## Abstract

Anaemia is almost a universal finding in patients who requires ICU care for more than a few days, the most effective transfusion practice in ICU patients is not always known.

## Patients and method:-

This study was conducted on sixty intensive care unit patients with anaemia of critical illness, thirty patients for the restrictive RBCs transfusion strategy and thirty patients for the liberal transfusion strategy.

## **Results:-**

-Comparison between the restrictive and liberal groups as regard the basic features before starting the study showed that the two groups were nearly had the same basic features .

- In the restrictive group ,Patients received RBC transfusion with a Hb transfusion trigger of  $\leq$ 70g/L and the target Hb of 71-90g/L was reached , In the liberal group , patients received RBC transfusion with a Hb transfusion trigger of  $\leq$ 90g/L and the target Hb of 91-110g/L was reached.

-ScvO2 Incressed in both groups but the incease reached a statistical significance in liberal group , p=.04

-Comparing the all cause mortality in the restrictive group (11/30-36.7%) with the liberal group (17/30-56.7%), it showed no significant statistical difference (P value = 0.195), and on doing logistic regression analysis, Hb % before blood transfusion proved to be a significant factor in mortality (P value = 0.04).

## **Conclusion:-**

We concluded that the use of restrictive transfusion strategy is as safe as the liberal strategy in the critically ill patients as proved by tissue perfusion parameters , adverse events and the mortality .

Key words :- Anaemia - Blood transfusion - Restrictive - Liberal