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Short Communication

A Tertiary Care Center-based Research to Determine Blood Donor Deferral Causes

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ABSTRACT

Blood safety is a major concern in transfusion medicine around the world. In addition to screening blood bags for infectious diseases, donor selection is needed for this. Deferrals result in the loss of valuable blood and components that could be used in a transfusion. We should be aware of the causes of deferral and the extent at which they occur in order to avoid this.

Keywords: Blood; Anemia; Malaria

INTRODUCTION

A blood transfusion can be a life-saving operation in today's medical and surgical practice. It does, however, necessitate a sufficient supply of safe blood from a good donor. In addition to screening blood bags for infectious diseases, donor selection is needed for this. Deferrals, on the other hand, result in the loss of essential blood and materials that could be used in a transfusion. [1], we should be aware of the causes of deferral and the extent at which they occur in order to avoid this. According to the National AIDS Control Organization's (NACO) statistics, India's annual blood donation rate is around 7.4 million units, compared to a requirement of 10 million units [2].

Over 81 million units of blood are collected annually worldwide, according to WHO estimates, but only 39% are collected in developing countries, which account for 82 percent of the world's population. A blood bank is critical in ensuring that healthy blood is available when it is needed. While it is critical to ensure a sufficient supply of blood, it is also critical to ensure that the blood processing process does not affect either the donor or the recipient. Donor deferracriteria and rigorous screening of collected blood for potential transfusion are used to accomplish this. There are two types of deferrals: permanent and temporary. Few studies conducted in India in the past have revealed various common reasons for deferral of whole blood donors, highlighting the country's diverse demographic profile the aim of our research is to learn about the demographics of blood donors, as well as the causes and frequency of permanent and temporary deferrals.

In blood banking and transfusion medicine, donor selection is critical. The aim of our research was to devise a procedure that would avoid whole blood/component loss while still being safe for donors and recipients. The majority of the donors (95%) were men, with women accounting for just 5% of the total. Female donors (20.41 percent) were deferred more often than male donors (11.98 percent) in the current sample, which may be attributed to the high prevalence of anemia in female donors. Anemia was the most common cause of temporary deferral (17.95%), compared to low hemoglobin, which was the most common cause of 46 percent of temporary deferral. Low hemoglobin was the most common cause of deferral in 20.7 percent of all deferrals study of Turkish donors. Our results were very similar to those of these studies. Malaria was the second most common reason for temporary deferral, possibly due to the fact that Aligarh and its environs, where most of the donors came from, were in an endemic region [3]. The current study found that, while donor deferral rates were very similar across populations, the reasons for deferral varied, indicating socioeconomic status and environmental differences. However, different deferral rates were found in different studies, which may be due to different donor selection criteria. Deferral patterns analysis can aid medical personnel and doctors in becoming more focused in donor screening, especially for those who have a higher frequency of infection, such as Anemia, Malaria, and Hepatitis B infection. However, since ribavirin (RBV) induced hemolytic anemia and increased blood transfusions, as well as interferon

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side effects including influenza-like symptoms, depression, and cytopenias, this medication was not well tolerated by thalassemia significant side effects [4]. Due to the hemolytic anemia caused by ribavirin.

CONCLUSION

Donor deferral was found to be 4.27 percent in this report, and the majority of the donors were young, with the majority being students and voluntary donors rather than substitute donors. When compared to permanent deferrals, temporary deferrals were more common, as in our non-responder subjects with infection relapse after 1 month. Furthermore, the care of patients did not initially include any of the new forms of DAAs that are currently available. The analysis was carried out in compliance with GCP principles, the Declaration of Helsinki, and all applicable local regulations Anemia, underweight, and hypotension were the most common reasons for temporary deferrals.

The most common explanation for permanent deferrals was hypertension. Donor deferrals can be minimized by supplying donors with information and education. This helps to alleviate negative feelings about blood donors and deferrals.

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