

LITERATURE SURVEY

TITLE : Payment, compensation and replacement – the ethics and motivation of blood and plasma donation

AUTHOR : A. Farrugia,J. Penrod,J. M. Bult

YEAR : 2010

The supply of blood and plasma to produce haemotherapies varies around the world, but all environments need donors to furnish the raw material. Many countries still lack adequate supply, and the question of what amounts of blood and plasma are required for optimal treatment is still unresolved. The issue of compensating donors has been a controversial and emotive one in blood transfusion for many decades. Donors are conventionally classified as paid, voluntary or replacement, and a level of stigma, based on safety and ethical considerations, has been attached to paid donation. This review points to evidence which renders many of these concerns redundant. Purist arguments against compensated donation have little basis in evidence and would lead to many of today's voluntary donors being designated as paid, because of the large range of incentives used to recruit and retain them. Misplaced application of 'Titmussian' volunteerism has precipitated its own safety and supply problems. Current systems of compensation and replacement are needed to maintain supplies of essential products and lead to safe products in controlled environments. We propose that a plurality of routes towards donation is an appropriate paradigm in the heterogeneous landscape of blood and plasma product supply.

TITLE : Why Prohibiting Donor Compensation Can Prevent Plasma Donors from Giving Their Informed Consent to Donate

AUTHOR :James Stacey Taylor

YEAR : 2019

In recent years, there has been a considerable increase in the degree of philosophical attention devoted to the question of the morality of offering financial compensation in an attempt to increase the medical supply of human body parts and products, such as plasma. This paper will argue not only that donor compensation is ethically acceptable, but that plasma donors should not be prohibited from being offered compensation if they are to give their informed consent to donate. (While this paper will focus on the ethics of compensating plasma donors, its arguments are also applicable to the ethics of offering compensation for other body parts, such as kidneys.) Regulatory regimes that prohibit donor compensation thus unethically prevent the typical donor from being able to give her informed consent to donate. In the first quarter of 2020, the Covid-19 pandemic disrupted the globe, severely compromising economic, educational, and social activities as well as healthcare. Although the vaccination process has been ongoing steadily since the beginning of 2021 in the USA and several other countries across the world, we are a long way from fully vaccinating the entire world's population. Thirty-eight percent of the population in the USA, 40 percent of the population in Israel, and 32 percent of the population in UK are fully vaccinated, as of May 2021. However, for many countries this number is still in the 20s or even lower. For a complete list of countries and vaccination rates, please refer.

TITLE : SARS-CoV-2 antibody persistence in COVID-19 convalescent plasma donors: Dependency on assay format and applicability to serosurveillance

AUTOUR : Clara Di Germanio,Graham Simmons,Kathleen Kelly,Rachel Martinelli,Orsolya Darst,Mahzad Azimpouran,Mars Stone,Kelsey Hazegh,Eduard Grebe,Shuting Zhang,Peijun Ma,Marek Orzechowski,James E. Gomez,Jonathan Livny,Deborah T. Hung,Ralph Vassallo,Michael P. Busch,Larry J. Dumont

YEAR : 2021

Clara Di Germanio and Graham Simmons contributed equally to this study.

Abbreviations: ACE2, angiotensin-converting enzyme 2; Ag, antigen; AU, Arbitrary Units; CCP, COVID-19 convalescent plasma; CMIA, chemiluminescent microparticle immunoassay; CoV2G, Ortho VITROS Anti-SARS-CoV-2 IgG; CoV2T, Ortho VITROS Anti-SARS-CoV-2 Total; COVID-19, Coronavirus disease 2019; CTS, creative testing solutions; DIN, donation identification number; EBLUP, empirical best linear unbiased predictor; ELISA, enzyme-linked immunosorbent assay; EUA, emergency use authorization; FDA, United States Food and Drug Administration; ID50, Half-maximal inhibitory dilution; Ig, immunoglobulin; IgA, Immunoglobulin A; IgG, immunoglobulin G; IgM, immunoglobulin M; MASS-BD, US National Blood Donor Serosurveillance Study; NC, nucleocapsid protein; NT50, Half-maximal neutralization titer; PRNT, plaque reduction neutralization test; RBD, receptor binding domain of S1; RVPN, reporter viral particle neutralization; RLU, relative light units; S1, spike subunit; S/CO, signal-to-cutoff ratio; SARS-CoV-2, severe acute respiratory syndrome coronavirus 2; TMPRSS2, Transmembrane Serine Protease 2; VRI, Vitalant Research Institute; VSV, vesicular stomatitis virus; VISP, vaccine induced seropositivity.

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TITLE : The role of identity in how whole-blood donors reflect on and construct their future as a plasma donor

AUTOUR : Rachel Thorpe

YEAR : 2019

In the context of decreased demand for whole blood and increased demand for plasma-derived products, donors in Australia are increasingly being asked to convert from whole-blood to plasmapheresis donations. Plasmapheresis is a different type of donation to whole blood as the process takes longer and can be engaged in more frequently. What is unknown is whether whole-blood donors view donating plasma as consistent with their donor identity and how they respond to the possibility of donating more frequently. To explore this, we undertook semistructured telephone interviews with 26 whole-blood donors who had recently made their first plasma donation. Findings indicated that whereas donating plasma was viewed as a bigger ask than donating whole blood, the former was viewed as consistent with their identity as a donor because both behaviours were seen to benefit others and self and were located within the same institutional context. Donating plasma was an opportunity for donors to enhance their self-concept as an altruistic giver. When contemplating their future donation behaviour, donors considered how their donor identity would fit alongside other salient roles. These findings have implications for how institutions can position their request of existing donors to give a different gift.

TITLE : A Multiclass, Multiproduct Covid-19 Convalescent Plasma Donor Equilibrium Model

AUTOUR : Anna Nagurney & Pritha Dutta

YEAR : 2021

In this paper, we develop a multiclass, multiproduct equilibrium model for convalescent plasma donations in the Covid-19 pandemic. The potential donors are situated at different locations and the donor population at each location can be separated into different classes based on their motivation and the product for which they provide donations at a collection site. The model captures the competition between nonprofit and for-profit organizations seeking convalescent plasma donations, which is a characteristic of this new market. A variational inequality formulation of the equilibrium conditions and qualitative properties of the model are provided. We also present a capacitated version of the model. Numerical examples of increasing complexity are presented and solved using the modified projection method. The results reveal multiclass, multiproduct donor behavior under different scenarios which can inform policy makers during this pandemic and beyond.