

ABSTRACT

BACKGROUND:

With the rapid rate of socio-economic development and socio-cultural changes, changes in dietary pattern and changes in lifestyle, increasing BMI has become a healthcare burden to the nation. Increasing BMI levels pose a challenge to obstetric practice and causes negative outcomes for both mother and fetus. Hence it is required a focus on the methods to prevent this trend of increasing weight gain in adolescence and to curb all the multifactorial aetiology that leads to increased BMI and further complications.

OBJECTIVE:

The objective is to compare the antepartum, intrapartum, postpartum and neonatal outcome in pregnant mothers with high body mass index in the first trimester with those of normal body mass index and to find the incidence of complications in mothers with high body mass index.

DESIGN:

Prospective study

STUDY POPULATION:

Subjects are selected from the Antenatal outpatient department of Madras Medical College.

MATERIALS AND METHOD:

Primigravida booked in the first trimester with 200 women with normal BMI in the first trimester and 200 women with high BMI were followed prospectively for antepartum, intrapartum, postpartum and neonatal variables. Patients with previous medical diseases, multiple pregnancies were excluded. Patients data was recorded on predesigned proforma. Data were analysed statistically by Chi-square test of the dependence of variables and a p-value of less than 0.05 was considered as statistically significant.

RESULTS:

The age distribution in our study showed that about 50% of women with normal BMI and about 43.5% of women with high BMI are in the age group between 20 to 24 years. Miscarriage rate was higher in the high BMI group with an incidence of 3.5%. Pre-eclampsia was seen with a higher incidence in the high BMI group with an incidence of 28% of which 17.5% was the incidence of severe pre-eclampsia. The incidence of Gestational Diabetes mellitus was found as 55% in the high BMI group with nearly 33% on insulin. Oligohydramnios, Abruption placenta and Premature rupture of the membrane were found to have no statistical significance in high BMI group. Induction rate was higher in the high BMI group in accordance with the previous studies with nearly 36.78%

of women getting induced. Vaginal delivery was found to occur with a higher incidence in normal BMI group(57.5%) while the caesarian section was found with a higher incidence in high BMI mothers(54.5%), both were statistically significant .instrumental deliveries were found to be equal in both the groups.

Postpartum Haemorrhage incidence was 3.5% in high BMI group. Wound gaping and lactational dysfunction were found to be statistically significant in the high BMI group. Preterm deliveries were found more in the normal BMI group.

. Still birth was found in 2.5% of babies born to mothers with high BMI. NICU admission was statistically significant in the high BMI group with an incidence of 24.5%.

Preeclampsia, GDM, Vaginal Delivery, LSCS, Lactation Dysfunction, Preterm, Macrosomia and NICU Admission are found to be dependent with BMI as their corresponding p-value of chi-square test is less than 0.05

CONCLUSION:

Our study points out that the obstetric and neonatal complications are more in women with high body mass index and obesity, which pose a challenge to the obstetrician. Hence, a lot of support is needed from medical personnel to help these women to get counselled about the pre-pregnancy loss of weight, healthy food and exercise, and healthy life style pattern during pregnancy also in order to have a healthy mother and baby.

KEYWORDS:

Body mass index, Pre eclampsia, Gestational Diabetes mellitus, Premature rupture of membranes, Anemia, Abortion, Still birth, Post partum haemorrhage, Caeserian delivery, Lactational dysfunction, Wound gaping, Preterm birth, Oligohydramnios, Instrumental delivery, Pyrexia.

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