Variation in prevalence of gestational diabetes mellitus (GDM) among different ethnic groups imposes the need for universal screening and investigation of risk factors. According to International Diabetes Federation (IDF), South-East Asia has the highest prevalence of hyperglycemia in pregnancy (24.2%). Unlike others, an alarming frequency of GDM in Bangladeshi population has been observed recently which were as high as 36.6% and 40.9% by WHO 1999 and WHO 2013 diagnostic criteria respectively. Genetic predisposition may be responsible for this. We noticed higher frequency of rs7903146 polymorphism of TCF7L2 in Bangladeshi GDM mothers having relatively lower age and body mass indexes (BMI). Advanced maternal age, high BMI and family history of diabetes were found to be important risk indicators of GDM. Moreover, we observed high frequency (50%) of postpartum persistence of abnormal glucose tolerance (AGT) in women with glucose abnormality in pregnancy. AGT in early gestation, use of insulin during pregnancy, higher maternal age and BMI were predictors for it. Recently, another study found 22% persistence of AGT at postpartum in GDM (excluding DM in pregnancy, DIP). Of pregnancy outcome, premature rupture of membrane was significantly higher in GDM whereas incidence of vaginal candidiasis was higher in non GDM mothers. Neonatal hypoglycemia and hyperbilirubinemia were higher in GDM mothers though not significant. High prevalence of postpartum persistence of AGT reinstates the fact that our ethnicity as South-East Asian confers the greatest risk of diabetes mellitus (DM) among our pregnant and post-pregnant mothers which may be considered as an extrapolation of the 'thrifty phenotype'. In conclusion, multinational broad-based comparative studies are needed to explore the genetic predisposition and risk factors for GDM among the ethnic groups of different countries.

Biography
Prof. M A Hasanat completed his studies from Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorders (BIRDEM), Dhaka, Bangladesh. At present he is working as Chairman of department of Endocrinology, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, Bangladesh. He has published about 50 original articles in reputed journals and presented papers at national and international level. He is keen to teaching as well as academic research and working as the team-leader of the GDM Study group in his Institute. He is also member of Editorial Board of American Research Journal of Endocrinology.

hasanatdr@yahoo.com