

## **ABSTRACT**

**Background:** *Chronic renal failure is a progressive chronic disease that needs kidney therapies, one of them is hemodialysis. In this case, patient compliance related to the frequency of hemodialysis can affect the success of therapy which is interpreted through iron status. This study discusses the relation in hemodialysis frequency towards iron status of chronic renal failure patients who experience hemodialysis.*

**Method:** *This research used observational analytic method through a cross sectional analysis of trials. Number of samples in this research were 50 patient medical records. The independent variable of this research is the frequency of hemodialysis and the variable released is the iron status level. After the data was obtained from each variable, then it was analyzed by using the Spearman correlation test.*

**Result:** *Research results obtained from chronic renal failure patients with Fe level increased by 2%, normal by 13%, and decreased by 72%. Whereas the TIBC level increased by 14%, normal 38%, and decreased by 48%. Furthermore, the SAT level increased by 2%, normal 36%, and decreased by 62%. The results of the analysis from the correlation test obtained significance figures  $p = 0.321$  for Fe,  $p = 0.251$  for TIBC,  $p = 0.018$  for SAT, and  $p = 0,087$  for Hb. There is no significant connection in Fe, TIBC, and Hb, while in SAT obtained a significant relation with the coefficient  $r = 0.034$  (weak resistance).*

**Conclusion:** *Based on these results, it can be concluded that there is no significant relationship between the frequency of hemodialysis on Fe, TIBC, and Hb and there is a significant relationship between the frequency of hemodialysis on SAT which shows a significant number  $p = 0.018$  and a comparison coefficient  $r = 0.334$ .*

**Keywords:** *Fe, TIBC, SAT, frequency of hemodialysis, chronic renal failure*

## INTISARI

**Latar Belakang:** Gagal ginjal kronis merupakan penyakit kronis progresif yang memerlukan terapi pengganti ginjal, salah satunya berupa hemodialisis. Kepatuhan pasien dalam hal ini berkaitan dengan frekuensi hemodialisis dapat memengaruhi keberhasilan terapi yang diinterpretasikan melalui kadarstatus besi. Penelitian ini bertujuan untuk mengetahui adanya hubungan antara frekuensi hemodialisis terhadap status besi pada pasien gagal ginjal kronis yang menjalani hemodialisis.

**Metode Penelitian:** Penelitian menggunakan metode observasional analitik melalui pendekatan *cross sectional* dengan analisis uji korelasi. Jumlah sampel pada penelitian ini adalah 50 rekam medis pasien. Variabel bebas penelitian adalah frekuensi hemodialisis dan variable terikatnya adalah kadar status besi. Setelah data didapat dari masing-masing variabel, dilakuk ananalisis data dengan uji korelasi *Spearman test*.

**Hasil Penelitian:** Hasil penelitian didapatkan pasien gagal ginjal kronis dengan kadar Fe meningkat 2%, normal 13%, dan menurun 72%. Sedangkan pada kadar TIBC meningkat 14%, normal 38%, dan menurun 48%. Selanjutnya pada kadar SAT meningkat 4%, normal 34%, dan menurun 62%. Hasil analisis uji hubungan diperoleh angka signifikansi  $p = 0,321$  pada Fe,  $p = 0,251$  pada TIBC,  $p = 0,018$  pada SAT, dan  $p = 0,087$  pada Hb. Tidak terdapat hubungan yang signifikan pada Fe, TIBC, dan Hb, sedangkan pada SAT didapatkan hubungan signifikan dengan koefisien korelasi  $r = 0,034$  (korelasi lemah).

**Kesimpulan:** Tidak terdapat hubungan yang signifikan antara frekuensi hemodialisis terhadap Fe, TIBC, dan SAT dan terdapat korelasi yang signifikan antara frekuensi hemodialisis terhadap SAT yang menunjukkan angka signifikansi  $p = 0,018$  dan koefisien korelasi  $r = 0,334$ .

**Kata kunci:** Fe, TIBC, SAT, frekuensi hemodialisis, gagal ginjal kronis