

# Only Screen Blood or Safe Blood Management Management

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Safety in blood transfusion is a global issue. It is generally assumed that screened blood is safe blood. However, the fact remains that there are additional issues in safe transfusion service, all interdependent and interconnected and much more relevant to the developing world where effective national blood transfusion services do not exist at most places. Safe blood management encompasses appropriate use of blood, safe donor recruitment, quality processing, proper transfusion and safe outcome not only of the recipient but also of the donor and blood bank staff. Doctors, individually or as part of national blood transfusion program, remain the key players in safety chain.

In our country most blood transfusions are advised by general practitioners, gynecologists, surgeons and physicians. It is estimated that use of blood remains inappropriate in almost 40-50% cases, which can best be avoided. It is important that the treating clinician justify the appropriate and effective clinical use as demand is badly outstripping the supply cost of unit of blood is going up and also to decrease the morbidity and mortality due to adverse blood reaction<sup>1</sup> Efforts need to be made to establish the diagnosis and use alternative where appropriate. Also the clinicians should promote the use of blood components as whole blood has minimal place in modern transfusion service<sup>2</sup>. Component use not only reduces the chances of adverse effect but is very low, largely because of lack of awareness and various community beliefs. Less than 0.5% of our people donate blood and less than 0.05% is voluntary donors, Thousands of clinicians, who see millions of patients each year. Can be very helpful in promoting voluntary donations from society if they simply say a few words to the family about safe donation while advising transfusion to their Patients.

Pathologist is responsible for safe blood system. In our country, paid and replacement donations are still practiced in greater than 80% cases. The blood bank incharge has tremendous responsibility of managing safe and sustained blood supply from low risk population<sup>3</sup>. Meanwhile it is also important to discourage paid donations and targeted donations from family and friends where prevalence of blood borne disease has been reported high<sup>4</sup>. Not only this, the risk of graft versus host disease and hemolytic disease of newborn (husband to wife) increases in targeted family donations<sup>5,6</sup>. Quality processing and screening for hepatitis B, C and HIV is seen in less than 20% cases in our country. Cross matching is improper or incomplete or not done at all in almost 70% of the cases. The pathologist also has great responsibility of quality processing of blood-Collection and labeling, screening, component preparation, grouping and cross matching, storage, issuing the blood and transportation. Availability of blood components is minimal. It is desired that all standard blood banks should stop the supply of whole blood and they should fractionate all blood into components according to community because blood from one donor can be transfused patients<sup>1</sup>. Adherence of staff to standard operating procedures (SOP) should be checked and SOPs should be updated at regular intervals.

Safety of the donor and blood bank staff is much less a concern to us. The pathologists need to ensure safe donation practice and a system of counseling and referral if a donor is found to have low hemoglobin or if he is found to be reactive for blood borne disease or other ailments, The pathologist should promote safe working habits among the blood bank staff and should take care of their safety (vaccination against hepatitis-B, etc.) as they may be the source at hand of uncommon and rare groups in emergencies. Record keeping and waste management are other aspects of safe health system relevant to transfusion service and the pathologist<sup>7</sup>.

Junior doctors supervise the actual process of transfusion. Mortality and Morbidity due to adverse blood reactions is very high in our country. This can be significantly reduced by adhering to certain simple recommendations: bed side identification of recipient and intended unit(s) of blood, inspection

of blood before starting transfusion, pre-transfusion assessment and regular monitoring of patient<sup>8</sup>. Also, not warming the blood in routine before use, not using plasma as volume expander, not giving any injection or drip (except N/S) through the same I/V line, not giving blood at night (except in emergencies), not keeping the blood in ward refrigerator etc<sup>9</sup> and regular monitoring and timely management of patient in case of adverse reaction can be life saving.

Health is a common wealth. Any one may need blood any time. Every citizen is a member of safely chain and we as doctors owe the responsibility of promoting a safe health culture in community. A health society means more safe blood and reduced need of blood.

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