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SCIENCE

On Stimulating the Gift of Blood

To meet their clinical needs for blood, hospitals in the United States rely upon three types of donor: the *volunteer* donor, who provides his blood free of charge; the *professional* donor, who supplies his blood directly to the user institution upon request and is reimbursed for it; and the *commercial* donor, who sells his blood to a commercial supplier.

Before being transfused, donor blood must be subjected to a comprehensive series of tests, including typing and antibody screening. In addition, an effort is made to detect diseases that may be transmitted through transfusion, such as serum hepatitis. And herein lies a major problem. At present, tests to detect serum hepatitis are highly unsatisfactory. Thus, if the donor is unaware of his illness or unwilling to acknowledge it, the likelihood is great that it will be passed on to someone else. Current estimates are that some 30,000 overt cases of hepatitis and 1500 to 3000 deaths each year in the United States result from blood transfusions.*

But the problem of infection through transfusion is not simply a question of inadequate tests. It is a matter of the system of distribution and of the demography of the donor population. Except in cases of unusual medical requirements, blood is assigned to recipients without reference to its source. And a very large proportion of the blood used in American hospitals comes from professional or commercial donors. In contrast to the volunteer donor, the commercial donor is likely to have an urgent need for his stipend, possess a reticence about his medical history, and be a carrier of hepatitis. A recent study at National Institutes of Health revealed that 51 percent of patients who received commercial blood during open-heart surgery contracted the disease but that none who received volunteer blood became infected.† Similarly, commercial blood is more likely to contain Australia antigen, a factor frequently found in the serum of hepatitis patients.‡

As a response to the clinical problem of diseased blood, Professor R. M. Titmuss in a recent book has advanced the case for institutionalizing the donor-recipient relationship on a totally voluntary basis.§ Although Titmuss's faith in the altruistic principle is not universally shared, many doctors agree that some means must be found for stimulating donors of the sort now generally found among volunteers. A useful approach has recently been proposed. A bill (H.R. 853), introduced by Edward I. Koch (D–N.Y.) and 22 other congressmen, is now before the Ways and Means Committee of the House. It provides that an individual may credit as a charitable contribution on his federal income tax declaration $25 for every pint of blood donated within the course of a year, with the total not to exceed $125. Although the bill might be made more effective by increasing (for instance, doubling) the allowable deduction, it provides the kind of incentive understood by persons in the volunteer class; it would not attract those motivated by on-the-spot cash. If a significant number of potential donors were to volunteer their blood (some 36 million federal returns were filed with itemized deductions in 1969), impressive progress would be made toward meeting the nation's need for blood. And, if nothing more, the Koch bill brings to the attention of Congress the nation's urgent need for an effective blood donor system. It is a good bill and worthy of support.—WILLIAM BEVAN

* Committee on Plasma and Plasma Substitutes, Division of Medical Sciences, National Academy of Sciences–National Research Council, *Transfusion* **10**, 1 (1970). † J. H. Walsh, R. H. Purcell, A. G. Morrow, R. M. Chanock, P. J. Schmidt, *J. Amer. Med. Ass.* **211** (No. 2), 261 (1970). ‡ Ad hoc Committee on Hepatitis-Associated Antigen (HAA) Tests, Committee on Plasma and Plasma Substitutes, National Academy of Sciences–National Research Council, *Transfusion* **11**, 1 (1971). § R. M. Titmuss, *The Gift Relationship: From Human Blood to Social Policy* (Allen & Unwin, London, 1971).