Effect of diarrheal illness during pregnancy on adverse birth outcomes in Nepal

Only 16 percent of symptomatic women sought medical care. Women who experienced diarrhea during pregnancy were 20% more likely to deliver infants who were small for gestational age (43% compared to 37%).

Dr. Newman and her colleagues found no relationship between diarrhea and occurrence of low birthweight or premature birth. Dr. Newman et al posit that interventions to prevent maternal diarrhea may reduce adverse birth outcomes.

Kira Newman, MD, PhD
Internal Medicine Resident

Dr. Kira Newman is a senior resident in the UW Internal Medicine Categorical Track. Dr. Newman received her MD and PhD in Epidemiology from Emory University. With mentorship from faculty in the UW Divisions of Gastroenterology and Infectious Diseases, Dr. Newman contributed to several research projects during residency examining epidemiology of diarrheal infections and operative outcomes of cirrhosis. Her primary scientific interest is in asymptomatic acute infection with gastrointestinal pathogens.

To highlight one study, Dr. Newman used data from 2 randomized trials performed in rural Nepal to examine relationships between maternal diarrhea and birth outcomes among 3,693 women. A relatively high 14 percent of surveilled pregnant women reported at least 3 watery bowel movements daily for 1 or more days.

"Women are understudied. I found it meaningful to have an opportunity to add to our knowledge in a way that has global implications."

The ultimate goal of Dr. Newman’s research is to motivate interventions that render diarrheal infections asymptomatic. Dr. Newman plans to pursue a research fellowship in Gastroenterology upon graduating residency in 2020.

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