ABSTRACT

Wijayanti (2025). Characteristics of Patients with Positive Antibody Screening on Blood Requests at ITDRS Dr. Saiful Anwar, East Java Province, Period January – June 2024. Scientific Writing. Malang Blood Bank Technology DIII Study Program. Department of Pharmaceutical and Food Analysis. Ministry of Health Malang Health Polytechnic. Supervisor: Dr. Ekowati Retnaningtyas, S.Kp, M.Kes

Blood transfusion patients must undergo pre-transfusion examination to ensure ABO compatibility between donor blood and patient blood and detect the presence of irregular antibodies that can react with donor red blood cell antigens. The formation of irregular antibodies can complicate transfusion therapy and result in difficulties with compatibility testing. Antibody screening is an examination method to detect the presence of irregular antibodies against red blood cells in the patient's plasma. Patients who frequently undergo blood transfusions may be at risk of forming irregular antibodies against blood cell antigens which can cause a delayed type transfusion reaction in the form of lysis of red blood cells in subsequent transfusions, characterized by a decrease in hemoglobin and an increase in bilirubin levels. The aim of this study was to determine the characteristics of patients with positive antibody screening when requesting blood at ITDRS dr. Saiful Anwar, East Java Province. This research uses secondary data using a descriptive observational research design. Data is presented in the form of narratives and pie charts. The results of this study from 176 samples obtained the most positive antibody screening for blood type B Rhesus Positive 87 samples (50%), in women 112 samples (64%), aged 20-60 years 67 samples (38%), History of anemia 63 samples (38%), History of repeated transfusion 95 samples (53%). The research conclusion is that the characteristics of patients with positive antibody screening when requesting blood have a significant diversity of factors related to blood type, age, gender, disease history, transfusion history. Antibody screening in pre-transfusion examinations is very necessary to improve patient safety.

Keywords: Antibody screening, Pre-transfusion examination, Irregular Antibodies, Blood Group System, Patient Characteristics