

THE INFLUENCE OF MATERNAL BODY MASS INDEX ON GESTATIONAL DIABETES IN PREGNANT WOMEN IN QATAR



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INTRODUCTION

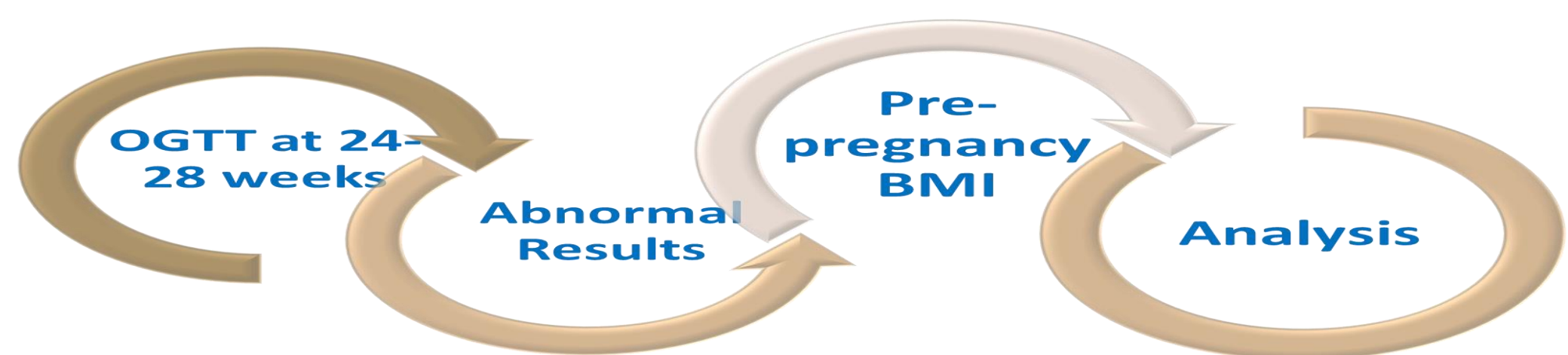
- ✓ Both gestational diabetes mellitus (GDM) and high body mass index (BMI) are correlated with adverse pregnancy outcomes.
- ✓ GDM is noted in 3–25% of pregnancies worldwide
- ✓ Its prevalence increased almost 3.5-fold from 1999 to 2012
- ✓ One of the cause of increased prevalence is growing incidence of obesity
- ✓ It increases the risk of adverse pregnancy outcomes, eg preterm birth, cesarean delivery, macrosomia, postpartum type 2 diabetes mellitus, and metabolic diseases in offspring
- ✓ In Qatar, with a multiethnic population and high prevalence of obesity, its relevant to study the impact of pre-pregnancy BMI and its association with GDM.

OBJECTIVE

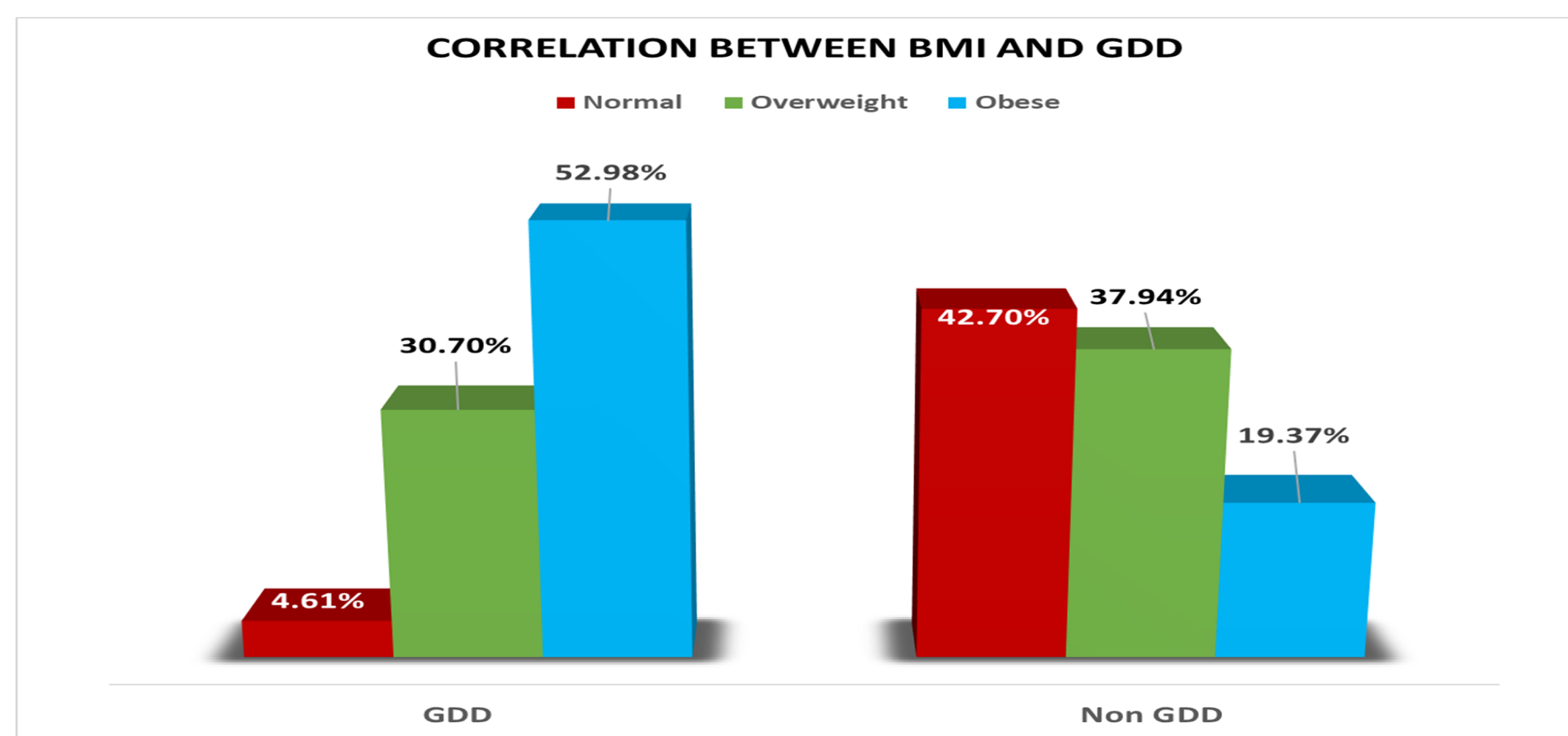
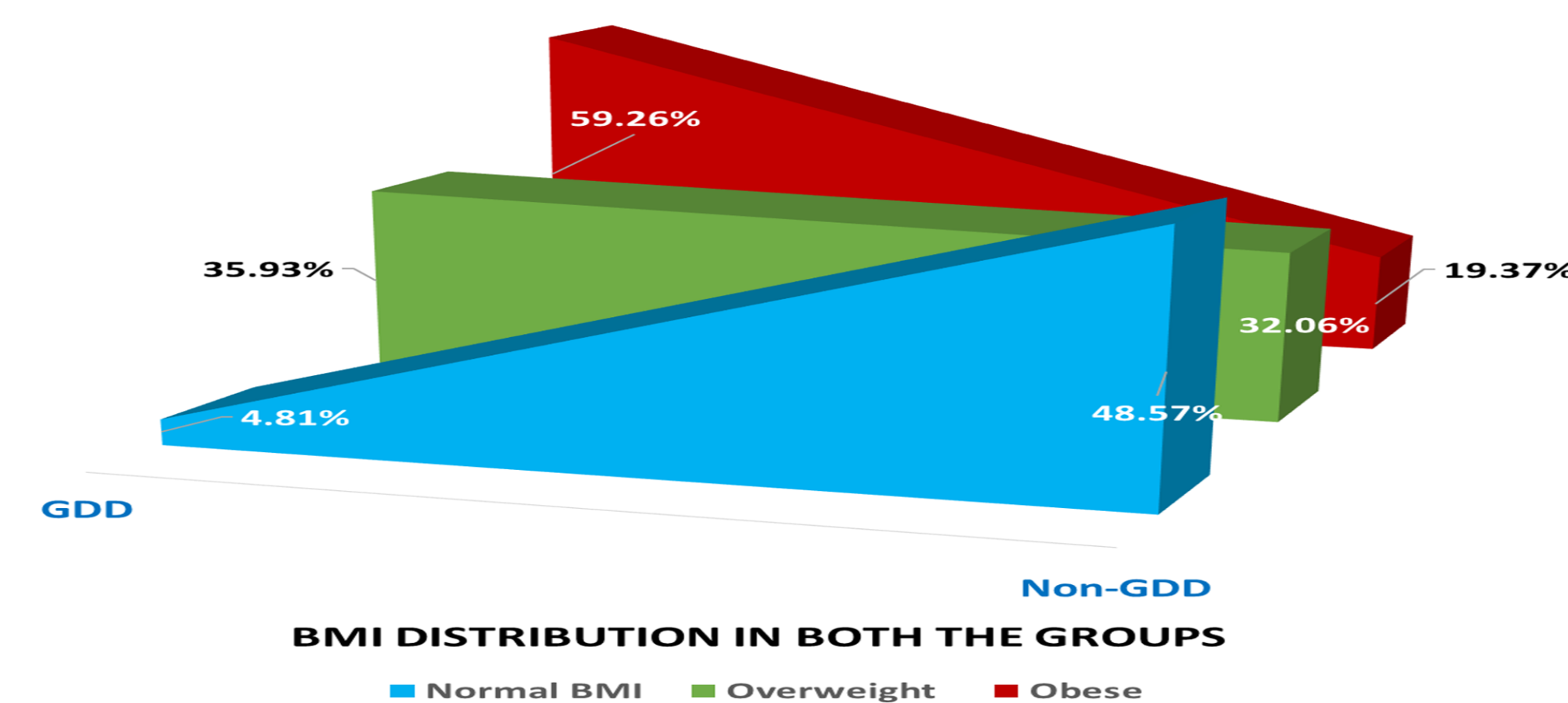
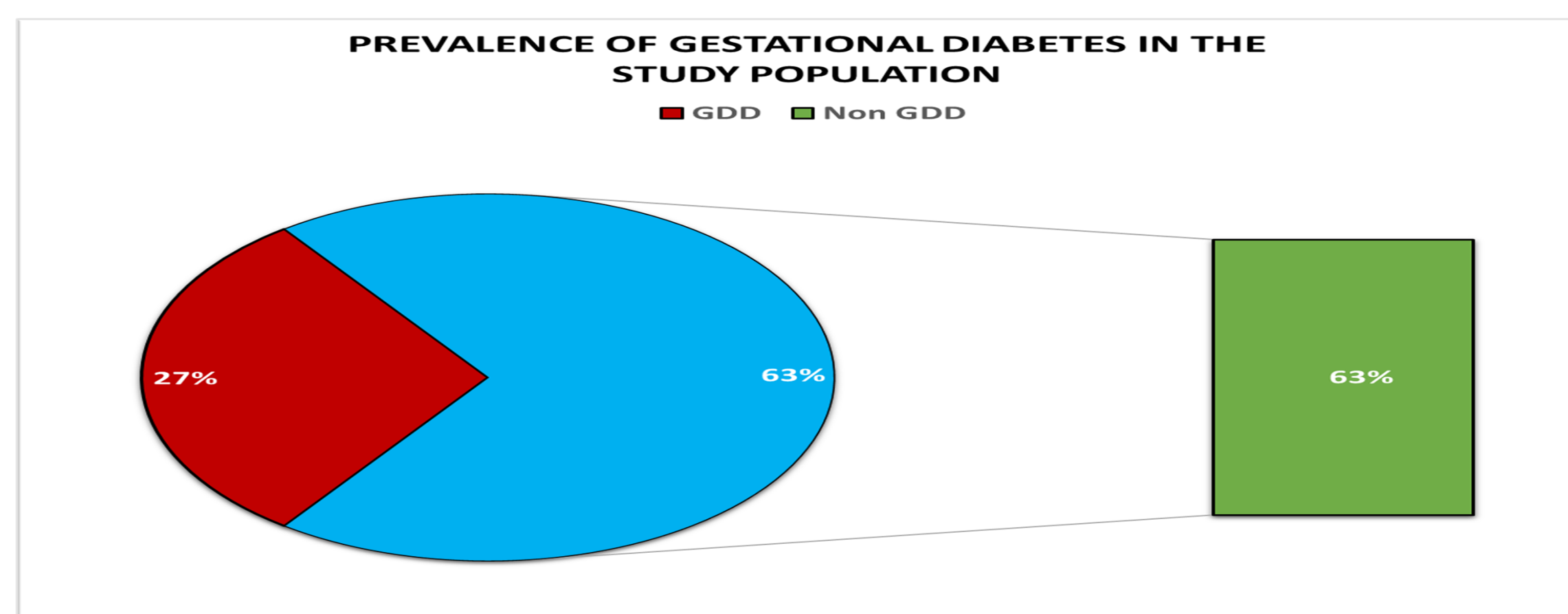
To study the impact of pre-pregnancy BMI and its association with GDM.

METHODOLOGY

- ✓ A retrospective clinical survey was conducted at a secondary hospital in Qatar.
- ✓ One thousand women with singleton pregnancies were included.
- ✓ Pregnant women who were enrolled after 16 weeks of gestation and those with type 1&2 and overt diabetes were excluded.
- ✓ Diagnosis of GDM was made by an abnormal oral glucose tolerance test (OGTT) during 24-28 weeks of gestation.
- ✓ Odds ratios were calculated using logistic regression to assess the association between GDM and pre-pregnancy BMI.



RESULTS



RESULTS

- ✓ Average BMI in women with GDM was 32.91 kg/m2.
- ✓ 24.37% women diagnosed with GDM were overweight (OR-0.67, 95% CI-0.48-0.89, p<0.05) .
- ✓ 59.6% women diagnosed with GDM were obese before pregnancy (OR-8.32, 95% CI-6.04-11.4, P<0.0001).
- ✓ All women with type 1,2 and 3 obesity developed GDM in pregnancy (P < 0.0001).

CONCLUSION

- ✓ Pre-pregnancy BMI and GDM were noted to have a strong association.
- ✓ Prevalence of GDM increased with increasing BMI.
- ✓ Pre-pregnancy weight reduction strategies should be considered in over-weight and obese women to reduce the prevalence of GDM and associated complications in pregnancy.

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