

A HISTORY OF BLOOD DONORS IN ENGLAND

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From the earliest days of practical blood transfusion individual blood donors were selected and bled as the need arose, resulting in a specific donor (or donors) being selected to donate blood for a particular patient. This process required the donor to donate blood by one of a number of direct 'donor artery to recipient vein' methods.

This type of 'direct' blood transfusion continued into the early part of the 20th Century and was the method used by the British Army during the early years of WW1. However, this same period also saw the introduction of an 'indirect' blood transfusion technique whereby the donor donated their blood into a bottle containing sodium citrate anticoagulant, thereby not only enabling the blood to be donated at a more convenient time (i.e. during a lull in the fighting), stored and used at a later time, but this method also overcame the surgical, technical and procedural difficulties posed by a direct transfusion. The blood donors used at that time were troops in aid stations who were stated to be 'lightly wounded'.



Fig.1 – A British Red Cross blood donation certificate for Mr Herbert A Price documenting the ten blood donations given by him between 1931 and 1934

Percy Lane Oliver (1878-1944), who worked for the British Red Cross, began to organise a voluntary (unpaid) blood donor panel in 1921 following a request for blood by King's College Hospital. He argued that it would be more convenient to have potential blood donors available on request rather than having to find them when needed by a surgeon. Oliver's voluntary donor scheme rapidly expanded to provide blood for a number of hospitals in London and the scheme was subsequently used in other areas of England. A suitable donor was specifically selected from a 'donor panel' and was asked to donate blood at the hospital where the patient was located. The hospital ABO grouped the blood and the donor received a brief medical examination which also established that they had no history of transmissible disease. These donors were initially issued with a certificate for each donation given (Fig.1) and after 1934 were also provided with a medal together with a bar for every ten

donations given (Fig.2). It should however be noted that from the end of WW1 into the 1920s many hospitals in the UK also paid so called 'on the hoof' professional blood donors to give blood, a system adopted by many other countries.



Fig.2 – British Red Cross blood donor medal together with 20th, 30th and 40th 'service' donation bars

One of the greatest developments in blood transfusion in England between WW1 and WW2 was the recruitment, selection and organisation of blood donors, which was required due to the loss of the large motivated source of donors that existed in wartime. This resulted in new methods / campaigns being developed to motivate and organize potential donors to give blood. Dr (later Sir) Geoffrey Keynes, who was an early supporter of the value of blood transfusion in clinical practice and acted as medical advisor to Percy Oliver's organisation, gave the first radio broadcast appeal for blood donors on the 22nd October 1927 entitled 'A Call to Save Life'. This set the seal on the principle that all blood donors in the UK were unpaid volunteers. Many of the issues relating to blood donors that emerged during this period have continued to this day (such as the safety of the blood supply) but the mechanisms for mobilisation of donors has varied from country to country (e.g. with regard to payment versus altruism) ¹.

Prior to the outbreak of WW2, Dr (later Dame) Janet Vaughan played a pivotal role in the UK for arguing that stored blood taken into sodium citrate solution should be used, rather than procuring blood from donors 'as it was required'. Plans produced by Dr Vaughan and colleagues, which included the creation of a donor panel of 25,000 people, were formally adopted by the government in April 1939. This system was subsequently developed further and involved the Army Blood Supply Depot based in Bristol (Fig.3), making it impossible for the UK to revert back to a hospital-based blood donor service after WW2. This resulted in the supply of blood to hospitals being controlled centrally by the Ministry of Health, organised on a regional basis from 12 centres that were also responsible for the recruitment of blood donors and the maintenance of suitable blood donor panels (Fig.4). The final transfer of responsibility for transfusion services in England by the Ministry of Health took place on the 26th September 1946, resulting in the creation of the 'National Blood Transfusion Service'.

This subsequently led to increasingly sophisticated national blood donor recruitment methods that targeted specific geographic areas and types of blood donor (e.g.

component donation) as well as to changes regarding blood donor eligibility and the introduction of 'Donor Selection Guidelines', designed not only to safeguard the recipient but also to ensure the safety of the blood donor.

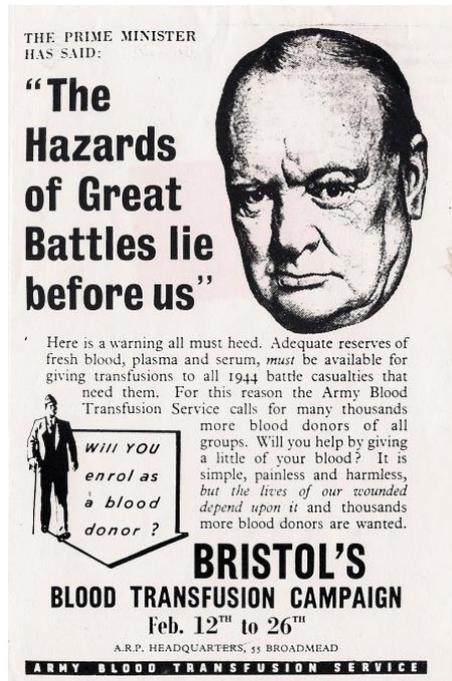


Fig.3 – Blood donor recruitment campaign poster (1944) for the Army Blood Supply Depot, Bristol (Photograph from the BBTS Archive)



Fig.4 – Enrolling Blood Donors – from the leaflet 'Life Blood' (published in 1945) (Leaflet from the BBTS Archive)

¹. For further information regarding blood donation worldwide, see 'Blood Transfusion between the Wars' by William H. Schneider published in the *Journal of the History of Medicine*, 58, 187-224, April 2003 (a copy of this paper is available to view via the internet)