OVERVIEW OF THE UTILIZATION OF LEUKODEPLETED PACKED RED CELL (PRC) BLOOD COMPONENTS IN UDD PMI JEMBER DISTRICT IN THE PERIOD OF 2023

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ABSTRACT

Background: Unit Transfusi Darah (UTD) are healthcare facilities responsible for the collection, processing and distribution of blood products. UTD has a major role in managing supply and ensuring that the amount of blood available is safe for transfusion. This study aims to determine how the utilization of Leukodepleted Packed Red Cell (PRC) blood components at UDD PMI Jember Regency Period 2023 based on medical indications, gender, age and blood type. **Methods:** This type of research is descriptive quantitative research. This study used secondary data from the Sistem Informasi Manajemen Donor Darah (SIMDODAR) of UDD PMI Jember Regency, including production, demand, and distribution based on age, gender, blood type, and disease indication. The sample was all Leukodepleted PRC blood components determined by total sampling, totaling 596 Leukodepleted PRC bags. Data were processed using percentages and presented in tabular form. **Results:** The study showed that Leukodepleted PRC production in 2023 reached 605 bags. The demand for Leukodepleted PRC was 701 bags. Leukodepleted PRC utilization was dominated by patients aged 18-65 years (47.99%), female (68.11%), and blood type O (54.19%). The most common medical indication was the Chronic Kidney Disease (CKD) (58,89%). **Conclusion:** Laukodepleted PRC blood products at the PMI UDD in Jember Regency are most commonly utilized by Chronic Kidney Disease (CKD) (58,89%). **Suggestion:** In order to broaden the understanding of the safety and effectiveness of the use of Leukodepleted PRC, future researchers can examine the side effects of giving Leukodepleted PRC transfusions, especially by considering various patient diagnoses.

Keywords: Leukodepleted Packed Red Cell (PRC), blood transfusion, blood component utilization.