Introduction:
Blood and blood product (BP) transfusions are frequently used in intensive care units (ICU)1. It is important to know transfusion epidemiology and the effect of adverse transfusion reactions and their effect on mortality and morbidity. We aimed to investigate the blood and BP transfusions in the ICU.

Methods:
Blood and BP transfusions in ICU, between 2013-2017 were reviewed retrospectively. We evaluated each transfusion as a data and examined the pre- and post-transfusion laboratory values, demographic data, cause of ICU admission and comorbidities.

Results:
284 patients who underwent transfusion in the ICU, and 2188 transfusion data from these patients were included. The most frequent cause of hospitalizations were respiratory failure and sepsis. The rate of patients transfused in the five-year period decreased from 73.9% to 36.67%. The hemoglobin threshold before transfusion decreased from 8.34 g / dl to 7.91 g / dl. A total of 148 transfusion reactions were observed and the most common transfusion reaction was febrile non-hemolytic reaction. The most commonly transfused product was red blood cell suspension. Transfusion reactions were found to be slightly higher in men than women in young age group (<65y) (p = 0.44 and p=0.021, respectively). Transfusion reactions were found to be more frequent in emergency transfusions (p <0.01). The number of transfusions was significantly lower in patients with APACHE II score <20 (p <0.01). The need for transfusion was found to be higher in patients with hematological malignancy (p <0.01). It was observed that as the mean number of transfusions increased the mortality is also increased (p <0.01).

Conclusion:
Transfusion therapies are the treatments that are vital but have a serious mortality and morbidity risk. In particular, intensive care patients should be considered in detail because of their specific features. Restrictive transfusion practices have positive results.

References: