

ABSTRAK

PEMBERIAN NUTRISI PARENTERAL DINI SEBAGAI FAKTOR RISIKO MORTALITAS PADA PASIEN COVID-19 DI INTENSIVE CARE UNIT (ICU) RSUP DR KARIADI

I Putu Prayoga Ratha¹, Niken Puruhita², Aryu Chandra², Siti Fatimah Muis², Enny Probosari²

¹Peserta Program Pendidikan Dokter Spesialis Gizi Klinis, Fakultas Kedokteran UNDIP

²Staf Program Pendidikan Dokter Spesialis Gizi Klinis, Fakultas Kedokteran UNDIP

Latar belakang: Mortalitas pada pasien COVID-19 di ICU dilaporkan lebih tinggi dibandingkan non-ICU. Pemberian nutrisi parenteral dini dihindari mengingat komplikasinya, namun pasien COVID-19 di ICU memerlukan nutrisi parenteral karena asupan enteral tidak memadai atau kontraindikasi. Penelitian ini bertujuan mengidentifikasi pemberian nutrisi parenteral dini dan faktor risiko lain yang menyebabkan mortalitas pasien COVID-19 di ICU RSUP dr Kariadi.

Metode penelitian: Penelitian analitik observasional dengan pendekatan kohort retrospektif menggunakan data sekunder melibatkan pasien COVID-19 yang dirawat di ICU RSUP dr. Kariadi pada Maret – September 2020. Teknik sampling menggunakan *total sampling* dengan kriteria: inklusi: terkonfirmasi COVID-19, usia ≥ 18 tahun dan diberikan terapi PN dan EN atau kombinasinya. Analisis statistik menggunakan uji *Chi Square* dan Regresi Logistik

Hasil penelitian: Sebanyak 188 subjek memenuhi kriteria inklusi. Tidak terdapat perbedaan mortalitas pasien yang diberikan PN dini atau lambat $p=0,92$ RR 0,90 (95% CI 0,43-1,84). Faktor risiko mortalitas adalah adanya komorbiditas $p=0,023$ RR 2,13 (95% CI 1,15-3,95), pemakaian VM $p=<0,0001$ RR 43,68 (95% CI 18,52 – 102,99), defisit energi $p=0,002$ RR 3,09 (95% CI 1,52-5,99) dan defisit protein $p=0,039$ RR 1,93 (95% CI 1,07-3,49). Pada analisis multivariat pemakaian VM yang dikontrol dengan status ARDS $p=0,022$ RR 6,20 (CI 95% 1,29 – 29,72) dan defisit energi $p=0,045$ RR 2,15 (1,01 – 4,57) secara bersama-sama menjadi faktor risiko mortalitas pada pasien COVID-19 di ICU RSUP dr Kariadi.

Simpulan: PN dini bukan merupakan faktor risiko mortalitas pasien COVID-19 sedangkan pemakaian VM dikontrol dengan status ARDS dan defisit energi secara bersama-sama merupakan faktor risiko mortalitas pada pasien COVID-19 di ICU RSUP dr. Kariadi.

Kata kunci: Faktor risiko, PN dini, Mortalitas, COVID-19, ICU

ABSTRACT

EARLY PARENTERAL NUTRITION (PN) AS MORTALITY RISK FACTOR IN COVID-19 PATIENTS AT THE INTENSIVE CARE UNIT (ICU) OF RSUP DR KARIADI

I Putu Prayoga Ratha¹, Niken Puruhita², Aryu Chandra², Siti Fatimah Muis², Enny Probosari²

¹Participant of Clinical Nutrition Specialist Medical Education Program, Faculty of Medicine UNDIP

²Staff of Clinical Nutrition Specialist Medical Education Program, Faculty of Medicine UNDIP

Background: Mortality in COVID-19 patients in the ICU is reported to be higher than non-ICU. Early parenteral nutrition is avoided considering the complications, but COVID-19 patients in the ICU require parenteral nutrition because enteral intake is inadequate or contraindicated. This study aims to identify early parenteral nutrition and other risk factors that cause mortality of COVID-19 patients in the ICU of Dr. Kariadi Hospital.

Research methods: Observational analytic study using a retrospective cohort approach using secondary data involving COVID-19 patients treated in the ICU of RSUP dr. Kariadi in March – September 2020. The sampling technique used total sampling with the following criteria: inclusion: confirmed COVID-19, age ≥ 18 years and given PN and EN therapy or a combination thereof. Statistical analysis using Chi Square test and Logistic Regression

Research result: Total of 188 subjects met the inclusion criteria. There was no difference in the mortality of patients who were given early or late PN $p=0.92$ RR 0.90 (95% CI 0.43-1.84). The risk factors for mortality were the presence of comorbidities $p=0.023$ RR 2.13 (95% CI 1.15-3.95), use of VM $p=<0.0001$ RR 43.68 (95% CI 18.52 – 102.99) , energy deficit $p=0.002$ RR 3.09 (95% CI 1.52-5.99) and protein deficit $p=0.039$ RR 1.93 (95% CI 1.07-3.49). In the multivariate analysis of controlled VM usage with ARDS status $p=0.022$ RR 6.20 (95% CI 1.29 – 29.72) and energy deficit $p=0.045$ RR 2.15 (1.01 – 4.57) together -the same as a risk factor for mortality in COVID-19 patients in the ICU of Dr. Kariadi Hospital.

Conclusion: Early PN is not a risk factor for mortality in COVID-19 patients while the use of VM is controlled by ARDS status and energy deficit together are risk factors for mortality in COVID-19 patients in the ICU of RSUP dr. Kariadi.

Keywords: Risk factors, early PN, Mortality, COVID-19, ICU