## The Status of Packed Red Blood Cell Transfusion in Besat Hospital of Hamadan in 2009-2010

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## Abstract

**Bachground and objectives:** Higher than the needed blood orders not only adversely affect blood quality but also impose extra expenses on therapeutic center and patients. We aimed at determining the frequency of packed red blood cell transfusion in Besat hospital of Hamadan in 2009-2010.

**Material and Methods:** This descriptive study was carried out on 926 blood order forms in Besat hospital. The data were collected, using blood order forms, in Hamedan teaching hospital (Besat) from March 2009 to march 2010. We assessed the amount of blood order, blood consumption, crossmatch/transfusion ratio(C/T) and transfusion index (TI) in different wards of hospital.

**Results:** Out of 926 patients aged averagely 28, 37% were females and 63% are males. The overall ratio of C/T and TI is 2.44 and 0/63, respectively. They are considered to be optimal, in comparison with the standard figures of C/T<2.5 and TI $\geq$ 0.5.The results show that the highest C/T is in surgery ward and the lowest in burn ward. But the highest TI is related to Hematology ward and the lowest to urology ward.

**Conclusion:** Packed cell consumption, C/T Ratio and TI in Besat hospitals are normal but not ideal.It seems that absence of hospital blood transfusion committees and lack of active contribution of physicians, are the major obstacles in reforming blood utilization.

Key words: Erythrocytes, Hematologic teste ,transfusion index.