

AN EVALUATION OF HEPATITIS C VIRUS SCREENING IN INFANTS BORN TO POSITIVE MOTHERS

Authors: Morris A¹, Gander S^{2,3}, Campbell S^{2,4}

¹Dalhousie University, Saint John, New Brunswick, Canada

²Horizon Health Network, Saint John, New Brunswick, Canada

³Centre for Research Education and Clinical Care of At-Risk Populations (RECAP), Saint John, New Brunswick, Canada

⁴New Brunswick Social Pediatrics Research Program, Saint John, New Brunswick, Canada

Background: The primary route of Hepatitis C Virus (HCV) infection in infants is through vertical transmission, from mother-to-child, which occurs at an estimated rate of 5.8%. Despite the known risk of transmission, screening practices are inconsistent and not well known. The objective of the current study was to evaluate the rates of screening for at-risk infants and determine if maternal custodianship impacts the rate at which infants are screened.

Methods: A retrospective chart review of all active charts at the Centre for Research, Education & Clinical Care of At-Risk Populations (RECAP) was conducted to identify HCV seropositive women who have had infants at-risk for HCV through vertical transmission. Information collected included maternal HCV genotype, non-prescription drug use, transfusion history, income quintile and opiate substitution therapy. A 2x2 chi-square test was performed to assess the frequency of HCV screening status by the presence or absence of custodianship issues.

Results: HCV status at the time of pregnancy (N = 62 mothers, 123 pregnancies) revealed 18 (14.6%) with a positive HCV screen, 14 (11.4%) with a positive viral load, and 91 (74.0%) with unknown results (no testing prior to infant date of birth or unknown infant date of birth). A total of 30 infants had HCV screening performed (N = 123), of which 3 (10.0%) were HCV-antibody positive and had a detectable viral load. The presence or absence of custodianship issues was found to be non-significant.

Conclusion: Improvements in chart documentation is essential to determine HCV status at the time of pregnancy and provide clarity on issues of custodianship on a per child basis. Further work into the most effective care pathways for at-risk mothers and infants is needed to ensure cases of HCV acquired through maternal transmission is detected since untreated HCV infection can lead to end stage liver disease.

Disclosure of Interest Statement:

Angela Morris received a grant from Dalhousie Medicine New Brunswick to fund research for this study.