecular Virology Laboratory at Fiocruz-RO of patients with viral hepatitis from the Tropical Medicine Center (CEMETRON) in Rondônia. The samples were stratified into 74 VHD co-infected and 103 HBV mono-infected groups. The diagnosis of the Delta virus was performed using molecular biology on samples collected between 2018 and 2022. The results were analyzed using T-test and chi-square test.

**Results and Discussion:** The total sample consisted of 177 participants, including 95 men, 54 women, and 28 without information. The average age of participants was 41 years (M=41), with the Delta group averaging 40 years and the HBV mono-infected group averaging 42 years. Of the 74 VHB-VHD sera, 9 (12.16%) were HEV IgG positive, 58 (78.40%) were non-reactive, and 7 (9.45%) were indeterminate. Among the 103 HBV sera, 9 (8.73%) were HEV IgG positive, 86 (83.50%) were non-reactive, and 8 (7.76%) were indeterminate.

**Conclusions:** The findings of HEV in HBV and VHD patients in Rondônia showed results similar to those found in studies with other populations. This is the first study on HEV in HBV and VHD patients.

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**P-59 SOCIAL DETERMINANTS OF HEALTH AND INEQUITIES IN CHRONIC DISEASES: THE CASE OF LIVER DISEASES**

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**Conflict of interest:** No

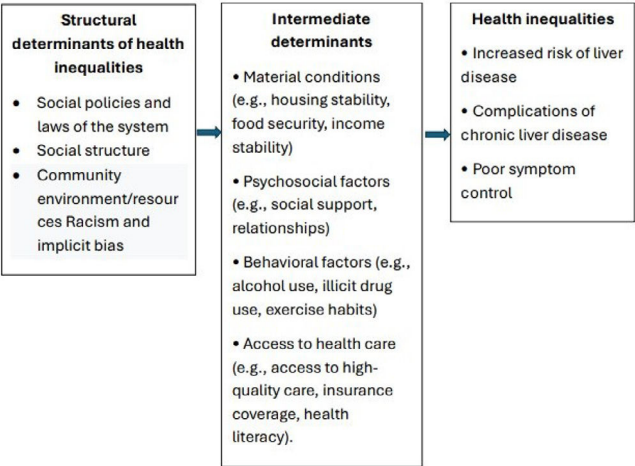
**Introduction and Objectives:** Cirrhosis is the leading cause of liver-related deaths worldwide. However, it should be highlighted that not only biology determines the disease, since ancient times it has been described that health is socially determined, however, today the same underlying problems continue to arise since its causes remain unresolved. It is clear that the mechanisms of society have a direct influence on the disease and only by taking these aspects into account can we understand social inequities in the field of health and intervene to correct them.

**Patients / Materials and Methods:** Retrospective descriptive ecological study using data from secondary sources, coming from mortality databases, morbidity databases of the National Public Health Surveillance System, Transplant Network, National Institute of Health and Liver and Transplant Associations.

**Results and Discussion:** Although vaccination, screening, and antiviral treatment campaigns for hepatitis B and C have reduced the disease burden in some parts of the world, concomitant increases in injection drug use, alcohol abuse, and metabolic syndrome threaten these trends, moreover, we can estimate that the affected population is much larger.

Alcohol-related liver diseases are a public health problem and remain underestimated. Within alcoholic beverages, those of artisanal production such as chicha and guarapo are so cheap and easy to manufacture while they meet basic needs such as quenching thirst and hunger, and their production is not controlled, alcohol content exceeds regulatory levels, translating into high health care expenditures, and requires culturally accepted interventions.

**Conclusions:** The global burden of cirrhosis is substantial, therefore, ongoing efforts to address it require accurate estimates of epidemiology, study of its social determinants, and establishing public health interventions to decrease the burden of the disease and thus the pressure on the health system.



Conceptual framework of the contribution of social determinants of health inequities, adapted to liver disease. Structural determinants lead to differential exposures to intermediate factors, which in turn generate differential vulnerabilities and create health inequities

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**P-60 CAN A DOPPLER ULTRASOUND PREDICT VARICEAL HEMORRHAGE AND CORRELATE WITH THE MELD 3.0 SCORE IN LIVER CIRRHOSIS PATIENTS? A RETROSPECTIVE STUDY**

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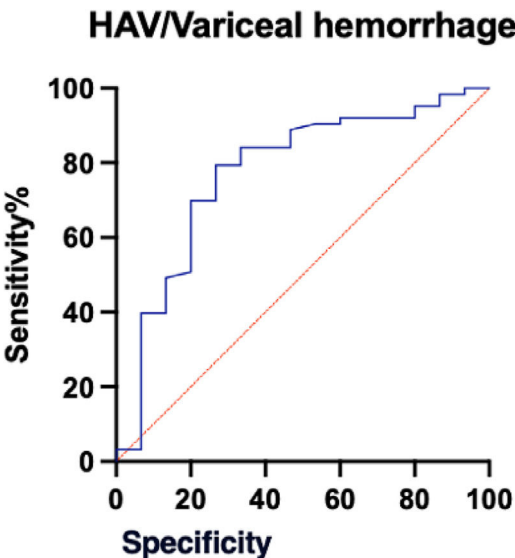
**Conflict of interest:** No

**Introduction and Objectives:** Liver cirrhosis, a major global health issue, causes blood flow resistance and portal hypertension. This study uses Doppler ultrasound to correlate hemodynamic changes with MELD 3.0 scores and variceal hemorrhage. Portal vein velocity, hepatic artery velocity, and hepatic artery resistance index were retrospectively evaluated in 2023 patients.

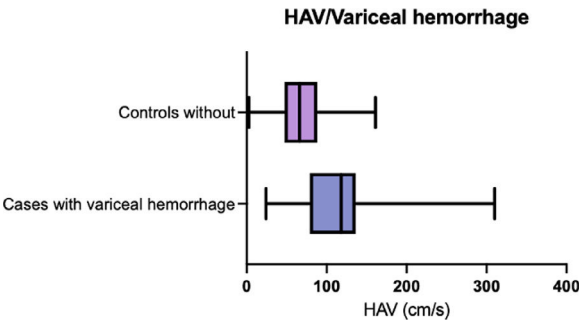
**Patients / Materials and Methods:** Data analysis was performed at the end of the study using GraphPad Prism version 10.2.3 and Microsoft Excel software. Individual correlation analysis was conducted between the hemodynamic variables and the MELD 3.0 score using Spearman's correlation coefficient. A Mann-Whitney test was performed to determine the association between HAV and variceal hemorrhage based on non-normal distribution data. The cut-off point was established with a ROC curve according to the Youden Value.

**Results and Discussion:** Seventy-nine cirrhotic patients (56% men, 54% women; mean age 58.8 years) had varied etiologies: 44 alcohol-related, 10 metabolic, and 25 other. Average MELD 3.0 score was 15 (range: 6-70). Fifteen patients had variceal hemorrhage within 6 months (mean 76.8 days; 6-178). HAV correlated significantly with hemorrhage (mean 188 cm/s vs. 66.0 cm/s;  $p = 0.0007$ ), with a cut-off of 115 cm/s (88% sensitivity, 53% specificity). HAV moderately correlated with MELD 3.0 ( $r = 0.3942$ ,  $p = 0.0003$ ); HARI-MELD 3.0 showed a weak inverse correlation ( $r = -0.02190$ ); PVV-MELD 3.0 had no significant correlation.

**Conclusions:** HAV correlates positively with the MELD 3.0 score and is positively associated with variceal hemorrhage in patients with liver cirrhosis. Given its non-invasive nature and greater accessibility compared to endoscopic studies, HAV could be considered a tool for screening variceal hemorrhage.



ROC CURVE



HAV/variceal hemorrhage correlation.

Table 1. Association with MELD 3.0.

Variable	Spearman correlation coefficient	P
Hepatic artery velocity (HAV)	0.3942	0.0003
Hepatic artery resistance index (HARI)	-0.02190	0.8490
Portal vein velocity (PVV)	0.08253	0.4725

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