



INTISARI

Latar belakang:

Diabetes Melitus Gestasional (DMG) didefinisikan sebagai kondisi intoleransi glukosa dengan onset atau pertama kali terdeteksi ketika hamil. *Gold standar* diagnosis DMG selama ini menggunakan Tes Toleransi Glukosa Terganggu (TTGO). Berbagai keterbatasan dari pemeriksaan TTGO menyebabkan banyak peneliti yang berusaha untuk mencari alternatif pemeriksaan lain untuk diagnosis DMG. Salah satu parameter yang telah banyak diteliti adalah pemeriksaan HbA1c. Terdapat beberapa *cut-off value* HbA1c dalam menegakkan diagnosis DMG pada berbagai negara. Di Indonesia belum ada studi untuk penentuan *cut-offvalue* HbA1c untuk menegakkan diagnosis DMG

Tujuan :

Penelitian ini bertujuan untuk mengetahui penampilan diagnostik Hemoglobin A1c (HbA1c) pada *cut off value* terpilih untuk penegakkan diagnosis diabetes melitus gestasional.

Metode:

Penelitian ini merupakan studi observasional analitik dengan desain potong lintang. Penelitian ini melibatkan wanita hamil usia gestasi 24-28 minggu yang dikelompokkan pada ibu hamil non-DMG dan DMG berdasarkan kriteria IADPSG dan diukur parameter HbA1c, serta diukur penampilan diagnostik HbA1c dalam mendiagnosis DMG.

Hasil :

Penelitian ini melibatkan 199 subjek yang memenuhi kriteria inklusi dan eksklusi. Kelompok DMG sejumlah 25 subjek dan non DMG sebanyak 174 subjek. Kurva ROC didapatkan nilai AUC 0,622, $p < 0,001$, menunjukkan HbA1c mempunyai kekuatan diagnostik lemah. *Cut-off* HbA1c sebesar 5,65% memiliki sensitivitas 68% dan spesifisitas 89%.

Simpulan:

Penampilan diagnostik hemoglobin A1c (HbA1c) pada *cut off value* terpilih 5,65% memiliki sensitivitas 68 % dan spesifisitas 89%.

Kata kunci: DMG, diagnosis, HbA1c



ABSTRACT

Background:

Gestational Diabetes Mellitus (GDM) is defined as a condition of glucose intolerance with onset or first detected during pregnancy. The gold standard for diagnosing GDM has been using the Impaired Glucose Tolerance Test (OGTT). Various limitations of the OGTT examination have caused many researchers to try to find other alternative examinations for the diagnosis of GDM. One of the parameters that has been widely studied is the HbA1c examination. There are several cut-off values of HbA1c in diagnosing GDM in various countries. In Indonesia alone, there are no studies to determine the cut-off value of HbA1c to establish the diagnosis of GDM.

Objective:.

This study aims to determine the appearance of the diagnosis of Hemoglobin A1c (HbA1c) at the cut off value selected for the diagnosis of gestational diabetes mellitus.

Method:

This research was an analytic observational study with a cross-sectional design. This study involved pregnant women aged 24-28 weeks who were grouped into non-GDM and GDM pregnant women based on IADPSG criteria and HbA1c was measured. Diagnostic performance of HbA1c in diagnosing GDM was analyzed.

Results:

This study involved 199 subjects who met the inclusion and exclusion criteria. Twenty-five subjects were grouped as GDM and 174 subjects were non-GDM. The ROC curve showed an AUC value of 0.622, $p < 0.001$, indicating that HbA1c had weak diagnostic power. The HbA1c cut-off at 5.65% had sensitivity of 68% and specificity of 89%.

Conclusion:

The diagnostic performance of hemoglobin A1c (HbA1c) at the selected cut off value of 5.65% had a sensitivity of 68% and a specificity of 89%.

Keywords: GDM, diagnosis, HbA1c