

# Case Study: Blood Transfusions and Women Health - A Big Concern

## “Good Female Health-Better Nation’s Health”

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**Abstract:** *The only indication for the transfusion of blood (red blood cells) is to correct or prevent tissue hypoxia; thus, the parameter like PO<sub>2</sub>, Hb value, HCT% are done to make decisions for transfusions. The indication for and the degree of urgency of Blood/packed red blood cell transfusions cannot, however, be defined only on the basis of the values of Hb or the Hct, but must be based on a complete evaluation of the patient's clinical condition (age, signs & symptoms of anemia, speed of blood loss, volume of blood loss, cardiac function, lung function, ischemic heart disease, pharmacological treatments) and the possible presence of mechanisms compensating for the anemia. Females are more vulnerable to these mentioned issues despite being cared and framed under several govt women empowerment schemes. 150 patients of all age group clinically diagnosed for blood transfusions were studied during my study. Blood/Red blood cell transfusions given to the studied patients reveal a different story regarding the poor health conditions of the female group in Kashmir.*

**Keywords:** Hb, PO<sub>2</sub>, HCT, THALASSEMIA, ECTOPIC

### 1. Introduction

Red blood cells are the most commonly transfused components of the blood. These cells carry oxygen from the lungs to your body's organs and tissues. They also help your body get rid of carbon dioxide and other waste products. You may need a transfusion of red blood cells if you've lost blood due to an injury or surgery to replace blood lost during the injury or surgery. You also may need this type of transfusion if you have severe anemia due to disease or blood loss. Anemia is a condition in which your blood has a lower than normal number of red blood cells. Anemia also can occur if your red blood cells don't have enough hemoglobin. Hemoglobin is an iron-rich protein that gives blood its red color. This protein carries oxygen from the lungs to the rest of the body. Some people need blood or parts of blood because of illnesses. You may need a blood transfusion if you have: 1:-A severe infection or liver disease that stops your body from properly making blood or some parts of blood. 2:-An illness that causes anemia, such as kidney disease or cancer. Medicines or radiation used to treat a medical condition also can cause anemia. There are many types of anemia, including aplastic, Fanconi, hemolytic, iron-deficiency, pernicious, and sickle cell anemias and thalassemia. 3:-A bleeding disorder, such as hemophilia or thrombocytopenia [1]. You may also need a transfusion of red blood cells in pregnancy either to counteract the iron deficiency anemia or hemorrhage. Hemorrhaging is bleeding excessively in an urgent situation. This bleeding can lead to severe anemia. A transfusion is often required in order to counteract excessive blood loss. Hemorrhaging can occur at any time during pregnancy. If you experience a miscarriage or ectopic pregnancy, it can lead to hemorrhaging early in your pregnancy [2].

### 2. Methods

150 patients were clinically diagnosed and advised for blood

transfusions both from OPD and IPD patients in the period of two months. The patients were diagnosed clinically by Gynecologists, physician specialists & surgeons in our hospital. They were attendance to the Govt. District Hospital Baramulla Kashmir (with registered blood bank in north Kashmir) for the treatment. 229 blood transfusions were given to the studied patients under NBTC rules and the concerned blood bank officer's observation.

### 3. Results

A total of 150 patients of both genders & all age group clinically diagnosed for blood transfusions were studied during my study and 229 transfusions were given to these patients according to the requirement and urgency in two months. During my study I came to know that women's are more affected by mentioned causes that lead to blood transfusions (total no of 129 cases among 150).

Total number of patients studied:-150

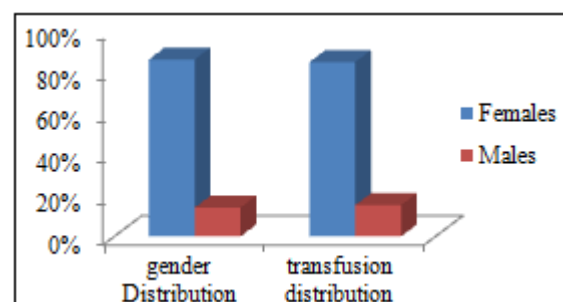
Males:-21(14%)

Females:-129(86%)

Total number of transfusions given:-229

Males:-35(15.2%)

Females:-194(84.7%) among which (36%) transfusions were given to gestation related patients and rest (64%) to patients with other issues (CKD, anemia, leukemia, cancers, excessive bleeding, surgeries).



#### 4. Discussion

Whenever Hb value or oxygen carrying capacity is reduced inside our body, to overcome the issue or to increase the oxygen supply to the tissues Blood transfusions are given( in some cases as whole blood and in some cases in packed red blood cells). This reduced oxygen carrying capacity can occur in different conditions like different types of anemia's, cancers, excessive bleeding, surgical procedures, kidney failures, liver diseases, cardiac disorders, pharmacological treatments, pregnancy related complications, hemorrhage etc. Red cell transfusions are commonly given in these conditions to counteract the problem.

According to WHO survey around 112.5 million units of donated blood are collected globally every year. Nearly 47% of these blood donations are collected in high-income countries, home to less than 19% of the world's population. In high-income countries, the most frequently transfused patient group is over 60 years of age, accounting for up to 79% of all transfusions. The transfusion is commonly used for supportive care in cardiovascular surgery, transplant surgery, massive trauma, and therapy for solid and hematological malignancies. In low- and middle-income countries, it is used more often for management of pregnancy-related complications, childhood malaria complicated by severe anemia, and trauma-related injuries [3].

India today faces a shortage of 10% relative to its blood requirements. In absolute terms, this means that we require to cover a shortfall of over 12 lakh units. Given that the eligible donor population of India is more than 512 million, this deficit is surprising. With more than 1200 road crashes occurring every day in India, 60 million trauma induced surgeries are performed in the country every year. The 230 million major operations, 331 million cancer related procedures like chemotherapy and 10 million pregnancy complications all require blood transfusion. Besides this, patients being treated for sickle cell anemia, thalassemia and haemophilia require large quantities of blood daily[4]. During my study I found female group more victimized and vulnerable to blood transfusions may be there is a social cause(poverty,discrimination,dominance of male group, unawareness) for this or it may be due to literacy rate variation in Kashmir which is Almost 20% behind as compared to the male group(males 76.75%,females 56.43%) which lead this vulnerable group to these health related issues by keeping them unaware about health schemes and programs.

There are different women empowerment schemes in India which tend to improve the female health, as per report the following schemes are enacted by Govt to empower the female group (Mother and child tracking system, The Indira Gandhi Matritiya sahyog yojana conditional maternity benefit plan, Rajiv Gandhi Scheme for Empowerment of Adolescent Girls-sabla, Rashtriya Mahila Kosh, Priyadarshin, JSSK etc)[5]

This serious concern regarding the female health in Kashmir can be treated/minimized by enhancing the literacy rate among female sector so that they become more aware about

the schemes related to their health (e.g., maternity issues, malnutrition,) also they can make themselves socially more strong to counteract/overcome the issues/causes which makes them more suspected and vulnerable to diseases that lead to blood transfusions. It also needs a serious attention of the Govt as well as the society to make the health facilities better and affordable; also they must organize awareness programmes regarding the female health and the running schemes (women empowerment schemes) to make this affected sector (Female) better than before.

#### 5. Conclusion

According to the results of this study I conclude:

- 1) Female Health still a big concern in Kashmir.
- 2) Females were affected more than Males with Anemia and other related issues responsible for blood transfusions.
- 3) Illiteracy, unawareness about schemes, social causes for ill health conditions of female sector in our society.

#### References

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#### Author Profile



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