

## ABSTRAK

*Chronic Kidney Disease* (CKD) adalah penurunan fungsi ginjal yang *irreversibel* dengan GFR berada di bawah nilai normal ( $< 60$  ml/menit/1,73 m<sup>2</sup>) dalam jangka waktu minimal 3 bulan. Secara luas, gagal ginjal kronis dikaitkan dengan perubahan sistem kekebalan yang parah. Jumlah limfosit menurun pada tahap akhir penyakit ginjal. Vitamin B dapat mengatur generasi kemokin sitokin, dan menjadi perantara interaksi dengan sel-sel kekebalan.

Penelitian ini bertujuan untuk mengukur dampak pemberian vitamin B1, B6, B12 parenteral terhadap peningkatan limfosit pasien gagal ginjal kronik yang menjalani hemodialisis. Jenis penelitian yang dilakukan adalah penelitian pra-eksperimental dengan desain *one group pretest-posttest*. Penelitian ini menggunakan data sekunder, diambil dari rekam medis hasil lab untuk mengetahui kadar limfosit, penyakit lain, dan terapi obat yang diterima pasien gagal ginjal kronis yang menjalani hemodialisis di Rumah Sakit Bethesda dan Panti Rapih Yogyakarta. Data yang diambil kemudian dianalisis dengan SPSS untuk menguji hipotesis bahwa pemberian vitamin B kombinasi parenteral dapat menaikkan kadar limfosit pada pasien gagal ginjal kronis yang menjalani hemodialisis.

Dari hasil penelitian tidak terdapat peningkatan kadar rata-rata limfosit setelah pemberian vitamin B selama 2 minggu ( $p=0,065$ ) dan selama 4 minggu ( $p=0,755$ ). Pemberian Vitamin B1, B6, B12 tidak secara bermakna menaikkan kadar rata-rata limfosit pasien gagal ginjal kronis yang menjalani hemodialisa.

Kata kunci: *Chronic Kidney Disease*, limfosit, vitamin B

**ABSTRACT**

*Chronic Kidney Disease (CKD) is a decrease in kidney function that irreversible with GFR is below the normal value (60 ml/min  $</1.73$  m<sup>2</sup>) for a period of at least 3 months. Broadly, chronic renal failure is associated with severe immune system changes. The number of lymphocytes decreased in the later stages of kidney disease. Vitamin B can manage the generation of kemokin cytokines, and becomes an intermediary interaction with immune cells.*

*This study aims to measure the impact of administering vitamins B1, B6, B12 parenteral against an increase in lymphocytes of patients chronic renal failure undergoing hemodialysis. The type of research that is done is research pre-experimental design with one group pretest-posttest. This study uses secondary data, taken from the medical record the results of the lab to find out the level of lymphocytes, other diseases, and drug therapy received patients of chronic renal failure undergoing hemodialysis at Bethesda Hospital and The Mess. The data is taken and then analyzed with SPSS to test the hypothesis that giving vitamin B combination of parenteral can raise the levels of lymphocytes in patients with chronic renal failure undergoing hemodialysis.*

*From the results of the study there was no increase in the average level of lymphocytes after the administration of vitamin B1, B6, B12 for 2 weeks ( $p=0,065$ ) and for 4 weeks ( $p=0,755$ ). Administration of vitamin B1, B6, B12 did not significantly increase the average level of lymphocytes in chronic renal failure patients undergoing hemodialysis.*

*Keywords: Chronic Kidney Disease, lymphocytes, B vitamin*

