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Transfusion Medicine | LETTER TO THE EDITOR

Theoretical and experimental ethics: advocacy for blood donors and beneficiaries of blood transfusions

Dear Sir,

Transfusion has been a routine treatment for more than 100 years. Blood is one of the few precious gifts that people can give – or accept from – others; it represents the sharing of none other than the most important value, i.e. a piece of our humanity (Godin *et al.*, 2005). Transfusion may, however, be deemed a 'non-natural' process for several reasons, which were overviewed previously by Garraud & Tissot, 2017. Blood is also considered highly symbolic (Garraud & Lefrère, 2014). If blood is a priceless gift, assumed to be 'pure', i.e. devoid of any germ capable of causing harm to the recipient, it is, so to speak, wrapped and delivered by intermediaries, i.e. professionals in transfusion medicine (TM) who qualify blood as pure enough to be accepted in the blood component inventory ('impurity' would, e.g. be the presence of an unacceptable infection or infection sequelae). The process of donation has indeed been modernised over time, but it is still – more or less – about '*a pint of blood*'. Professionals maintain, however, the anonymity of this indirect process (Ferguson, 2015). That said, it should be noted that not everyone is able to donate blood (notably because they are not in good enough health) (Tissot and Garraud, 2016).

Like other resources offered by '*Nature*' (water, wind, etc.), blood may become corrupt as a consequence of overexploitation and the desire to make profit as fewer checks can be anticipated to reduce costs. The power of this exquisite resource of Nature goes beyond human domination; this should be kept in mind at a time when the temptation to make a profit from blood is back in the transfusion field [the so-called red market (Carney, 2011)]. Blood can be viewed as a servant as opposed to a master; its aim is to serve people in need and not the rich, the powerful and the technocrats. When issues related to blood are discussed in a similar way to those related to goods, conflicts of interest (or at least links of interest) arise because there is direct competition between the public and private sectors involving the use of the same tools [market, economy, etc. (Aldamiz-Echevarria & Aguirre-Garcia, 2014; Griffin *et al.*, 2014)]; such aspects are far too often denied. Furthermore, despite a new release of the Code of Ethics by the International Society for Blood Transfusion (ISBT) (Flanagan, 2015; ISBT communication, Copenhagen 2017), ethics applied to TM are, more than ever, transgressed in real-life conditions: there is a commodification of the plasma collection business that has led the French plasma fraction provider, for example, to call upon commercial principles and to pay donors (outside France), despite it being majority-owned by the French state, a country that embedded not-for-profit blood donation into its fundamental laws.

While often considered old fashioned compared to other specialties, TM nevertheless offers terrific opportunities to get acquainted with both healthy and sick individuals at the same time, termed the 'donors' and the 'patients', respectively. However, using the term patients in the field of TM is often avoided; the term 'recipients' is more customary. Moreover, some groups of patients even refer to themselves as 'beneficiaries'. Semantics in the field of TM represents a valuable source of information in social sciences. The practice of TM is indeed a connecting link between medicine, sciences and humanities, and this is not its only virtue; it also inspires reflective works and studies in ethics. TM is, therefore, a good model for addressing a number of questions in bioethics in a much broader manner than solely blood donation. Thus, TM can be viewed as being supported by blood as a raw material as well as a dematerialised gift. It gives way to 'theoretical' and 'experimental (or applied) ethics' that confront different standpoints: not-for-profit vs business, symbols vs biological sciences, needs and supply vs demand, anonymity vs targeted donation, etc.

Perhaps the best lesson that transfusion provides is the value of Hippocratic and holistic medicine: '*Nothing in excess*', which applies to both donation and TM. Modern medicine and pathophysiological research in TM have demonstrated that excess transfusion is as detrimental as delayed or insufficient transfusion. Pathophysiological models show that beneficiaries' immune systems detect foreign blood as emitting danger signals. Innate immune cells then acknowledge these danger signatures and either develop a subclinical inflammation – which helps control the otherwise combating elements – or a clinical (pathological) inflammation – which leads to the immediate or differed lysis of transfused cells and immunisation against certain major foreign determinants; the nature and level of response depends on numerous factors, including the intensity of the stimuli. There is evidence that transfusing too much, too old, too manipulated or too immunologically incompatible blood etc. can cause clinical inflammation (Garraud *et al.*, 2016). Inappropriate use of blood, along with overloading, can result in the manifestations of adverse events and complications (Hendrickson *et al.*, 2016). TM practitioners have acknowledged this holistic view and have set up '*choose wisely*' programmes. Is technocracy related to the regulation and law enforcement in TM eager to display comparable wisdom?

Besides assisting people in need (indeed, transfusion treats rather than cures people) and being an ethics instructor, TM

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relies on an exclusive '*ménage à trois*' involving donors, beneficiaries and intermediaries (professionals and volunteers). Advocacy for the due respect (and safety) of donors appears equally important as for the respect of patients' rights: to be wisely counselled and transfused (Furumaki *et al.*, 2016). Considering blood to represent life as opposed to solely a raw material, our pledge would be to emphasise the human aspect of each actor: donors (who are not only veins), beneficiaries (who are more than the deficiency they carry) and intermediaries (who are more than officers tied up in quality procedures).

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CONFLICT OF INTEREST

The authors have no competing interests.

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