



## MOTIVATION OF VOLUNTARY BLOOD DONATION DURING COVID-19 PANDEMIC

## Transfusion Medicine

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## ABSTRACT

**Background:** Blood transfusion is an essential service to mankind in various situations. So maintaining blood supply during this COVID pandemic is a big issue to blood center. This study is aimed to measure donor attendance and blood demand in order to manage blood supply and demand by motivating blood donors for donation. **Materials & Methods:** This is an observational prospective study done from 1st dec 2019 to 1st June 2020 at SMGS hospital, Govt Medical College Jammu which is a tertiary care centre of North India. In this study data obtained from donor registry and inventory records. **Results:** After covid-19 pandemic there is a drop in donor attendance of 67%. **Conclusion:** The Covid-19 pandemic has a negative impact on donor attendance. Hence to improve blood donation, motivational steps should be taken to deal with such pandemics.

## KEYWORDS

Covid-19, motivation, blood supply.

## INTRODUCTION:

A new strain of Coronavirus which was first identified in Wuhan city, Hubei province, China in late December 2019 [1] has caused a cluster of cover of acute respiratory disease, which is referred to as coronavirus disease 2019 (Covid-19). On 11 March 2020, the WHO characterized the spread of covid-19 as Pandemic [2, 3]. As of 19 May 2020, the number of people infected with covid-19 has reached over 4.89 million worldwide, whom 1,908,111 have recovered [4]. The death toll is 3,20,189.

In India, the count of infected person and deaths are rising gradually and to prevent the community spread of SARS-COV-2 virus, the Govt. Of India announces national lockdown which affected the blood transfusion services.

There are 3000 licensed blood centers all over the country. All blood centers in India are either hospital based blood centers or stand alone and are controlled by various organizations under the Ministry of Health and Family Welfare, Govt. of India [5].

In Pandemic situations like Covid-19, blood transfusion services face challenges to deliver safe and adequate supply of blood due to decreasing blood donation. The primary source of this safe and adequate blood supply is direct donation, voluntary non-remunerated donors and mobile blood drives. [6]

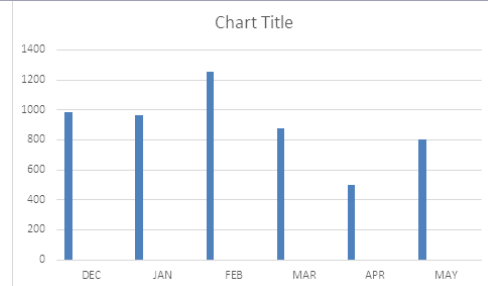
Various problems are faced by BTS due to covid-19 pandemic. One of the problem faced is Blood Donor problem in which it is difficult for donors to reach blood center in lockdown situations, fear of exposure to Covid-19 at hospital blood bank [7, 8].

We believe that there might be lots of concerns, confusion and misleading rumors in the mind of donors with regards to blood donation during pandemic period. There has been a general reluctance of the public to come to the blood centers to donate blood.

## MATERIALS AND METHODS:

This is an observational prospective study done from period of 1st Dec 2019 to 1st June 2020 at SMGS hospital, Govt Medical College Jammu which is a tertiary care centre of North India. Data from donor attendance of blood inventory records were obtained to access the problem of blood donation noticed to BTS during Covid-19 Pandemic. **RESULTS:** In this study data of 6 months i.e. 3 months before COVID & 3 months during COVID is monitored. Blood units collected in 3 months before COVID is 3207 units. But blood units collected in 3 months during COVID is 2180 as shown in Fig 1. This shows a decline in blood donation of 67%

Figure 1:



## DISCUSSION

Blood is an essential part of life which can neither be synthesized nor be stored for long period especially platelets. The shelf life of red blood cells is up to 42 days while shelf life of platelets is only 5 days [9, 10]. So proper planning is required to maintain sufficient blood stock in inventory. After declaration of lockdown, there is decline in number of blood units due to decrease in number of voluntary blood donors during Covid-19 pandemic. Many measures should be implemented to overcome these problems to ensure a stable and adequate blood supply. In response to donor challenge, we request the community to donate blood regularly to help in maintaining the blood supply and cover the gap between blood supply and demand [11, 12]. All the donors are screened by questionnaire and temperature at entry point of the blood center, are advised to wear mask and sanitize their hands and maintaining social distancing. We educate donors to follow NBTC [13] guidelines that specifies:

1. An individual should be deferred from blood donation for 28 days after the date of departure from a country with Covid-19 in the community and areas as notified by Ministry of Health.
2. Individual should be deferred for 28 days with last possible close contact exposure to a person who is suspected/ confirmed case of Covid-19.
3. Individual should be deferred from donating blood for 28 days till there is complete recovery from disease in presenting virological and radiological clearance.

Blood donors are also advised to report back to the blood center within 14 days of donation if they are symptomatic or confirmed positive or have been in close contact with confirmed positive individual.

Many measures should be implemented to overcome these problems to motivate donors for donation. These measures may include using public media to educate and motivate people for blood donation and mobile blood drives at donor's homes to ensure their safety.

Conclusion: In this study, we conclude that every blood center should make an evidence based emergency blood management plan and regulatory policies in place to be ready for any kind of disaster and to respond quickly if a blood shortage happens. Effective public awareness campaigns on the importance of maintaining an adequate national blood supply, need for blood donors and safety of the donation process should be disseminated continuously. The blood service must communicate clearly to ensure that the national emergency response team, donors and recipients and the public are properly informed and understand planned actions. Messaging and actions should be proportionate, evidence based and consistent with overall national emergency response messaging [14, 15, and 16].

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