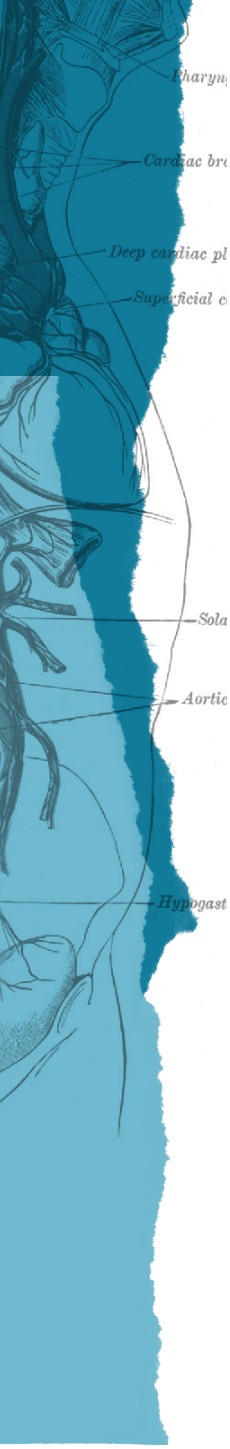

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Prevalence of Hepatitis B and C Markers Among Waste Pickers at the Marmolejo Dumpsite, Quibdó, Chocó, Colombia

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ABSTRACT

Introduction: Urban solid waste pickers are at risk of biological hazards through exposure to sharps and body fluids. In Brazil, hepatitis B virus (HBV) marker prevalence in this group ranges from 4.3% to 33.4% and hepatitis C virus (HCV) markers from 1.6% to 12.4%, exceeding general population levels. In Colombia, no prevalence data exist for this occupational group. In Chocó Department in 2015, HBsAg prevalence was reported at 2.2%.

Methods: We conducted a cross-sectional census in 2024 including 64 active waste pickers at the Marmolejo dumpsite in Quibdó, Chocó, in the Pacific region in Colombia (49 Afro-Colombians, 3 Indigenous). Sociodemographic and occupational data were collected. Venous blood samples were drawn on-site, centrifuged, and refrigerated before processing. In 47 waste pickers, HBsAg was determined with the H&M test HBsAg RST rapid assay, and anti-HCV with the Bioline™ HCV rapid test. The study was approved by the Ethics Committee of the National School of Public Health. A logistic regression analysis did not find a difference in the group of 47 versus the group of 20 who did not allow the test to be developed.

Results: The median age was 38 years (IQR: 28–49); median time in the trade was 10 years (IQR: 3–16); 40 were women. In the previous year, 54 reported work accidents, 17 involving sharps; 29 used gloves and 37 boots in fair/good condition. Usage of alcohol, tobacco, and marijuana were 48.4%, 23.4%, and 3.1%, respectively; none reported injecting drug use. Illiteracy was 21.9%; 80.6% had health insurance, only one had access to pension, and none had occupational risk coverage. A total of 59.4% were from Chocó and 84.4% had at least one family member also working at Marmolejo. HBsAg and anti-HCV prevalences were both 0% (95% CI: 0–7.5%).

Conclusions: The 95% confidence intervals (0.0–7.5%) suggest that the true prevalence is at the lower levels of the estimates from similar Brazilian populations. This may reflect the long-standing national HBV vaccination program and the absence of injecting drug use. Nonetheless, high occupational risk was evident underscoring the need to sustain hepatitis prevention and integrate screening within the healthy environment strategy to prevent future viral introduction and transmission.

Keywords: hepatitis B, hepatitis C, dumpsites.