

Tele Counseling -Effective Strategy for Blood Donors with Chronic Hepatitis B and C

Malhotra P*, Singh G, Gupta U, Sanwariya Y, Sugam and Singh S

Department of Medical Gastroenterology, Immunohaematology & Blood transfusion PGIMS, Rohtak, ADHS, NVHCP, Panchkula, India

*Corresponding author:

Parveen Malhotra,
Department of Medical Gastroenterology,
Immunohaematology & Blood transfusion PGIMS,
Rohtak, ADHS, 128/19, Civil Hospital Road,
Rohtak, Haryana, 124001, India,
E-mail: drparveenmalhotra@yahoo.com

Received: 30 Aug 2022

Accepted: 07 Sep 2022

Published: 12 Sep 2022

J Short Name: JJGH

Copyright:

©2022 Malhotra P, This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and build upon your work non-commercially.

Keywords:

Hepatitis B; Hepatitis C; Blood donors; HbsAg; Anti HCV antibody

Citation:

Malhotra P. Tele Counseling -Effective Strategy for Blood Donors with Chronic Hepatitis B and C. J Gastro Hepato. V9(7): 1-3

1. Abstract

1.1. Background: The blood is a life saving component which cannot be produced but has to be donated by healthy donors. In view of high Seroprevalence of transfusion-transmitted infectious diseases such as HIV, hepatitis B virus (HBV), hepatitis C virus (HCV) and syphilis in India which affects the safety of blood for recipients, mandatory screening is done for above infections in every donated unit of blood. This maneuver leads to detection of these infections in healthy volunteer donors who were unaware of the same. The main thrust is to bring all these donors on board for further diagnostic tests and treatment. In this Tele counseling is playing an important role and giving good results.

1.2. Aim: The aim of study was to estimate effectiveness of Tele counseling of Blood Donors who were incidentally detected to be having Hepatitis B and C infection and were counseled for further confirmatory test and treatment.

1.3. Methods: It was a prospective study in which all blood donors who were incidentally detected to be Hepatitis B or C positive were telephonically motivated twice i.e. once by Blood transfusion team and then Medical Gastroenterology team, for coming on board for further confirmatory tests and treatment. This study was conducted in collaboration with Medical Gastroenterology and Blood transfusion Department, PGIMS, Rohtak over a period of two years. Total sixty seven thousand blood donations were done in blood bank at PGIMS, Rohtak in above time period which included both voluntary and replacement and who were thoroughly screened and selected for

blood donation in various blood banks at Rohtak and nearby areas.

1.4. Results: Out of sixty seven thousand blood donations, 1440 (2.14%) were found to be HbsAg positive and 1210 (1.80%) were found to be anti HCV antibody positive by Enzyme linked immunoassay method (ELISA). The success associated with first counseling of blood donors found to be positive for hepatitis B & C by Immunohaematology and Blood transfusion department was around 55% (36,850 donors) which increased to 85% (56,950 donors) after second round of counseling by Medical Gastroenterology team.

1.5. Conclusions: Blood donation is blessing not only for recipient but for also donors, many of whom are incidentally detected to be suffering from chronic diseases like Hepatitis B and C which cause significant morbidity and mortality. Despite knowing about their positivity for HBV and HCV infection, there are many hindrances for bringing them on board for further confirmatory testing and treatment which can be successfully taken care by repeated Telecounseling by both Immunohaematology & Blood transfusion team as well as treating Medical Gastroenterology team.

2. Introduction

Blood is an efficient mean of transmitting infections like human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV) and syphilis and these are preventable. The WHO recommends that all blood donations should be screened for above infections prior to use for ensuring safety of blood for recipients. This is the most efficient way of transmission of HIV and even a small transfusion of infected blood results in virtually 100% sero-

conversion [1]. In developing countries, the extent to which blood donations are screened against HIV is determined by the available resources and continuous efforts are being made to improve the coverage [2]. Screening of blood has to be done before transfusion to prevent from infection into recipient [3]. The various microbes - viruses, bacteria and protozoa have been reported to be transmitted by blood transfusion, viruses are most commonly transmitted by transfusion such as HIV, Hepatitis B, C, A, G, CMV and EBV. The safety assessment of the blood supply, the quality of screening procedures, and the risk of transfusion transmitted infectious diseases in any country can be estimated by review and analysis of the records of blood donors, screening procedures, and the prevalence of serological markers of infectious diseases [4]. It is the responsibility of the national blood program to provide an adequate supply of blood for all patients requiring transfusion and to ensure the quality of blood and blood products for clinical use. All products must be safe, clinically effective and of appropriate and consistent quality [4]. Blood donation is beneficial to donors also because it leads to incidental detection of Hepatitis B, C, HIV and Syphilis. Among these infections, most commonly detected are Hepatitis B and C because; these two infections are asymptomatic in majority of cases. These voluntary donors are healthy and thus came forward for blood donation but it became blessing for them, as it lead to timely detection of these deadly and chronic infection. It leads to decrease in morbidity and mortality associated with these diseases.

3. Aim of Study

The aim of study was to calculate effectiveness of Tele counseling in Blood Donors who were incidentally detected to be having Hepatitis B and C infection and were counseled for further confirmatory test and treatment.

4. Methods

It was a prospective study conducted in collaboration with Medical Gastroenterology and Immunohaematology & Blood transfusion Department, PGIMS, Rohtak over a period two years. Total sixty seven thousand blood donations were collected at blood bank at PGIMS, Rohtak in above time period which included both voluntary and replacement and all of them were thoroughly screened. The blood donors who were incidentally detected to be Hepatitis B or C positive, on Rapid card test or Enzyme linked Immunosorbent assay (ELISA), were telephonically motivated twice i.e. once by Immunohaematology and Blood transfusion department team and then Medical Gastroenterology team, for coming on board for further confirmatory tests like HBV DNA and HCV RNA quantitative by Polymerase Chain Reaction (PCR) and treatment.

5. Results

Total number of blood donors in the above two year period was sixty seven thousand. The overwhelming majority of donors were of male i.e. 99.9% (66,933 donors, in comparison to 0.1% (67 donors) were female. The maximum number of donors were of voluntary type i.e. 60,300 (90%) and only 6700 (10%) were replacement donors. The Seroprevalence of HBV in total donor was 2.14% (1440 donors) and HCV consist of 1.80% (1210 donors). The maximum donors were in 20-30 years of age group i.e. 50,250 donors (75%), followed by 30-40 yrs age group i.e. 12060 (18%) and remaining 7% (4690 donors) belonged to other age groups. Out of total sixty seven thousand donors, 58 % (38,860 donors) belonged to urban areas and 42 % (28,140 donors) belonged to rural areas. The success associated with first counseling of blood donors found to be positive for hepatitis B & C by Immunohaematology and Blood transfusion department was around 55% (36,850 donors) which increased to 85% (56,950 donors) after second round of counseling by Medical Gastroenterology team (Table 1-3).

Table 1: Showing Details of Blood Donors and HBV & HCV Positivity

Total Blood Donors	Male	Female	Voluntary	Replacement	HBV	HCV
67000	66,933 (99.9%)	67 (0.1%)	60300 (90%)	6700 (10%)	1440 (2.14%)	1210 (1.80%)

Table 2: Showing Age Group Distribution of Blood Donor

Total Blood Donors	10-20 yrs	20-30 yrs	30-40 yrs	40-50 yrs	50-60 yrs	60-70 yrs
67000	780 (1.16%)	50250 (75%)	12060 (18%)	2010 (3%)	1730 (2.58%)	170 (0.25%)

Table 3: Showing Success Associated with Telecounseling

Total Blood Donors	Urban Donors	Rural Donors	Success of Telecounseling by Blood Bank Department	Success of Telecounseling by Medical Gastroenterology Department	Effectivity Difference of Counseling by Medical Gastroenterology Department
67000	38,860 (58%)	28140 (42%)	36850 (55%)	56950 (85%)	20100 (30%)

6. Discussion

The target of National Viral Hepatitis Control Program (NVHCP) is 100% voluntary blood donation and our department is Model treatment centre for the same. Thus it is continuously involved in various awareness programmes regarding hepatitis B and C. As a protocol, all blood donations at PGIMS, Rohtak are screened for Hepatitis B, C, HIV, Syphilis and malaria. The donors who come positive for any of above infections are informed telephonically to consult the concerned specialist at PGIMS, Rohtak or of their choice. It was observed that many blood donors despite being informed telephonically never came forward for treatment. This fact was verified by monthly list of blood donors who turned out to be Hepatitis B or C which was shared by Immunohaematology & Blood transfusion department with Medical Gastroenterology Department. Thus, it necessitated the need of telecounseling by Medical Gastroenterology Department of blood donors who never came forward for further confirmatory testing and treatment. The telecounseling was done by Peer view support and the Specialist. On counseling, the most common factor for not coming forward for treatment did not believe that they were having any disease, as they were healthy and asymptomatic. Many blood donors told that they have been regularly donating blood and have never tested positive for any infection, then how it is possible that they were now infected. Other hindrance found was stigma associated with these hepatitis B & C and many confused it with HIV. Some donors were reluctant to come to PGIMS, Rohtak and hence wanted to consult in nearby district hospital and thus were guided for the same. The other obstacle found was unawareness about availability of effective and free treatment for hepatitis B and C, at PGIMS, Rohtak and all district hospitals of Haryana. One difference which was felt between motivation from blood transfusion department and Medical Gastroenterology Department, as expected was allaying of fears and apprehensions related to disease by the latter. The importance of blood transfusion team motivation is that first bond of blood donor is with them and they are able to clearly connect with time and venue of blood donation. The motivation from Medical Gastroenterology Department proved to be vital as the donors were clearly made to understand about disease course, success associated with treatment and availability of free treatment along with specialist care, at treatment of their choice. Thus significantly increasing the percentage of blood donors from 55% to 85% who came forward for further confirmatory testing and treatment.

7. Conclusion

Blood donation is blessing not only for recipient but for also donors, many of whom are incidentally detected to be suffering from chronic diseases like Hepatitis B and C which cause significant morbidity and mortality. Despite knowing about their positivity for HBV and HCV infection, there are many hindrances for bringing them on board for further confirmatory testing and treatment which can be successfully taken care by repeated Telecounseling by both Immunohaematology

& Blood transfusion team as well as treating Medical Gastroenterology team.

References

1. Blood safety and availability. Fact sheet. Available from: <http://www.who.int/media/centre/factsheets/fs279/en/>
2. WHO Global Database on Blood Safety, 2004-2005. Geneva. World Health Organization. 2008.
3. NACO - Modules for Medical Officers on HIV Care and Treatment (including ART) curriculum. Participants Guide. 2007.
4. WHO - Towards 100% Voluntary Blood Donation. A Global Framework for Action. 2010.