# Prevalence of Neonatal Macrosomia (NM) and Its Relation to Hypoglycaemia (NH) in Normoglycemic Versus Dysglycemic Pregnant Women. 687 ---P2

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## Objectives

**Several factors contribute to the risk of neonatal macrosomia (NM) and its associated hypoglycaemia (NH) in pregnant women.**

**Objective. To determine the prevalence of NM and its association with NH in a large cohort of normoglycemic and dysglycemic women**

## Material and Methods

**Out of 12255 pregnant women screened during 2016-2017, 3027 women were identified with gestational diabetes (GDM) (WHO criteria) and 233 were diabetic (DM) before pregnancy.**

**All dysglycemic women were managed according to related guideline/protocol with 3 or more clinical visits during the pregnancy period. Neonatal macrosomia (NM) is defined as an infant's birth weight of more than 4000 g at term.**

**Neonatal hypoglycaemia (NH) was defined as a plasma glucose < 30 mg/dL in the first day of life and < 45 mg/dL thereafter. Data on neonatal outcome was collected the hospital records as a part of a PEARL-Peristat Study, funded by QNRF- Doha-Qatar.**

## Results

**GDM and DM women had higher prevalence of Neonatal Macrosomia.**

**Macrosomic newborns of dysglycemic mothers had higher prevalence of Neonatal Hypoglycemia compared to MN of normoglycemic mothers.**

**The major risk factors for macrosomia which were compared with the normal weight infant groups (for all parameters).**

## Results

**Table: Macrosomia and associated hypoglycemia in Normoglycemic and dysglycemic women**

| | Mothers | | |
|---|---|---|---|
| Babies | No DM | GDM | DM |
| Liveborn | 8926 | 3018 | 233 |
| NICU admissions | 1076 | 483 | 58 |
| Macrosomic babies | 447 | 205 | 15 |
| Macrosomia + hypoglycaemia requiring NICU admission out of liveborn | 0.078% | 0.26%* | 1.29%* |
| Macrosomia + hypoglycaemia requiring NICU Admission out of all macrosomia babies | 7 (1.57%) | 8 (3.9%)* | 3 (20%) * |

## Discussion

**Fetal macrosomia is a common adverse infant outcome of GDM. Complications for infant include macrosomia increases the risk of shoulder dystocia, clavicle fractures and brachial plexus injury and increases the rate of admissions to the NICU**

**For the mother, the risks associated with macrosomia are cesarean delivery, postpartum hemorrhage and vaginal lacerations.**

**Infants of women with GDM are at an increased risk of becoming overweight or obese at a young age (during adolescence) and are more likely to develop type II diabetes later in life.**

## Conclusions

**Neonatal macrosomia is still more prevalent in treated women with DM and GDM.**
**Macrosomic infants of dysglycemic mothers are in greater risk of having severe hypoglycemia requiring NICU admission compared to normoglycemic women**

## Contact

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I declare that I have no potential conflict of interest.