

ABSTRACT

Background: Chronic kidney disease patients at Royal Prima Hospital Medan frequently experience physical complaints in the form of muscle cramps during hemodialysis. **Objective:** This study aims to analyze the relationship between hemodialysis duration and the incidence of muscle cramps in these patients to improve the quality of nursing care and patient comfort. **Methods:** This analytical quantitative study utilized a cross-sectional approach. The research was conducted at the Hemodialysis Unit of Royal Prima Hospital Medan in 2026. The research population consisted of 149 chronic kidney disease patients, with a sample size of 52 individuals. Data were collected through questionnaires and medical records, then analyzed using the Chi-Square statistical test. **Results:** The study of 52 respondents showed that the majority of patients underwent hemodialysis for 4 hours (63.5%) and experienced moderate-level muscle cramps (55.8%). Based on the Pearson Chi-Square test, a p-value of 0.037 ($p < 0.05$) was found. This proves a significant relationship between hemodialysis duration and the severity of muscle cramps in patients with chronic kidney disease. **Conclusion:** The majority of respondents underwent hemodialysis therapy with a duration of 4 hours (63.5%) and mostly experienced muscle cramps in the moderate category (55.8%). The main conclusion demonstrates a significant relationship between hemodialysis duration and the incidence of muscle cramps in patients with chronic kidney disease at Royal Prima Hospital Medan in 2026 ($\chi^2=10.233$, $p=0.037$).

Keywords: Chronic Kidney Disease; Hemodialysis; Hemodialysis Duration; Muscle Cramps

ABSTRAK

Latar Belakang: Pasien gagal ginjal kronis di Rumah Sakit Royal Prima Medan kerap mengalami keluhan fisik berupa kram otot saat menjalani hemodialisis. **Tujuan:** Penelitian ini bertujuan menganalisis hubungan antara durasi hemodialisis dengan kejadian kram otot pada pasien tersebut untuk meningkatkan mutu asuhan keperawatan dan kenyamanan pasien. **Metode:** Penelitian kuantitatif analitik ini menggunakan pendekatan cross-sectional. Penelitian dilakukan di Unit Hemodialisis Rumah Sakit Royal Prima Medan pada tahun 2026. Populasi penelitian berjumlah 149 pasien gagal ginjal kronis, dengan sampel sebanyak 52 orang. Data dikumpulkan melalui kuesioner dan rekam medis, kemudian dianalisis menggunakan uji statistik Chi-Square. **Hasil:** Penelitian terhadap 52 responden menunjukkan mayoritas pasien menjalani hemodialisis selama 4 jam (63,5%) dan mengalami kram otot tingkat sedang (55,8%). Berdasarkan uji Pearson Chi-Square, ditemukan nilai p-value sebesar 0,037 ($p<0,05$). Hal ini membuktikan adanya hubungan signifikan antara durasi hemodialisis dengan tingkat keparahan kram otot pada pasien gagal ginjal kronis. Mayoritas responden menjalani terapi hemodialisis dengan durasi 4 jam (63,5%) dan sebagian besar mengalami kram otot dalam kategori sedang (55,8%). **Kesimpulan:** Kesimpulan utama membuktikan adanya hubungan yang signifikan antara durasi hemodialisis dengan kejadian kram otot pada pasien gagal ginjal kronis di Rumah Sakit Royal Prima Medan tahun 2026 ($\chi^2=10,233$ $p=0,037$).

Kata Kunci: Gagal Ginjal Kronis; Hemodialisis; Durasi Hemodialisis; Kram Otot