

**New Insights of Diabetes: is it Rational to Initiate Insulin Treatment for Diabetes Type 2 Patients**

Ahed J Alkhatib

Department of Legal Medicine, Toxicology of Forensic Science and Toxicology, School of Medicine, University of Science and Technology, Jordan

**Corresponding Author :** Ahed J Alkhatib, Department of Legal Medicine, Toxicology of Forensic Science and Toxicology, School of Medicine, University of Science and Technology, Jordan **Email:**ahed.alkhatib64@yahoo.com

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Diabetes type 2 is considered one of the most common chronic and non-infectious diseases that ranks third following cardiovascular diseases and cancer. It has complications that make risks for health of persons and associated with economic burden for individual and community levels [2,4,,5,6].

I think that there is a philosophical problem in diabetic knowledge affecting its treatment. Type 2 diabetes is defined " a group of metabolic diseases characterized by hyperglycemia resulting from defects in insulin secretion, insulin action, or both [1].

The philosophical approaches in taking diabetes as special entity seems to underestimate the reality of the topic. It has been used to define diabetes and identify diabetic patients based on glucose level (the indirect path of diabetes) rather than measuring insulin

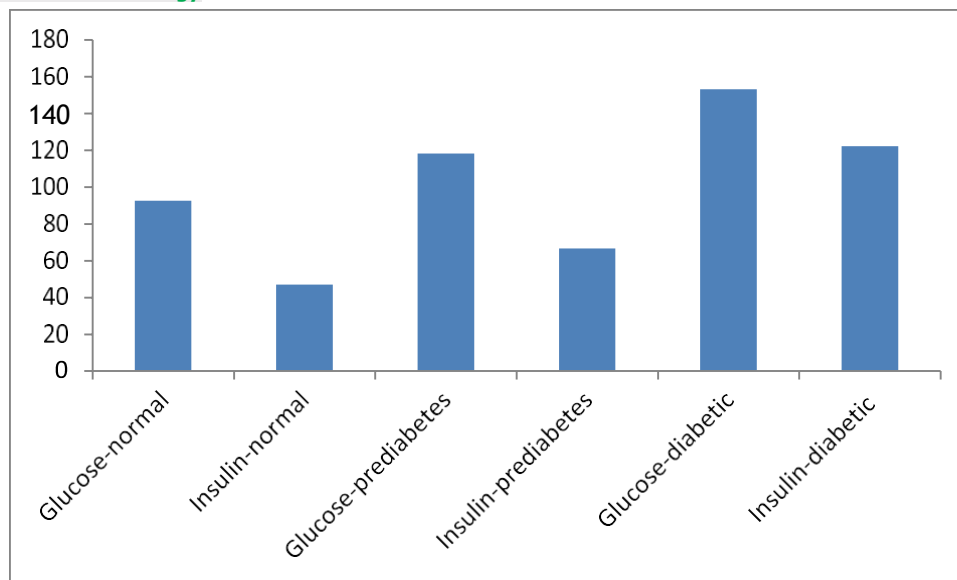
level (the direct path of diabetes).

We wanted to test a new hypothesis in which insulin measurement reflects new insights to diabetes. We analyzed two data sets based on Kaggle website. One dataset was from India, and the other data was from Frankfurt Hospital (Germany). Approximately 2800 subjects were included. We divided subjects into three groups: normal, pre-diabetic, and diabetics.

It was interestingly found that both glucose level and insulin level were increased together overall study groups. The mean glucose levels were in the following patterns: normal group (92.41 mg/dl), pre-diabetic group (118.05 mg/dl), and diabetic group (153.04 mg/dl) (table 1, figure 1).

Group	Glucose (mg/dl)	Insulin
Normal	92.41	46.83
Pre-diabetic	118.05	66.60
Diabetic	153.034	122.04

**Table 1:** Levels of glucose and insulin in study groups



**Figure 1:** Representation of glucose and insulin in study groups

According to this context, we think that it is better to reduce both glucose and insulin levels instead of initiating insulin treatment.

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