PENGARUH PENGGUNAAN OBAT ANTI DIABETES INSULIN TERHADAP KADAR GULA DARAH PASIEN *CORONA VIRUS SISEASE-2019 (COVID 19)* DI RUMAH SAKIT UMUM ROYAL PRIMA MEDAN

ABSTRAK

Diabetes Melitus atau sering disebut kencing manis yang dikenali dengan masalah hiperglikemia (meningkatnya glukosa darah). Pemakaian obat hipoglikemik oral paling sering digunakan ialah obat dari golongan insulin. Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan obat insulin terhadap kadar gula darah pasien *Covid-19* di Rumah Sakit Royal Prima Medan. Penelitian ini merupakan penelitian analitik observasional dengan pendekatan *cross sectional* yang dilakukan pada bulan Desember 2020-Juni 2021. Populasi yang menggunakan insulin pada penelitian ini adalah seluruh pasien rawat inap*Covid-19* dengan diabetes mellitus dan tercatat dalam rekam medis RSU Royal Prima Medan sebanyak 174 orang. Sampel pada penelitian ini adalah sebanyak 153 responden dengan teknik *simple random sampling.* Analisis multivariat disajikan dalam bentuk pengolahan data menggunakan komputerisasi program SPSS versi IBM 25.0. Hasil yang diperoleh bahwa penggunaan obat antidiabetik yang paling banyak digunakan adalah, Terapi Kombinasi *(long acting* dengan *rapid acting)* 116 orang (76,8%), *Rapid Acting* 22 orang (13,7%), dan *Long Acting* 15 orang (9,3%). Perbandingan kadar gula darah awal dan akhir terhadap terapi *Rapid acting* menunjukkan nilai P(sig) 0,000 < 0,05, Pada perbandingan kadar gula darah awal dan akhir terhadap terapi *Long acting* menunjukkan nilai P (sig) 0,000 < 0,05, dan pada perbandingan kadar gula darah awal dan akhir terhadap terapi kombinasi menunjukkan nilai P (sig) 0,000 <0,05. Kadar gula darah rata-rata paling efektif dalam penelitian ini adalah *rapd acting.* Berdasarkan hasil, dapat disimpulkan bahwa H0 ditolak, artinya terdapat pengaruh yang signifikan antara kadar gula darah awal dan akhir.

Kata Kunci :*Kadar Gula Darah, Terapi Kombinasi, Long acting, Rapid acting*

THE EFFECT OF THE USE OF ANTI-DIABETIC INSULIN ON BLOOD SUGAR LEVELS OF *CORONA VIRUS - 2019 (COVID - 19)* PATIENTS IN ROYAL PRIMA MEDAN GENERAL HOSPITAL

ABSTRACT

Diabetes Mellitus or often called diabetes is characterized by the occurrence of hyperglycemia (increased blood glucose). The most commonly used oral hypoglycemic drugs are drugs from the insulin class of drugs. This study aims to determine the effect of using insulin on the blood sugar levels of Covid-19 patients at the Royal Prima Hospital in Medan. This study is an observational analytic study with a cross sectional approach conducted in December 2020-June 2021. The population using insulin in this study were all inpatients for Covid-19 with diabetes mellitus and recorded in the medical records of RSU Royal Prima Medan as many as 174 people. The sample in this study was 153 respondents with simple random sampling technique. Multivariate analysis is presented in the form of data processing using the computerized SPSS program version IBM 25.0. The results obtained that the most widely used antidiabetic drugs were Combination Therapy (long acting with rapid acting) 116 people (76.8%), Rapid Acting 22 people (13.7%), and Long Acting 15 people (9, 3%). Comparison of initial and final blood sugar levels against Rapid acting therapy showed P value (sig) 0.000 < 0.05, In comparison of initial and final blood sugar levels to Long-acting therapy showed P value (sig) 0.000 <0.05, and in comparison Initial and final blood sugar levels on combination therapy showed a P (sig) value of 0.000 <0.05. The most effective average blood sugar level in this study was rapd acting. Based on the results, it can be concluded that H0 is rejected, meaning that there is a significant effect between the initial and final blood sugar levels.

Keywords: Blood Sugar Levels, Combination Therapy, *Long acting, Rapid acting*