**RATE OF BLOOD GLIUCOSE CONTROL IN PATEINTS WITH TYPE 2 DM IN DIYALA PROVINCE BY USING HbA1c**

**Abstract :**

### Background: Diabetes mellitus is a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both. The chronic hyperglycemia of diabetes is associated with long-term damage, dysfunction, and failure of various organs, especially the eyes, kidneys, nerves, heart, and blood vessels. Symptoms of marked hyperglycemia include polyuria, polydipsia, weight loss, sometimes with polyphagia, and blurred vision. Impairment of growth and susceptibility to certain infections may also accompany chronic hyperglycemia. Acute, life-threatening consequences of uncontrolled diabetes are hyperglycemia with ketoacidosis or the nonketotic hyperosmolar syndrome. Type 1 diabetes (β-cell destruction, usually leading to absolute insulin deficiency). Type 2 diabetes (ranging from predominantly insulin resistance with relative insulin deficiency to predominantly an insulin secretory defect with insulin resistance).

Hemoglobin A1c, often abbreviated HbA1c, is a form of [hemoglobin](http://www.emedicinehealth.com/hemoglobin_levels/article_em.htm) (a blood pigment that carries oxygen) that is bound to glucose.The blood test for HbA1c level is routinely performed in people with type 1 and type 2 diabetes mellitus.Blood HbA1c levels are reflective of how well [diabetes](http://www.emedicinehealth.com/diabetes_mellitus_type_1_and_type_2/article_em.htm) is controlled.The normal range for level for hemoglobin A1c is less than 7%.HbA1c also is known as glycosylated, or glycated hemoglobin.

Type 2 Diabetes mellitus has reached epidemic proportions worldwide and Iraq is no exception. This study was done to see the glycaemic control of our diabetic patients by estimating Glycosylated haemoglobin as poor control leads to significant complications causing enormous human suffering & socioeconomic burden.