

Lack of information as a barrier to blood donation: results from a survey of pharma industry workers in Italy

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Dear Sir,

Blood donation is a voluntary procedure that provides blood cells and plasma crucial for transfusions in patients with acute and/or chronic conditions. Better awareness of the importance of blood donations is imperative to ensure routine access to safe blood to all patients at all times¹. The present study surveyed 758 employees from an Italian pharmaceutical company in November 2020 to determine barriers that prevent blood donation.

Almost all responders (99.6%) were aware of the importance of blood donation, and 42% (n=315) were blood donors. Of these, 102 employees (32%) regularly donated blood every 3-6 months, and 158 (50%) had actively donated blood at least once in the last 2 years. However, of the 441 employees who had never donated blood, 42.6% believed they were not eligible to donate, and 27.0% feared the process.

Informed responders were significantly more likely to donate blood than uninformed responders (52.3 vs 2.5%, respectively; $p < 0.001$), and access to information was a strong predictive factor that influenced blood donation, irrespective of age or gender (OR: 50.66; 95% CI 20.85-167.25, $p < 0.0001$). Indeed, 52 of 119 (43.7%) employees who reported they were fearful of donating blood also reported a lack of knowledge.

An awareness of safety issues and eligibility criteria were key aspects that significantly increased the decision to donate blood, whereas an understanding of logistics and procedures did not (Figure 1).

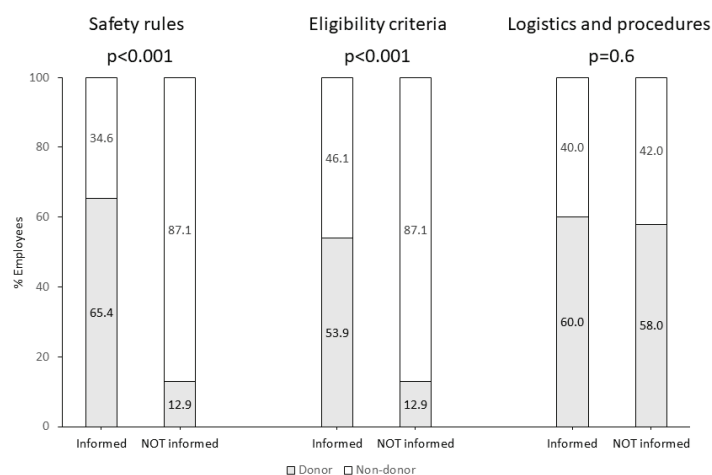


Figure 1 - Key issues that influence the decision to donate blood

Donors and non-donors cited acute events (serious injuries; surgeries) as the main reason for blood use, while there was less awareness of its need for chronic conditions (severe anemia; blood tumors; impaired coagulation). Finally, significantly more employees who had actively donated blood at least once in the last 2 years were aware of the importance of donating plasma compared with less active donors (94.9 vs 80.4%, respectively; $p=0.002$).

This study identifies inadequate information as the main barrier to blood donation, with better knowledge of the eligibility criteria and safety rules needed, even among donors, and a general request for more information among non-donors. In contrast, the published literature reports fear, anxiety, and stress as the main reasons deterring blood donations^{2,3}. Indeed, fear is a known barrier for first-time donors⁴. Although we also identified fear as a barrier, almost half of the non-donors who feared donation also reported a lack of knowledge.

In our cohort, chronic blood diseases were not recognized as important targets for blood donation. Hence, information on the destination of donated blood is also crucial since the importance of blood and plasma appears to be underestimated, especially for patients with chronic conditions. Indeed, better awareness of the end-use of blood components could encourage regular donations.

The small size and recruitment of a specific population limit our study. However, our survey shows that access to information is the main factor that influences blood donation, and highlights the need for more specific information, especially regarding safety issues and eligibility criteria. Ideally, this strategy may increase blood collection, encourage new donors, and facilitate more regular donations from current donors.

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DISCLOSURE OF CONFLICTS OF INTEREST

CDS, RM, AV, LF declare to be Chiesi S.p.A. employees. MC has nothing to declare.

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