

LITERATURE SURVEY

1.BLOODR: blood donor and requester mobile application

Author: [Vamsi Krishna Tatikonda](#) and [Hosam El-Ocla](#)

Donors can be individuals and blood banks. Donor users can register to the application to receive notification about blood donation requests when their blood type is required for an admitted patient to a clinic. In the online registration, users need to provide information about their blood type and address. Once the user login, he would be able to see the latest blood donation requests in their city/region using “BlooRequests Feed”. Each notification contains information about the required blood type and the clinic address together with a request status as pending if the donation is not done yet. If someone has donated, then the request status is marked as success so that potential donors would receive an updated notification indicating that the blood donation has been made and there is no further donation is required for this particular request. Blood donation has a significant impact on iron stores in frequent donors, particularly females. Several measures are necessary to prevent, detect, and treat iron deficiency in donors. These include less frequent donations by donors most susceptible to iron deficiency, and better education of both donors and their physicians about iron needs associated with blood donation. Regular blood donors may require a course of iron supplements to replenish the iron lost in blood donation. These individuals can often return to blood donation, after an adequate course of iron supplementation ([17](#)). As a result, donor may track his/her donation history details using “Donation History” to avoid such risky intensive donations before that the body can makeup its lost red blood cells. Donors can invite friends to register to the application using “Invite Friends” to increase the number of donors. When a donor is notified about a blood request, he/she can book an appointment with the clinic that requested the donation using the “Book Appointment feature”.

2. Blood component

Author: Denuis O'Neil (1999)

The Amount of human body weight comes from blood. For adults, it is 4-6 litres of blood. This essential liquid plays an important role in transporting oxygen and nutrients to cells and removing carbon dioxide, ammonia and other waste products. Blood is a very common tissue composed of over 4000 different types of components.

3.COPAL-19: Plasma Donor App

source : [News Desk-07/09/2020](#)

Doctors of AIIMS with the help of IIT Delhi students have developed an app called COPAL-19 to track real-time COVID-19 patients in AIIMS, as they can become potential plasma donors after 28 days of recovery. The app will have details of patients who have already been discharged from AIIMS, those currently undergoing treatment and their blood groups. This information will help patients in need of plasma therapy to get it on time without any hassle.

Once the app goes live, anyone will be able to register as a plasma donor by simply downloading the app and filling in the details in a simple format. AIIMS blood bank is also linked with the app so they will also get the details of the needy patient and help him/her get the plasma. Patients can also register themselves and get details of plasma donors matching their blood group.

4.A Free Health Screening

Author: Dr. DeSimone

Before you are allowed to donate, your vital signs will be checked to make sure you are fit enough for the procedure. This exam might turn up a condition that needs medical attention, such as high blood pressure or a heart arrhythmia like atrial fibrillation. In addition, you'll be screened for infectious diseases you may be unaware of.

"If we detect an issue with your vital signs or another health issue, we would direct you to go to a physician at that point to be checked," Dr. DeSimone says.

The health screening will also reveal if you have a rare blood type. This information can be useful if you ever face surgery or another medical situation in which a transfusion may be required. Plus, you'll have the satisfaction of knowing your donation is particularly needed.

5.How to Motivate Whole Blood Donors to Become Plasma Donors

Author: Gaston Godin and Marc Germain

This study tested the efficacy of interventions to recruit new plasma donors among whole blood donors. A sample of 924 donors was randomized to one of three conditions: control; information only by nurse; and information plus self-positive image message by nurse (SPI). Participants in the control condition only received a leaflet describing the plasma donation procedure. In the two experimental conditions the leaflet was explained face-to-face by a nurse. The dependent variables were the proportion of new plasma donors and the number of donations at six months. Overall, 141 (15.3%) new plasma donors were recruited at six months. There were higher proportions of new plasma donors in the two experimental conditions compared to the control condition (); the two experimental conditions did not differ. Also, compared to the control condition, those in the experimental conditions (all) gave plasma more often (information only by nurse: ; SPI:); the SPI intervention significantly outperformed () the information only by nurse condition. The results suggest that references to feelings of SPI such as feeling good and being proud and that giving plasma is a rewarding personal experience favour a higher frequency of plasma donation.