ASSOCIATION BETWEEN RISK FACTORS OF GDM AND GLUCOSE CHALLENGE TEST STATUS AMONG URBAN PREGNANT WOMEN IN BANGLADESH: A TERTIARY CARE HOSPITAL EXPERIENCE.

Mahmud Naseem Tofail (BD) [1], Rahman Raina (BD) [2], Qureshi Nazmul Kabir (BD) [3]

Context:
Bangladeshi population is characterized by high prevalence of family origin of diabetes and women of this population are at increased risk for developing Gestational diabetes mellitus (GDM) during pregnancy.

Objective:
To see frequency of risk factors of GDM among Bangladeshi urban pregnant women and to find out association between risk factors of GDM and GCT status.

Method:
Descriptive study was conducted during December 2012- November 2013 among urban Bangladeshi women with 24 weeks gestation who attended for antenatal care in the United Hospital Limited. Diabetic pregnant subjects were excluded from the study.

Patients: 149 subjects 24 weeks of gestation.

Intervention: GCT was done.

Main outcome: Association between risk factors of GDM and GCT status and frequency of risk factors of GDM.

Result:
GDM Risk factors frequencies (%) and GCT-VPG (mmol/L) as mean± SD (SE) between corresponding risk factor positive vs negative groups were as follows: age>25yrs 73.8%, exercise<150min/wk 65.8%, DM family history 61.1%, BMI>25kg/m2 25.5%, PCOS 22.8%, bad obstetric history 20.8%, acanthosis negricans 12.8%, macrosomia 2.7%, history of GDM 11.4%, IGT 5.4%, IFG 4%.

Overall, GCT screening was positive (>=7.8mmol/L) in 18.8% (n=28) subjects. Percentage of GCT positive(%) cases between risk factor positive vs negative subjects were as follows: age>25yrs as 22.7% vs 7.7%[p0.02], exercise<150min/wk as 25.5% vs 5.9%[p0.01], DM family history as 27.5% vs 5.2%[p0.01], BMI>25kg/m2 as 42.5% vs 10.1%[p0.01], PCOS as 29.4% vs 15.7%[p0.07], obstetric history as 45.2% vs 11.9%[p0.01], acanthosis negricans as 36.8% vs 16.2%[p0.03], macrosomia as 25% vs 18.6%[p0.74], previous history of GDM as 64.7% vs 12.9% [p0.01], IGT as 100% vs 14.2%[p0.01], IFG as 100% vs 15.4%[p0.01].

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Conclusion: GCT status was significantly associated with risk factor of GDM among Bangladeshi women.