

**ABSTRACT**

**Background:** Diabetes Mellitus is one of metabolic diseases characterized by hyperglycemia resulting from defect in insulin secretion, insulin action, or both. The abnormalities begin earlier in peripheral tissue in form of insulin resistance which in the end turns into  $\beta$ -pancreas dysfunction. Management of diabetes mellitus includes control of glucose, co morbid abnormalities and complications. Regulation on diet is one of the managements. There are 21 types of diets that have been developed base on patient needs.

**Objective:** To recognize the distribution of age, nutritional status, complications and nutrition interventions of T2DM in diabetes inpatient Clinic RSUD Dr. Soetomo within the period of August until October 2016.

**Method:** The design of this study is descriptive with retrospective setting. The samples are obtained through secondary data from patients' medical history using total sampling techniques within the period of August until October 2016.

**Result:** There were 120 T2DM patients used as sample in this study. T2DM patients were mostly found in the range of 50<sup>th</sup>-59<sup>th</sup> years old (42,5%). Meanwhile, for the nutritional status (BMI) were mostly found higher than 18, 5 kg/m<sup>2</sup> (83, 33%). The most acute complication that was found in this study is diabetic ketoacidosis (14, 16%). There were 19, 16% patients suffered on diabetic nephropathy and 60% suffered on defect of peripheral vascular. The most nutrition intervention used was Diet-B3 (25%).

**Conclusion:** The age distribution that found in this study as same as other studies in other developing countries. Increased prevalence of T2DM is associated with worsening insulin resistance as age increases. The distribution of most nutritional status (BMI > 18.5) in this study was associated with obesity as a major risk factor that can still be modified in T2DM. Comparison of prevalence of complications in each study showed considerable differences. The distribution of acute complications in this study was higher than another study, this is because of Clinic RSUD Dr. Soetomo is highest referral center in which the severity of the patient's disease is high. Also found differences in the distribution of chronic complications between studies conducted. B3 Diet as the most nutrition intervention applied was indicated for patients with T2DM with diabetic nephropathy, CKD, UTI and sepsis

**Keywords:** type 2 diabetes mellitus, age, nutritional status, complication, nutrition intervention.