

UNIVERSITI TEKNOLOGI MARA

**PHARMACOKINETIC OF VANCOMYCIN IN
HOSPITALIZED PEDIATRIC PATIENTS**

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ABSTRACT

The purpose of this study was to study the effectiveness of pharmacokinetic monitoring and to establish a pharmacokinetic in hospitalized pediatric patients who received vancomycin TDM. The data comprise of 31 patients; 16 of male patients and 15 of female patients. The patients had an average age of 2 and average weights of 9.4. The patient demographic parameter such as gender, age, race, were analyzed to identify their potential influence in vancomycin pharmacokinetics. The data was described with one compartment model. From data analysis the mean population estimates of K_e , $t_{1/2}$, and V_d were 0.28 hr^{-1} , 3.5 hour, 0.63 L/kg respectively. It is necessitate to practice routine therapeutic drug monitoring as there are individual inter- and intravariability and to ensure minimal adverse effect and maximum therapeutic effect to the patients.