Manuscript Number:

Title: Authors' reply

Article Type: Invited Correspondence

Keywords: blood donation, frequency, donors

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Manuscript Region of Origin: UNITED KINGDOM
Authors’ reply

The INTERVAL study randomly assigned 45,263 whole blood donors to different inter-donation intervals to assess the effect on donor health and the blood supply of varying the frequency of donation. Over a 2-year period, there was a substantial increase in the amount of blood collected by reducing the inter-donation intervals used in the UK to those used in blood services in the USA or Western Europe. For example, reducing the inter-donation interval from 12 weeks to 8 weeks in men led to an increase of 33% (an average of 1·7 units per donor). No significant differences were observed in quality of life, physical activity, or cognitive function across randomised groups. However, more frequent donation resulted in more donation-related symptoms (eg, tiredness), lower mean haemoglobin and ferritin concentrations, and more deferrals for low haemoglobin than those observed in the lowest frequency groups.

Katja van den Hurk and colleagues noted that the mean physical component score of the 36-item Short Form Health Survey at 2-years was lower than the baseline score across all groups in INTERVAL. However, this observation was not based on a randomised comparison. Its interpretation is further complicated by the small absolute differences observed between baseline and follow-up time-points, and by the potential confounding effects of ageing (since participants were older at the end of the study than at the beginning). As regards van den Hurk and colleagues’ comment on serious adverse events, it is not possible to compare them reliably across the INTERVAL trial and the Donor InSight study because they used different methods, definitions, and durations of observation.

In response to the query by Andrew J King and colleagues, we can clarify that the INTERVAL trial recorded deferral for low haemoglobin levels (ie, <135 g/L for men and <125 g/L for women, based on minimum haemoglobin thresholds required to donate in England), rather than deferral for anaemia. We can also clarify that the trial did not collect data on referral for gastroenterological
King and colleagues correctly noted that the INTERVAL trial has quantified key measures of efficiency and safety (eg, average number of donations achieved versus allocated frequencies) that blood services need to balance to safeguard donor health and maintain the blood supply. However, in contrast with their suggestion, the INTERVAL trial data give policy makers in the UK the short-term option of allowing more frequent collection from donors than is now standard, such as for in-demand blood groups or during periods of falling supply.

_Emanuele Di Angelantonio, Simon G Thompson, Stephen Kaptoge, David J Roberts, John Danesh_

References


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