

ABSTRACT

**THE ROLE OF ALBUMIN IN THE DEVELOPMENT
OF DIABETES MELLITUS TYPE 2**

Background : Productive age in Indonesia is susceptible to non-communicable diseases such as diabetes due to poor lifestyle and unbalanced nutritional intake. Riskesdas (2013) reported 6.9% population over 15 years old in Indonesia have diabetes. Therefore, we need to find a way to monitor the development of Diabetes Mellitus Type 2. Some studies linked hypoalbuminemia with increased complications and worsening of patient's condition (Jellinge et al., 2014). Vincent, et al. (2003) suggest that hypoalbuminemia is a strong independent risk factor for poor outcomes in many diseases.

Method : This study was a cross sectional study and it observed level of serum albumin as an independent variable and liver and kidney function which are dependent variables. Albumin, liver, and kidney function indicator are recorded twice, when the patient admitted to the hospital and the last measurement before leaving the hospital. Relations were sought by bivariate correlation test.

Result : There is no association between serum albumin with liver function (p SGOT = 0.278; p SGPT = 0.208) and serum creatinine as kidney function ($p=0.406$). However there is an association between serum albumin and the alteration of BUN (0.021).

Conclusion : Serum albumin has no association with liver function lab tests and poor association with kidney function lab tests.

Keywords : role of serum albumin, diabetes mellitus type 2, liver function, kidney function, and lab tests.