CONSUMPTION OF RAW MILK IS THE MAIN CAUSE OF PREVALENCE AND RISK FACTORS OF GESTATIONAL DIABETES MELLITUS AMONG PREGNANT PATIENTS ATTENDING NATIONAL GUARD PRIMARY HEALTHCARE CENTERS IN JEDDAH CITY

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Background Gestational diabetes mellitus (GDM) is defined as glucose intolerance with onset or first recognition during pregnancy, and is usually screened for at 24–28 weeks of gestation. Risk factors that have been identified include persistent glucosuria, history of macrosomic fetus, obesity, age older than 25 years, congenital malformations, and strong family history of type 2 diabetes, which is a common illness in our country. In our study, we estimated GDM prevalence and evaluated its risk factors among female patients attending National Guard Primary Healthcare Centers in Jeddah city in 2017.

Methods This was an observational cross-sectional study. Our sample size was calculated to be 347. We included all pregnant females, aged 15–45 years, who attended National Guard Primary Healthcare Centers in Jeddah, and had been following up there during the study period. We collected data from antenatal visit notes, and labor and delivery sheets using the electronic file system BestCare. Screening for GDM at 24–28 gestational weeks was done using the American Diabetes Association (ADA) two-step approach, starting with 1 hour 50 g glucose challenge test, followed by 3-hour 100 g glucose tolerance test. We used SPSS 24.0 to analyze data.

Results The prevalence of GDM among our population was calculated to be 19.6%. Glucose challenge test was abnormal in 36.6% (n=127) of the sample, and 6.9% (n=24) had diagnostic value. Glucose tolerance test was abnormal in 18.7% (n=65) of the sample, and 15% (n=52) had diagnostic value. Several factors were significantly associated with GDM including age (p=0.001), height (p=0.028), and body-mass index (BMI; p=0.045).

Conclusion Prevalence of GDM is considered high among our population. Dietary habits and high BMI play an important role in the increasing amount of GDM cases. It is important to prevent GDM to minimize risks for both the mother and fetus.