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Research Article

MATERNAL AND FETAL OUTCOMES OF OBESE PREGNANT PATIENTS¹Ayesha Abubakar, ²Shamayem Imdad, ³Muhammad Shoaib Amjad¹Jinnah Hospital Lahore, ²Wah Medical College, ³Medical Officer at Tehrik e khidmat e insani general hospital jaranwala, Faisalabad.**Article Received:** January 2019**Accepted:** February 2019**Published:** March 2019**Abstract:**

Introduction: Many studies indicated that there is rising prevalence of overweight and obesity amongst children of all ages is increasing in the past few decades. Mothers who are overweight or obese during pregnancy and childbirth, as measured by increasing maternal body mass index (BMI), are known to be at risk of significant antenatal, intrapartum, postpartum and also neonatal complications.

Objectives of the study: The basic aim of the study is to analyze the maternal and fetal outcome in obese pregnant females in Pakistan.

Material and methods: This cross sectional study was conducted at Jinnah Hospital Lahore during April 2018 to July 2018. One hundred and twenty two women were recruited in the study. The patients were allocated into two groups, group 1 obese patients (68) BMI 30 or more and group 2 non obese patients (54). Patients were excluded from the study, if there was other risk factors like previous Cesarean Section (C.S.) or pre-existing medical and / or obstetric complications to evaluate obesity as the only risk factor and its impact upon pregnancy and obstetric outcome.

Results: About two - third of the study group were having mild obesity, moderate obesity comprised about 28% and about 4% only was morbidly obese. Hypertensive disorders were nine folds more among obese women. Obese pregnant women were significantly more prone to have gestational diabetes.

Conclusion: It is concluded that as there is higher chances of operative interference during labour, better antenatal care and prior planning for elective caesarean section could prevent complications arising out of emergency caesarean section.

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INTRODUCTION:

Many studies indicated that there is rising prevalence of overweight and obesity amongst children of all ages is increasing in the past few decades. Mothers who are overweight or obese during pregnancy and childbirth, as measured by increasing maternal body mass index (BMI), are known to be at risk of significant antenatal, intrapartum, postpartum and also neonatal complications. The worldwide prevalence of obesity has increased substantially over the past few decades. Economic, technologic, and lifestyle changes have created an abundance of cheap, high-calorie food coupled with decreased required physical activity [1]. We are eating more and moving less. There is evidence for metabolic dysregulation among obese individuals that has been linked with a number of possible environmental factors, including contaminants from modern industry [2]. Obesity is a significant public health concern and is likely to remain so for the foreseeable future. Maternal obesity increases the risk of a number of pregnancy complications, including preeclampsia, gestational diabetes mellitus (GDM), and cesarean delivery [3].

In women during pregnancy, the prevalence of obesity is high (28.9%) and shows no signs of abating [4]. Maternal obesity is associated with a number of adverse outcomes during and after pregnancy, such as gestational hypertension and diabetes in mothers, and macrosomia and later overweight in their children. Obese women are more likely to gain in excess of current gestational weight gain guidelines, which itself increases the risk for maternal and offspring morbidity [5].

Objectives of the study

The basic aim of the study is to analyze the maternal and fetal outcome in obese pregnant females in Pakistan.

MATERIAL AND METHODS:

This cross sectional study was conducted at Jinnah Hospital Lahore during April 2018 to July 2018. One hundred and twenty two women were recruited in the study. The patients were allocated into two groups, group 1 obese patients (68) BMI 30 or more and group 2 non obese patients (54). Patients were excluded from the study, if there was other risk factors like previous Cesarean Section (C.S.) or pre-existing medical and / or obstetric complications to evaluate obesity as the only risk factor and its impact upon pregnancy and obstetric outcome. Both groups were comparable as regard age and parity. All patients were subjected to thorough history, detailed examinations and investigations.

Statistical analysis

The statistical analysis was carried out using Statistical Package for Social Sciences version 19 (SPSS Inc., Chicago, USA). Descriptive statistics such as mean, standard deviation, and proportion were used.

RESULTS:

About two - third of the study group were having mild obesity, moderate obesity comprised about 28% and about 4% only was morbidly obese. Hypertensive disorders were nine folds more among obese women. Obese pregnant women were significantly more prone to have gestational diabetes. Table 01 shows that during the index pregnancy control group women were significantly lesser weight gain during pregnancy.

Table 01: Mean age, BMI and weight gain during the index pregnancy of women in both groups (mean \pm SD).

	Study group	Control group	P. value
	Mean \pm SD	Mean \pm SD	
Age	27.85 \pm 3.96	26.54 \pm 3.49	N.S
BMI	33.85 \pm 2.81	24.49 \pm 1.88	*
Weight gain During the Index pregnancy	12.47 \pm 3.08	10.06 \pm 2.79	

*P. value < 0.05

DISCUSSION:

It was clearly evident from the present study that maternal obesity had adverse maternal and fetal outcomes. Maternal obesity was strongly associated with antenatal complications like gestational diabetes mellitus, gestational hypertension and preeclampsia. Increase in need for induction of labour and increased operative interference was associated with maternal obesity [6]. Maternal obesity was also associated with increased amniotic fluid index, big sized babies and postpartum complications like wound infection and postpartum fever. Obesity is growing problem all over the world and it may have an important impact on pregnancy. Studies on maternal and fetal outcomes of pregnancies implicated by obesity have reported varied results [7]. Women with other risk factors like previous C.S. or pre-existing medical and / or obstetric complications were excluded from the study to evaluate obesity as the only risk factor and its impact upon pregnancy and obstetric outcome [8]. Generally, the results of the present study indicated that obese mothers are at higher risk for most of obstetric complications ranging from a relatively little increase in risk for some problems like hyper emesis gravidarum where obese women had risk of 1.32 to have this problem when compared to non-obese one [9]. This agrees with who found that hyper emesis gravidarum where obese women had a risk of 1.5 to have this problem when compared to non-obese one [10].

CONCLUSION:

It is concluded that as there is higher chances of operative interference during labour, better antenatal care and prior planning for elective caesarean section could prevent complications arising out of emergency caesarean section. To improve obstetric provider compliance with management of their obese pregnant patients, our findings suggest a need for more education around BMI definitions and weight gain guidelines, along with strategies to address provider personal factors, such as confidence and body

satisfaction, that may be important predictors of adherence to management recommendations.

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