

Finding The Prevalence For Gestational Diabetes Mellitus At A Tertiary Care Hospital In North East India

Dr Manika Agarwal,

*Additional Professor, North Eastern Indira Gandhi Regional Institute Of Health And Medical
Sciences, Shillong, Meghalaya
Department Of Obstetrics And Gynaecology, Neigrihms, Shillong, Meghalaya*

Dr Kaushiki Singh

*Dmo/ Indian Railways, Expg, North Eastern Indira Gandhi Regional Institute Of Health And Medical
Sciences, Shillong, Meghalaya
Sub Divisional Hospital, Tundla, Firozabad*

Dr Rituparna Das,

*Assistant Professor, All India Institute Of Medical Sciences, Guwahati, Assam
Department Of Obstetrics And Gynaecology, Aiims, Guwahati, Assam*

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Abstract:

Aim: India is considered as the Diabetes capital of the world due to high prevalence of Diabetes including Gestational Diabetes Mellitus. We undertook this study to find the prevalence of GDM in North East India.

Method: It was a hospital based study conducted at a tertiary care centre in North East India.

Result: The prevalence was found to be very high around 21.45%, which was higher than the national average.

Conclusion: The prevalence of GDM is high in India including North East India hence it needs special consideration during pregnancy.

Introduction:

Worldwide, Gestational Diabetes Mellitus is one of the biggest health issues. It is described as a glucose intolerance that either manifests itself for the first time or develops for first time in pregnancy (1).

The prevalence of GDM widely varies depending on the diagnostic method used and the ethnic group or population studied (2). One reason for this being that the prevalence of GDM reflects the prevalence of diabetes mellitus type 2 (DM2) within the population (3). Worldwide 1 in 10 pregnancies suffer from diabetes and 90% of it is GDM. According to a 2015 estimate by the International Diabetic Foundation, 1 in 11 individuals globally have diabetes, with 75% of those affected living in low- and middle-income nations (4). The frequency of GDM is believed to be between 10.3% and 14.3% in India, one of the most populated countries in the world, which is significantly higher than in western countries.

We undertook this study to find the prevalence of GDM in North Eastern Region of India whose geography and ethnicity is different from the rest of the country.

Aim:

To find the prevalence of GDM by both DIPSI (Diabetes In Pregnancy Study group of India) and IADPSG criteria.

Materials and Methods:

It was a hospital based prospective study carried out at a tertiary care centre “North Eastern Indira Gandhi Regional Institute of Health and Medical

GDM (OGTT Criteria)	n	%
Yes	59	21.45%
No	216	78.55%
TOTAL	275	100%

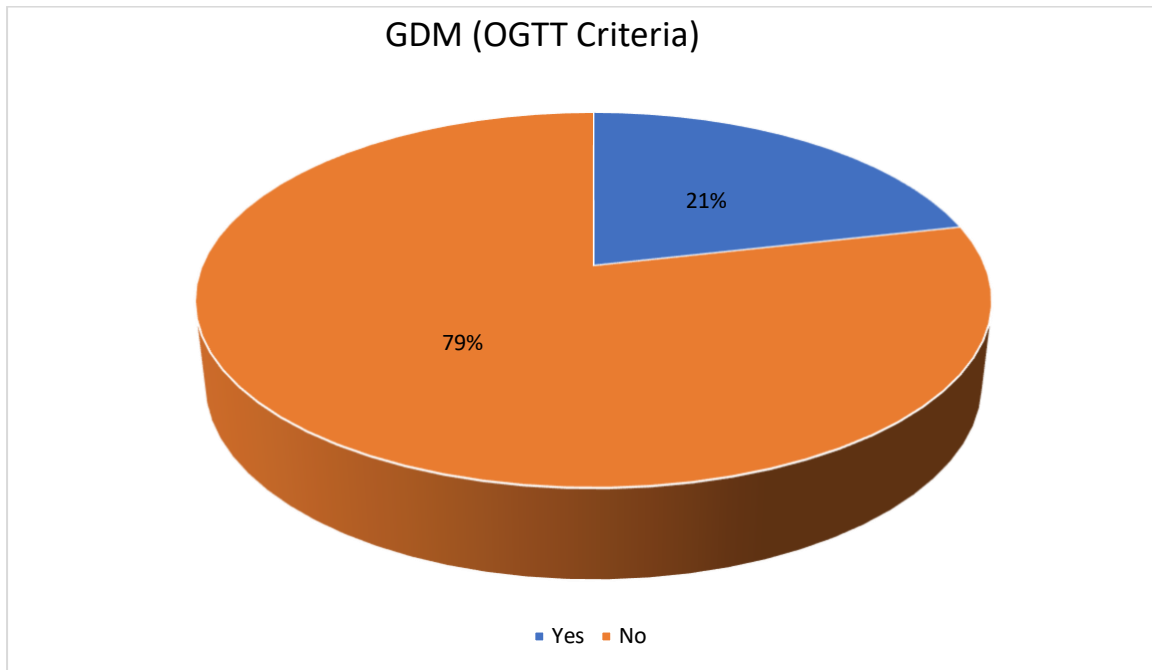
Sciences, Shillong, Meghalaya” from JANUARY 2020 to JULY 2021.

Results and Observations:

Table 1: Prevalence of GDM in our study by IADPSG criteria

The number of pregnant women found to have gestational diabetes mellitus according to OGTT based on IADPSG criteria were 59, i.e. 21.45%. Hence, the prevalence by IADPSG criteria is found to be 21.45%.

Graph 1:



Discussion :

The global prevalence of hyperglycemia in pregnancy in women of age 20-49 years was estimated to be 16.9% according to a study by L.Guariguata et al.(5), with the highest prevalence seen in South East Asia at 25.0%, and India contributing the most around 27.5%.

According to our study we found that the prevalence of diabetes in pregnancy in North East India is high, around 21.45% which can be due to our study centre being a tertiary care institute and the north-eastern population being majorly a non-vegetarian population.

As stated in table 1 and graph 1, the percentage of pregnant women found to have GDM by IADPSG criteria is 21.45%.

The prevalence found in my study is quite near to the prevalence found in the study by Trupti C. Ruge et al (6), of 19.11% by IADPSG criteria. The study done by Herath et al (7), also found similar prevalence of 21.5% by IADPSG criteria.

Summary:

The present prospective study has been conducted in a medical institute in Shillong, Meghalaya.

After identifying the Inclusion and Exclusion criteria, 275 pregnant women attending OPD for antenatal check-up were subjected to GDM testing by IADPSG criteria between 24-28weeks of gestation.

The prevalence of GDM by IADPSG criteria was found to be 21.45%.

Conclusion:

The prevalence of GDM is found to be high in North-East region which is 21.45%. Hence, Gestational Diabetes Mellitus is a concern for the Indian population and needs special attention.

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Conflicts of Interest: No conflict of interest

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