

**THE PREVALENCE OF GESTATIONAL DIABETES AMONG PATIENTS PRESENTING  
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**ABSTRACT**

Gestational diabetes is a condition in which a woman without diabetes develops high blood sugar levels during pregnancy. Gestational diabetes generally results in few symptoms; however, it does increase the risk of pre-eclampsia, depression, and requiring a Caesarean section. A total of 105 females were included in this study. After taking the informed consent, basic demographic data, and history i.e. name, maternal age, gestational age, previous birth history, whether they know about gestational diabetes or not, do they take precautionary measures for this etc. was taken and entered on a predefined proforma. The mean age of the patients was  $29.34 \pm 2.13$  years. The minimum age was 24 years and maximum age was 38 years. All the women were in their last trimesters of their pregnancies. Eighty-five patients said that they have knowledge about gestational diabetes and that they keep it being checked on regular basis. Out of 105 patients, 23 were suffering from gestational diabetes. Out of these 23, 3 patients also suffered from this disease in the previous pregnancy.

**KEYWORDS:** Gestational Diabetes.**INTRODUCTION**

Gestational diabetes is a condition in which a woman without diabetes develops high blood sugar levels during pregnancy. Gestational diabetes generally results in few symptoms; however, it does increase the risk of pre-eclampsia, depression, and requiring a Caesarean section. Babies born to mothers with poorly treated gestational diabetes are at increased risk of being too large, having low blood sugar after birth, and jaundice. If untreated, it can also result in a stillbirth. Long term, children are at higher risk of being overweight and developing type 2 diabetes. Gestational diabetes can occur during pregnancy because of insulin resistance or reduced production of insulin. Risk factors include being overweight, previously having gestational diabetes, a family history of type 2 diabetes, and having polycystic ovarian syndrome.

Diagnosis is by blood tests. For those at normal risk, screening is recommended between 24- and 28 weeks' gestation. For those at high risk, testing may occur at the first prenatal visit.

Prevention is by maintaining a healthy weight and exercising before pregnancy. Gestational diabetes is treated with a diabetic diet, exercise, medication (such as metformin), and possibly insulin injections. Most women can manage their blood sugar with diet and exercise. Blood sugar testing among those who are affected is

often recommended four times a day. Breastfeeding is recommended as soon as possible after birth.

Gestational diabetes affects 3–9% of pregnancies, depending on the population studied. It is especially common during the last three months of pregnancy. It affects 1% of those under the age of 20 and 13% of those over the age of 44. A number of ethnic groups including Asians, American Indians, Indigenous

Australians, and Pacific Islanders are at higher risk. In 90% of cases, gestational diabetes will resolve after the baby is born. Women, however, are at an increased risk of developing type 2 diabetes.<sup>[1-2]</sup> The objective of this study is to see the prevalence of gestational diabetes among the women presenting in obstetrical clinics.

**MATERIAL OF METHODS**

A total of 105 females were included in this study. After taking the informed consent, basic demographic data, and history i.e. name, maternal age, gestational age, previous birth history, whether they know about gestational diabetes or not, do they take precautionary measures for this etc. was taken and entered on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The qualitative variables were presented as numbers and frequencies. The quantitative variables were presented as mean and standard deviations.

## RESULTS

The mean age of the patients was  $29.34 \pm 2.13$  years. The minimum age was 24 years and maximum age was 38 years. All the women were in their last trimesters of their pregnancies. Eighty-five patients said that they have knowledge about gestational diabetes and that they keep it being checked on regular basis. Out of 105 patients, 23 were suffering from gestational diabetes. Out of these 23, 3 patients also suffered from this disease in the previous pregnancy.

## DISCUSSION

A number of screening and diagnostic tests have been used to look for high levels of glucose in plasma or serum in defined circumstances. One method is a stepwise approach where a suspicious result on a screening test is followed by diagnostic test. Alternatively, a more involved diagnostic test can be used directly at the first prenatal visit for a woman with a high-risk pregnancy. (for example in those with polycystic ovarian syndrome or acanthosis nigricans).

Non-challenge blood glucose tests involve measuring glucose levels in blood samples without challenging the subject with glucose solutions. A blood glucose level is determined when fasting, 2 hours after a meal, or simply at any random time. In contrast, challenge tests involve drinking a glucose solution and measuring glucose concentration thereafter in the blood; in diabetes, they tend to remain high. The glucose solution has a very sweet taste which some women find unpleasant; sometimes, therefore, artificial flavours are added. Some women may experience nausea during the test, and more so with higher glucose levels.

There is currently not enough research to show which way is best at diagnosing gestational diabetes. Routine screening of women with a glucose challenge test may find more women with gestational diabetes than only screening women with risk factors. It is not clear how these screening tests affect the rest of the pregnancy. Future research should include how the method of screening impacts the mother and baby.

Opinions differ about optimal screening and diagnostic measures, in part due to differences in population risks, cost-effectiveness considerations, and lack of an evidence base to support large national screening programs. The most elaborate regimen entails a random blood glucose test during a booking visit, a screening glucose challenge test around 24–28 weeks' gestation, followed by an OGTT if the tests are outside normal limits. If there is a high suspicion, a woman may be tested earlier.

In the United States, most obstetricians prefer universal screening with a screening glucose challenge test. In the United Kingdom, obstetric units often rely on risk factors and a random blood glucose test. The American Diabetes

Association and the Society of Obstetricians and Gynaecologists of Canada recommend routine screening unless the woman is low risk (this means the woman must be younger than 25 years and have a body mass index less than 27, with no personal, ethnic or family risk factors) The Canadian Diabetes Association and the American College of Obstetricians and Gynecologists recommend universal screening. The U.S. Preventive Services Task Force found there is insufficient evidence to recommend for or against routine screening, and a 2017 a Cochrane review found that there is not evidence to determine which screening method is best for women and their babies.

Some pregnant women and careproviders choose to forgo routine screening due to the absence of risk factors, however this is not advised due to the large proportion of women who develop gestational diabetes despite having no risk factors present and the dangers to the mother and baby if gestational diabetes remains untreated.<sup>[3-6]</sup>

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