

## LITERATURE SURVEY

Antoine Beurel, Florence Terrade, J.P. Lebaudy and Bruno Danic “Determinants of plasma donation” on September 2017 published a paper on the conference. The major contribution of Human Sciences in the understanding of the whole blood donation behavior has been through the study of individuals’ motivations and deterrents to donate. However, if whole blood donation has been very widely studied in the last sixty years, we still know very little about plasma donation in voluntary non-remunerated environments. Yet, the need for plasma-derived products has been strongly increasing for some years, and blood collection agencies have to adapt if they want to meet this demand. Current evidence shows similarities between both behaviors, but also differences that indicate a need for further research regarding plasma donation.

S Delépine-Farvacques, Florence Terrade, B Danic, J-P Lebaudy “Commitment in plasmapheresis donation: A study of determinants among regular donors in plasmapheresis” 2017 Mar 21. The purpose of this study, based on the Theory of Planned Behavior, is to identify and ultimately better understand what determines the loyalty and regularity of donors involved in plasmapheresis donation. There is a survey conducted among 16 regular plasmapheresis donors, by the way of semi structured individual interviews. The level of commitments of these regular donor is considered as a level of appropriation. A better understanding of the determinants of plasmapheresis donors should lead us to more effective awareness of new potential donors, thereby increasing recruitment and retention. Due to the increasing need for plasma-derived products, the main problem of this study is closely related to both ethical and socio-economic aspects.

Rachel Thorpe, Barbara M Masser, Lilly Nguyen, Tanya E Davison” Understanding donation frequency: insights from current plasma donors” 2019 Dec 17. Experienced plasma donors try to maintain a donation practice in the context of busy lives, often by adopting a flexible approach to the frequency of donation. Their knowledge of the benefit of their donations is key to their continued giving, but most identified limitations to donating more often. Some involved health issues and more research is needed to understand donors' perspectives on the impact of donation on their health.

Nayan Das, MD. Asif Iqbal “Nearest Blood & Plasma Donor Finding: A Machine Learning Approach” 2020 23rd International Conference of Computer and Information Technology (IC C IT ). Due to lack of blood, people could not save themselves or their friends and family members. A bag of blood can save a precious life. Statistics show that a large amount of blood is needed annually due to major operations, traffic accidents, blood disorders, including anemia, hemophilia, and acute viral infections like Dengue etc. And approx. 85 million people need one or more blood transfusions for treatment. Voluntary blood donors 1000 population in some countries is a matter of course, like Switzerland (113/1,000), Japan (70/1,000), while others have disappointing results like India 4/1000 and Bangladesh has 5/1000. Recently, the life-threatening COVID-19 virus has been spreading around the world a globe that is more vulnerable for older people those with a pre-existing medical condition. Nearest blood or plasma donors the same group in a certain area can be explored in less time and more efficiently.

Kalpana Devi Guntoju, Tejaswini Jalli, Sreeja Uppala, Sanjay Malliseti “instant plasma donor recipientconnector webapplication” The world is suffering from the COVID 19 crisis and no vaccine has been found yet. But there is another scientific way we can help reduce mortality or help people affected by COVID19 by donating plasma from recovered patients. In the absence of an approved antiviral treatment plan for the fatal COVID-19 infection, plasma therapy is an experimental approach to treat patients positive for COVID-19 and help speed their recovery. Therapy is considered competent. In the referral system, a donor who wants to donate plasma can donate by uploading their COVID19 certificate and the blood bank can see the donors who have uploaded the certificate and the donors can request and the hospital can register/log in and search for the necessary items. plasma from a blood bank and can apply for a blood bank and receive plasma from a blood bank blood bank.

HarapanHarapan,NaoyaItoh,AmandaYufika,WiraWinardi,SynatKeam,HayphengTe,DewiMegawati<sup>ij</sup>ZinatulHayati,Abram L.Wagner” Coronavirus disease 2019 (COVID-19)”. In early December 2019, an outbreak of the novel severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) occurred in the city of Wuhan, Hubei Province, China. On January 30, 2020, the World Health Organization declared the outbreak a public health emergency of international concern. As of February 14, 2020, 49,053 laboratory-confirmed cases and 1,381 deaths have been reported worldwide. The perceived risk of the disease has led many governments to introduce various control measures. We conducted a literature search of publicly available information to summarize knowledge about the pathogen and the current epidemic. In this review of the literature, the causative agent, pathogenesis and immune response, epidemiology, diagnosis, treatment and management of the disease, control and prevention strategies are evaluated.

Sean T. H. Liu, Hung-Mo Lin, Ian Baine, Ania Wajnberg, Jeffrey P. Gumprecht, Farah Rahman, Denise Rodriguez, Pranai Tandon, Adel Bassily-Marcus, Jeffrey Bander, Charles Sanky, Amy Dupper,Allen Zheng” Convalescent plasma treatment of severe COVID-19: a propensity score–matched control study”published a paper on September 2020. Convalescent plasma, donated by people who have recovered from COVID-19, is a cell-free component of blood that contains antibodies, including those that specifically recognize SARS-CoV-2. These antibodies, when transfused into patients infected with SARS-CoV-2, are thought to have an antiviral effect, suppressing the replication of the virus before the patients develop their own humoral immune response. Convalescent plasma is potentially effective against COVID-19, but is sufficiently potent that randomized controlled trials are needed.