

LITERATURE SURVEY

INTRODUCTION:

Plasma is the clear, straw-colored liquid portion of blood that remains after red blood cells, white blood cells, platelets and other cellular components are removed. It is the single largest component of human blood, comprising about 55 percent, and contains water, salts, enzymes, antibodies and other proteins. Plasma carries out a variety of functions in the body, including clotting blood, fighting diseases and other critical functions.

Plasma plays the critical role of maintaining a healthy blood pressure, blood volume and a proper pH balance. Without Plasma, our body would not be supplied with many of the proteins that are necessary to support blood clotting and our immune system responses. In addition, plasma carries many of the electrolytes that our muscles need to function properly and support our activities of daily living.

DESCRIPTION:

Our idea is to build a virtual platform where user can interact with the application by registering as a donor. Many people are familiar with the benefits and the process of blood donation; however, few people understand the importance of Plasma donation. The requirement of plasma increased because to increase immunity among the people. This led to the idea of Plasma Donor Application. The project aims to save donor information and help the needy by notifying the current donors. In regard to the problem faced, an application is to be built which would take the donor details, store them and inform them upon a request. The Database contains all the details and if a user posts a request then the concerned blood group donors will get notified about it. This could be done 13 times per year according to the survey. Yet, the need for Plasma-derived products has been strongly increasing for some years, and Plasma collection

agencies have to adapt if they want to meet this demand. This project is User-Friendly which provides the information for the availability of Plasma for the requesting user in a flexible manner. . However, if whole Plasma donation has been very widely studied in the last several years, we still know very little about Plasma donation in voluntary non-remunerated environments.

OBJECTIVE:

The main objective is to manage the details of Plasma, Donor, Blood Group. It manages all the information about Blood group , Blood Cell.. In recent decades, several studies have been conducted to investigate the psychology of Plasma donation, identifying many motivators, such as the perceived need for donation, high self-efficacy, and pro social behavior , as well as deterrents such as vasovagal reactions, the time required for donation, and fear of contamination. Although many determinants are identified in the scientific literature, no motivational strategy has been found so far toward which both donors and non donors would have a positive attitude, and would not have a negative impact on blood safety. Blood plasma donations are used for slightly more specific purposes than a general blood donation.

PROCESS:

There are a few differences between normal blood donation and plasma donation, but the process only takes a few extra minutes. During a normal blood donation, blood is removed from the patient and sent to a laboratory, where it is then separated into its primary parts for separate transfusion. Most plasma that goes to patients comes from this process. During a plasma donation, blood is removed from the donor's arm and run through an automated process that removes the plasma portion from the blood. The remaining red blood cells and platelets are then returned to the donor's arm with a small amount of saline to maintain the

overall volume. This all occurs while the donor is in the donation chair and allows a donor to give more plasma than they would during a regular blood donation – enough plasma for up to three patients from a single plasma donation. The process itself is safe, and ultimately is very similar to a general blood donation visit.

BENEFITS OF PLASMA DONATIONS:

Blood plasma donations are used for slightly more specific purposes than a general blood donation. The most common uses of plasma donations include individuals who have experienced a severe trauma, burn or shock, adults children with cancer, and people with liver or clotting factor disorders. Donated plasma can be frozen and stored for up to one year. Nearly 10,000 units of plasma are needed every day in the United States, and plasma transfusions are often lifesaving. In addition, people with liver disease or clotting factor deficiencies may not have the proper substances in their blood to allow their blood to clot normally. Whenever an individual has a cut or injury, these clotting factors ensure that they do not lose too much blood. Plasma donations ensure that these individuals can receive a plasma transfusion to supplement their body's clotting ability and stop excessive bleeding from occurring.