Women of Korean, Chinese, and Filipino descent are more than twice as likely to develop gestational diabetes as Caucasian or African American women, according to a data analysis of more than 16,000 pregnant women in Hawaii published in the Ethnicity and Disease journal.

Gestational diabetes occurs in 4%-8% of all pregnant women, wrote Kathryn L. Pedula and her colleagues. Data from a pair of recent U.S. studies suggested that Asians have a higher prevalence of gestational diabetes mellitus (GDM) than do other ethnicities, but differences among subcategories of Asian populations have not been well studied.

Ms. Pedula and her associates at the Center for Health Research, Kaiser Permanente Northwest in Portland, Ore., reviewed 10 years’ worth of data from 22,110 pregnancies in 16,757 women, Hawaii was chosen for the study because of its ethnically diverse population, the researchers said (Ethn. Dis. 2009;19:414-9).

A total of 353 women had pre-existing diabetes. The remaining women underwent screening for GDM between 24 and 28 weeks of pregnancy, using the 50-gram, 1-hour glucose challenge test (GCT). Women with plasma glucose levels greater than 200 mg/dL on the GCT were deemed to have GDM and were not tested further. The remaining women with a GCT value greater than 140 mg/dL underwent the 100-gram, 3-hour oral glucose tolerance test.

Overall, 20.9% of the women had a positive GCT (plasma glucose at least 140 mg/dL). Approximately 4% had GDM based on the National Diabetes Data Group (NDDG) criteria, and 7% had GDM based on the Carpenter and Coustan (C&C) criteria.

After adjusting for age, the investigators found that 10% of the Korean women had GDM based on the C&C criteria, followed by 9.8% of Chinese women and 8.3% among Filipino women. The prevalence was lowest among African Americans (3.3%) and Caucasians (4.2%).

Based on the NDDG criteria, Puerto Rican women had the highest age-adjusted prevalence of GDM (7.4%), but this was barely higher than the average when C&C criteria were applied. However, Korean, Filipino, and Chinese women had the next highest prevalences of GDM, at 6.4%, 5.8%, and 5.6%, respectively, based on the NDDG criteria.