Potassium Levels in Type II Diabetes Mellitus Patients in Telaga Dewa Health Center

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Abstract

Type II Diabetes Mellitus (DM) patients have a higher risk of cardiovascular disease and serious complications such as heart rhythm disturbances and hypertension. Maintaining potassium levels in normal conditions, especially in type II DM patients, helps increase insulin sensitivity, supports kidney function, keeps heart and blood vessel function, and maintains body fluid balance, thereby reducing the risk of heart attack and stroke. An overview of serum potassium levels in type II DM sufferers in the Telaga Dewa Community Health Center working area is necessary to determine the risk factors of potassium deficiency (hypokalemia) and excess potassium (hyperkalemia). A total of 30 serum samples from type II DM patients in the working area of the Telaga Dewa Community Health Center, Bengkulu City were examined for potassium levels using the Ion Selective Electrode (ISE) method, demographic data such as gender and age were recorded as supporting data. Respondents were dominated by women (76.66%) and men (23.33%). Based on age, patients are dominated by those of productive age (90%) and the rest are elderly (10%). The results of measuring potassium levels, 90% of respondents (27 patients) had normal potassium levels with an average of 3.9 mmol/l, three respondents (10%) had low potassium levels (hypokalemia) all of whom were female and of productive age levels potassium averaged 3.4 mmol/l.

Keywords

Potassium, Diabetes Mellitus Type II, Hypokalemia and Hyperkalemia