Transfusion Medicine

Volume 6, Supplement 1, 1996

Fifty Years of Blood Transfusion

Harold H. Gunson, CBE, DSc, MD, FRCP, FRCP(E), FRCPath
Helen Dodsworth, BSc, MB BS, FRCP, FRCPath

Blackwell Science

0960-5592(1996)6+1;1-C

Transfusion Medicine, 1996, 6 (Suppl. 1).

Contents

Transfusion Medicine is abstracted in *Current Contents/Life Sciences, Science Citation Index, SCISEARCH, Research Alert* and *CABS (Current Awareness in Biological Sciences)*

Transfusion Medicine, 1996, 6 (Suppl. 1), i

Foreword

Dr Gunson is an ideal author for this work. He makes reference to the many people who have made a notable impact on the blood service but modestly makes no reference to his own significant contribution. He is internationally recognized for his work in transfusion medicine and his vision was one of the driving forces behind the creation of the truly national blood service that now exists. All those associated with the Blood Transfusion Service, whether colleagues, donors or patients, owe him a great debt of gratitude.

I am honoured to have been asked to contribute the Foreword to this book. Although it deals with the history of one of our great public institutions, the National Blood Transfusion Service, it is really a testament to the generosity of the people in this country and an unequalled example of human nature at its best. That the Service is, this year, celebrating its 50th anniversary is due to one simple fact: millions of individuals are prepared to give their blood so that other, unknown, persons can have the medical treatment they require. This is often the difference between life and death for the recipient of that gift. The National Blood Service has a worldwide reputation for quality and safety that is second to none and this is built on our system of voluntary, unpaid blood donors.

I think it extremely unlikely that those early pioneers, about whose work Drs Gunson and Dodsworth write so eloquently, could ever have hoped to see a nationwide network of nearly 2 million donors giving 2·5 million donations per year, or could have imagined the complex and sophisticated medical and scientific disciplines that would develop from their early work.

As Chairman of the National Blood Authority, I am conscious of the magnificent traditions of the past that the new national service has inherited but, as the contents of this history show, the blood service has always existed in a constantly evolving world. This is particularly apparent now, and in looking to the future we must build on the strengths established over the past 50 years. Many challenges face the blood service today, not the least of which is to keep pace with the ever-increasing demand for blood from hospitals. Our blood supply is amongst the safest in the world but, even so, medical advice is always likely to be that the best transfusion is no transfusion. Safety and quality have always been hallmarks of the Service and we will ensure that standards are maintained.

The blood service is vital to the NHS and is a unique organization within it. It shares with the NHS the commitment of its staff to provide the highest possible professional standards, but is unique in the alliance of these commitments with the generosity of donors. Professor Titmuss wrote about 'The Gift Relationship' in his seminal work published soon after the birth of the National Blood Transfusion Service. The phrase is still accurate nearly 50 years later and will, I believe, still hold good when the history of the first 100 years of the blood service is written.

SIR COLIN WALKER, OBE
Chairman, The National Blood Authority

Transfusion Medicine, 1996, 6 (Suppl. 1), iii

Preface

The first record of a transfusion of blood to a human being was by Samuel Pepys over 300 years ago when Arthur Coga received a few ounces of blood from a sheep before an audience at the Royal Society. Despite the pioneering work of James Blundell (1824), any measure of success in the administration of blood transfusions had to await the discovery of the ABO blood groups by Landsteiner in 1900. In the 20th century the impetus for using blood transfusion therapy came during two World Wars and the Spanish Civil War.

In 1996 the National Blood Transfusion Service for England and Wales will celebrate its Golden Jubilee. In common with all medical specialities, and to an extent driven by the requirements of these specialities, blood transfusion practice has experienced many changes during the past 50 years. Progress in vascular surgery, chemotherapy, transplantation, the treatment of coagulation disorders and shock from massive blood loss, to name a few examples, has been made possible only with support therapy available from blood and its products. Transfusion medicine, a recent term, is used to describe not only those activities involved with the collection and processing of blood, but also those associated with a number of specialities. There have been contributions to anthropology, biochemistry, forensic medicine, genetics, haematology, immunology, transplantation science, microbiology and virology; yet it remains a small speciality, with only about 4000 employees in England and Wales, of whom 43 are consultant medical staff.

Within the National Health Service the Transfusion Service is unique in having unpaid volunteers as the cornerstone for the provision of its service to patients. In order to provide maximum safety, quality and efficacy, the Service has had to operate within strict guidelines.

This history of the National Blood Transfusion Service illustrates the development of a speciality that has been recognized relatively recently. Considerable medical and scientific progress has been made but there is a recurring feature which merits attention: on four occasions attempts were made to change the management of transfusion centres from regional to national in order to create a unified Service. Twenty-three years after the first application was made to the former Ministry of Health in 1970 the Department of Health agreed to establish a National Blood Authority.

The history begins with the Lister Institute, founded in 1891. The Institute was to play a major role in the development of the Transfusion Service until 1978, particularly in the field of plasma fractionation. The British Red Cross became involved with blood transfusion in the 1920s and was superseded in 1939 by the Medical Research Council and the Emergency Medical Service. However, since 1946, the National Blood Transfusion Service (known as the National Blood Service since 1993) has been part of the National Health Service and the present publication has been written to mark the 50th anniversary of its foundation.

HAROLD H. GUNSON
HELEN DODSWORTH

Acknowledgements

The authors wish to thank a number of persons who have given them assistance in the preparation of this manuscript. These are:

Mr F. Hanley for information concerning the Red Cross Transfusion Service, for access to his private archives and for reading Chapter 2. Professor P. L. Mollison for information concerning the London depots and for reading Chapters 2 and 4.

Professor W. Schneider of the University of Indiana for making available the text of his unpublished article, *Blood Transfusion in the Twentieth Century*, and for reading Chapter 2.

Dr J. A. J. Barbara for providing information and for reading Chapter 5.

Mr L. Vallet for providing information on the activities of the Lister Institute during the development of BPL and for reading the entire manuscript.

Mr E. D. Wesley for early archives of BPL, Dr T. J. Snape for information on the activities of BPL and PFL and to both, together with Mr R. C. D. Walker, for reading Chapters 6, 7 and 8.

Dr J. Davies for providing photographs of BPL and BPL products.

Dr M. L. Scott, Miss J. Poole and Dr D. J. Anstee for providing material for Chapter 9.

Dr R. J. Moore for providing photographs of publicity posters and for contributing to Chapter 11.

Mr J. F. Adey for reading Chapter 12, Mr G. Barr, Miss P. Banks and Mrs S. Cunningham for providing information for Chapter 12.

The authors are especially grateful to Colonel Michael J. G. Thomas, former Commanding Officer of the Army Blood Supply Depot, Aldershot, for writing Chapter 10.

Transfusion Medicine, 1996, 6 (Suppl. 1), 72–79

Chapter 11: The National Directorate, 1988–1993

It has been noted at the end of Chapter 3 that the NHS Management Consultancy Services team identified the need for a coordinated service to increase efficiency and improve performance. On 28 July 1988 Mrs Edwina Currie, Parliamentary Secretary for Health, announced that new management arrangements would be made to provide a formal national management structure for the National Blood Transfusion Service. In a written reply to a Parliamentary Question from Mr Ian Taylor, Mrs Currie stated:

"I have decided that new management arrangements are needed for the supra-regional and national dimension of the National Blood Transfusion Service (NBTS).

"I therefore intend that operational responsibility at the national level for the NBTS and the Central Blood Laboratories Authority (CBLA) will be exercised on behalf of the Health Ministers for England and Wales by the NHS Management Board and undertaken by its Director of Operations, in consultation in respect to Wales with the Director, NHS Wales. Day-to-day implementation of the national strategy will be delegated to a new National Director of the NBTS and a small supporting staff. The key objectives will be:

a) to implement a cost-effective strategy for ensuring an adequate supply of blood throughout England and Wales;
b) to implement a cost-effective strategy for the supply of plasma to the blood products laboratory of the CBLA;
c) to co-ordinate the activities of the NBTS and the CBLA;
d) to promote the efficiency of the NBTS.

"In implementing the objectives at a) and b) a priority task will be to remove financial disincentives by having a national system of processing and handling charges both between transfusion centres and between them and the CBLA. No charges will be made, of course, for freely donated blood.

"The National Director will be Dr Harold Gunson who is at present the Regional Transfusion Director for NW Region.

"I have arranged for copies of the Report to be placed in the Library."[1]

Dr Gunson assumed the appointment of National Director on 1 October 1988. He reported to Mr Graham Hart, at that time the Director of Operations, the NHS Management Board. Mr Hart convened a coordinating committee whose membership is given in Table 11·1. It was the intention that it met no more frequently than once or twice a year to review the work of the National Directorate and to provide a bridge between the Directorate and top NHS management.

[1] Hansard, 28 July 1988.

The National Directorate was funded by the DHSS through the NW RHA in whose premises it was based. Mrs Linda Johnstone, his secretary at the NW Regional RTC, was transferred as Dr Gunson's personal assistant. Dr Moore was seconded from the Department of Health and Social Security (DHSS) as Deputy Director (Administration) from 1 January 1989. His most recent appointment had been concerned with blood transfusion and he was involved with the formation of the National Directorate. An office manager, Mr Peter Cosgrove, and Mrs Debbie Wrigley as secretary to Dr Moore were appointed early in 1989. A few months later, Mr Stuart Orvis was appointed as Computer Services Manager. The six staff detailed above were the maximum number to be employed by the National Directorate.

Dr Gunson presented a report to the Regional Transfusion Director's (RTD) Committee on 4 October 1988. He announced that he intended to create a National Management Committee (NMC). Initially it was proposed to invite the Chairman of the RTD Committee and the Chairmen of Divisions as RTC members. At the next meeting in January 1989, RTDs agreed to disband their Committee, to be replaced by an annual meeting with a scientific agenda to which all consultants in the NBTS would be invited. The membership of the Management Committee was changed to the elected Chairmen of the Divisions and a second person from each Division, nominated by the National Director.

The terms of reference of the NMC were:

- to consider matters of importance in relation to the work of the NBTS and advise the National Director;
- to bring forward to the Committee matters of national importance to the work of the NBTS;
- to receive reports from:
  i) meetings of the NBTS/CBLA Liaison Committee;
  ii) meetings of the Head Laboratory Scientists, Nurse, Donor Service Managers and Administrators/Managers;
  iii) *ad hoc* RTD working parties;

Table 11·1 Membership of the NBTS Co-ordinating Committee

DHSS	Mr Graham Hart, Chairman
RHA Chairman	Mr Colin Walker (Cambridge)
Chairman CBLA	Mr David Smart (later Mr Ron Wing)
Regional Medical Officer	Dr Michael O'Brien (Cambridge RHA)
Regional General Manager	Mr Bob Nichols (Oxford RHA)
Regional Treasurer	Mr Arthur Wilson (South Western RHA)

iv) National Publicity Sub-committee;
- to report to the Divisions the decisions reached by the National Directorate.

Of the committees mentioned above, those in sections ii) and iv) existed prior to the formation of the National Directorate. The National Publicity Sub-committee was chaired by a member of the publicity section of DHSS with RTD and Donor Organizer representation. Its function was to allocate central funds on a national basis for donor publicity. Later, it was incorporated in the Provision of Donors Committee, known throughout the NBTS as POD (see above).

The NBTS/CBLA Liaison Committee was created and chaired by Dr Gunson with the aim of coordinating the work of the RTCs and BPL. It provided the opportunity for the National Directorate, representatives of RTCs and senior managerial staff at BPL to discuss operational matters affecting both organizations and to provide a forum for problem solving. In addition to reporting to the NMC, this Committee also reported to the Board of the CBLA.

ACHIEVEMENTS OF THE NATIONAL DIRECTORATE

It is important to remember that the National Directorate had no executive authority with respect to the RTCs as they continued to be regionally managed. Its success in changing policies were achieved by persuading the senior management in RTCs that the change was beneficial for the good of the Service.

The inter-regional transfer of blood

Prior to the formation of the National Directorate there had been several attempts to organize the transfer of blood between RTCs to correct temporary shortages. None was successful. The first action taken by the Directorate was to arrange for each RTC to fax to the central office, daily, a statement of their blood stocks. These were collated and a national total of units of blood of each group was available, usually before 12 noon each day. RTCs who were short of blood telephoned the National Directorate and supplies from another RTC were arranged. The two centres made direct contact with each other and decided how best the transfer could be made.

This system continued successfully until the Directorate was disbanded. Whilst it might seem, in retrospect, to have been antiquated in these days of the Internet, the system worked satisfactorily and was welcomed by most RTCs. During the period from 1989 to 1993 there was only one instance when there was adverse publicity due to a shortage of blood which occurred when one RTC failed to inform the Directorate that they had asked hospitals in their region to postpone some planned surgery. Some RTCs were reluctant to use the service, particularly after charges were introduced, and contractual arrangements between RTCs, although they existed were not as fully exploited as they could have been with national management rather than national coordination.

The difference in quantities between a satisfactory supply and a shortage was small. Whilst total daily red-cell stocks were in the order of 25,000, approximately 2½ days' supply, there was rarely a need to transfer blood between RTCs. Below this level there were shortages at one or more RTCs; above it there was a surplus. The advantage of having a national dimension for the blood stocks was that when the trend was downwards it was possible to initiate local, or if necessary national, publicity to increase the blood supply before a major shortage occurred. Indeed, it became possible to predict seasonal peaks and troughs with considerable accuracy and provide an understanding of the dynamics of national blood stocks, hitherto unknown.

The management information system

It will be recalled that a major criticism of the NBTS in the review by the DHSS Central Management Services was that it lacked management information on which to make decisions (Chapter 3). In order to achieve the objectives set by the DHSS, it was necessary to design and implement a management information system (MIS) for the NBTS.

A survey of RTCs revealed that there were variations and deficiencies in the management information available. At the first meeting of the NMC on 1 December 1988 it was decided to form a steering group to pilot the scheme. A timetable was drawn up which envisaged that the MIS would be operational by February/March 1990. The resources available within the National Directorate were insufficient to carry out the investigations necessary to develop the MIS; consequently specifications were prepared and the management consultants Ernst Young were appointed and funded by the DHSS.

During 1989, the system was developed and was programmed into the computer at the National Directorate. As there was a wide variation in the computer systems operating in RTCs it was necessary to provide each RTC with a computer and modem for the transfer of data. Most RTCs appointed a management information coordinator to assemble the required data on a monthly basis and send it on a disc to the National Directorate. The data was collated by the Computer Services Manager at the Directorate and each RTC received information on the activities of all 14 centres in England and Wales. The quality of the information was only as good as that received from the RTCs. Inevitably there were gaps as it proved difficult to obtain complete information from each RTC every month. Also, as time went by, RTCs required information which was not available on the national MIS and they developed their own programmes.

There was a tendency to refer to the MIS as the 'Directorate's information system'. This was not the intention because it was designed to provide timely information for the benefit of all tiers of local management as well as national use. It is fair to say, however, that the information proved more valuable and was used to a greater extent by the National Directorate than the RTCs. By the time the National Blood Authority (NBA) assumed responsibility for managing the RTCs the MIS needed replacing. If nothing else the development of the MIS served to illustrate to RTCs the need for accurate management information. Also, it was an indication that in the NBTS a nationally integrated computer system was essential together with a mechanism for continual review. The latter would have been undertaken by the National Directorate, but by 1991 it was clear that there would be fundamental changes in the management of the NBTS; the Computer Services Manager had left the Directorate to return to the hospital service and was not replaced as there was uncertainty concerning the security of this post in the future.

Quality assurance

Several pressures combined to bring quality assurance to the forefront of the NBTS agenda. It was recognized that a major degree of standardization was required and minimum standards set in order that the UK BTS could respond to possible litigation under product liability legislation. Also, it was the intention of the DoH to abolish Crown Immunity in the National Health Service and Community Care Act (1990). This meant that each RTC would require a Manufacturers' "Specials" Licence from the Medicine's Control Agency (MCA).

During 1988, prior to the formation of the National Directorate, a joint project was organized between the NBTS, the Scottish National Blood Transfusion Service (SNBTS) and the National Institute of Biological Standards and Control (NIBSC). Several working groups were formed to prepare operational guidelines for the UK BTS and by 1989 considerable thought had been given by the working groups to Standard Operating Procedures (SOPs) and specifications.

The National Directorate took the lead in focusing this activity. The key to the strategy was the adoption of the British Standard (BS) 5750, Part 1, as the guideline for NBTS quality systems. A programme to train quality managers and a system of peer audit was carried out against the requirements of BS 5750.

Quality assurance (QA) managers were being appointed at several RTCs but their appointments varied between centres according to the resources available.[2] Dr Moore reported to the NMC that the majority of QA managers in post and those likely to be recruited in the near future had been drawn from the Medical Laboratory Scientific Officers (MLSOs). Whilst this meant that they were adept at dealing with the technical details of specifications and laboratory quality-control testing, they were less familiar with the requirements of total quality assurance systems.[3]

Dr Moore proposed a residential course for NBTS QA managers, to be specifically orientated towards the transfusion service by David Begg, a former Medicines Inspector. Two courses were held in November 1989 and subsequently Dr Gunson signed a NBTS Quality Policy Statement which was displayed in each RTC (Fig. 11·1). In association with this initiative the National Directorate launched the QUIN Strategy (Quality Initiative for the Nineties). Guidelines were given to each RTC on how best to approach this important task, regular meetings were held with QA managers and a series of audits were arranged which were designed to assist the QA managers in carrying out internal audits. Two QA managers, initially led by Drs Gunson and Moore audited selected activities, including laboratory work, blood collection and processing at RTCs outside their region. A major advantage of these audits was that QA staff visiting different

[2] Minutes of meeting of Regional Transfusion Directors, 13/4/88.
[3] Minutes of meeting of the NMC, 13/4/89.

NBTS QUALITY POLICY STATEMENT

The National Blood Transfusion Service is dedicated to a system of quality management which will ensure that its blood products and services meet the requirements of clinicians and their patients. Because our products are administered to patients, our quality system will be comparable in excellence to those used in the pharmaceutical industry by licensed manufacturers.

The quality policy rests on four principles:-

- *Our definition of quality is conformance to requirements. We will carefully specify the requirements for our suppliers (donors and manufacturers), our processes (collection, laboratory, distribution) and our product users.*
- *We will improve and maintain quality through a planned system of quality assurance management which will cover every part of our activity. Audit and review will be an essential part of this system.*
- *We will ensure that under the guidance of trained QA management each member of staff recognises their responsibility for quality improvement.*
- *We will ensure that education and training of staff are sufficient to maintain and improve quality.*

Dr H H Gunson
National Director
April 1990

Fig. 11·1 The NBTS Quality Policy Statement.

Fig. 11·2 Examples of succesful national posters.

RTCs were able to identify best practices and often introduced them in their own centres; in this manner a standard format for some procedures was gradually achieved.

The first edition of the Guidelines for the UK Blood Transfusion Services, the *Red Book*, was published in 1990. This provided specifications for a comprehensive range of products, procedures in blood transfusion practice and included sections on quality assurance, blood collection, processing, testing, distribution and plasma fractionation. The NBTS accepted the contents and when writing policy statements for their hospital customers RTCs were able to state that they operated in accordance with the guidelines.

Arguably, the action taken by the National Directorate with respect to quality assurance was its most important success.

Dr Moore, with his previous experience in quality assurance, brought leadership and gained the respect of the Service. It is to his credit that when he left the National Directorate only three RTCs had failed to obtain the Manufacturer's "Specials" Licence.

Blood-donor retention and recruitment

Maintenance of the blood supply was a major priority and the National Directorate was instrumental in measuring the need and setting a strategy for the NBTS. The POD was established in 1989. This was chaired by Dr Moore and membership consisted of three medical consultants and three donor-service managers, with observers from Scotland and Northern Ireland. The Committee replaced the former DHSS National Publicity Sub-committee and as such advised DHSS on the provision of national publicity material in the form of posters, leaflets and videos. An early move was to secure an 0800 telephone number for the NBTS. The cost of national publicity was met from a central budget held by the DHSS. Usually, three major campaigns were mounted each year. The first was in the Spring to cover Easter and the Spring Bank Holidays which often followed each other closely. The second was during the Summer when many donors took holidays and the third was immediately before Christmas. The national campaigns were supplemented by local publicity to correct deficiencies within a region. During the 4 years that this Committee was in existence several million pounds were allocated from the central budget. Examples of successful posters are shown in Fig. 11·2.

It was important, also, to take a long-term view of donor recruitment and retention. Research International Ltd (RIL) were engaged in September 1989 to carry out a survey of donors and the general population to answer the following two questions:

- to advise how all donors may be encouraged to continue giving blood regularly;
- to advise how people may be encouraged in the most

efficient and cost-effective way to become blood and plasma donors.

This was a major study of donor motivation and the results were reported by Moore (1991).

One significant finding in RIL's report, presented in March 1990, was that 27% of the general public interviewed had given blood at some time in the past. As current donor panels comprised only 4–5% of the population it was clear that the Service was not efficient at retaining donors. Proposals for a communication strategy were drawn up and circulated to RTCs in July 1990. The recommended strategy was considered under three headings:

- *what* we ought to be saying (the message, in words and actions);
- *who* we ought to be saying it to (the target);
- *how* we ought to be saying it (the tools).[4]

The message

Conveying the need for blood was the primary message which had to be given, i.e. blood was a national resource which must be maintained, that there was an increasing requirement as medical science progressed and that it was dependent upon a partnership between members of the public and the NBTS. Because blood can be stored for only a short time, the need, on every day of the year, must be communicated so strongly that it overcomes the reluctance of a person to donate. Other factors to be taken into account were, allaying anxiety of potential donors and projection of the identity and image of the NBTS as professional and caring.

The target

The main targets for the message were current donors, lapsing and lapsed donors, willing and non-willing persons who are not yet donors. Action taken might have a knock-on effect; thus an improved response of donors could increase the retention of lapsing donors and action taken to remotivate lapsed donors could help to recruit new donors.

The tools

There were several ways in which communications could be made with donors:

- *for current, lapsed and potential donors* — through the media, advertising and by word of mouth or contact through friends and families;
- *for current and lapsing donors* — through experience at sessions, e.g. the attitude of staff, by distribution of information leaflets and by direct communication by mail or telephone.

[4] Extract from RIL report, March 1990.

RTCs were asked to take steps to improve the experience of donors at blood-collection sessions, to monitor the situation and to provide a comprehensive series of leaflets at sessions displayed in an attractive dispenser. Within 3 months all but two RTCs had responded with a timetable for introducing the communication strategy and some had begun to implement the proposals.

The National Directorate deliberately encouraged RTCs to run their own local campaigns in order to increase the feeling of local ownership, to reflect local donor attitudes and to meet local service needs. The role of the Directorate was strategic and facilitative. This approach was successful in maintaining the donor base and enabled the National Directorate to act as a focal point for national media interest. During this period, the national media were encouragingly positive and helpful with respect to donor recruitment.

Liaison with BPL—the plasma supply

In 1988 only 338 tonnes (338,000 litres) were supplied out of a target of 450 tonnes (Fig. 8·5). Moreover, the quantity supplied differed between RTCs; although the average rate for 1988 was 6·77 tonnes per million of the regional populations, the range was from 4·35 to 8·48 tonnes per million. Whilst this deficiency was not critical at that time due to the commissioning of the new factory and the consequent lack of increased fractionation it was important that targets were reached in the next few years.

A target of 8·82 tonnes per million of the population was set by the National Directorate and the aim was to achieve this level by 1990. It can be seen from Fig. 8·5 that this was accomplished. Two events assisted in increasing the plasma supply:

- Mr Graham Hart wrote to Regional General Managers stressing the need to give priority to plasma production at RTCs so that targets set by the National Directorate could be met;
- cross-accounting for plasma and plasma products was introduced in April 1989.

Transfer prices of £35/kg for recovered plasma, £60/kg for apheresed plasma and £80/kg for specific antibody plasmas were agreed with BPL. There was concern that once this funding had been transferred to RHAs it would not be spent on buying BPL products. If this occurred, and with devolvement of income to Districts it was a possibility, the transfer of approximately £14 million/year could result in a serious situation at BPL. Meetings at the DoH did not fully resolve this situation as the ethos of the strategy was that BPL should compete with industry. The price of plasma was a contentious matter between the RTCs and BPL, although it was unaltered for 2 years before rising in line with inflation. It was a major part of product cost initially but increased yields have lessened its impact.

The Gulf War

Working with the Army Blood Supply Depot (ABSD) the National Directorate appealed for additional blood supplies to support the British Armed Forces involved in the Gulf War. From the outbreak of hostilities on 17 January 1991 an additional 4000 donors each day i.e. 14,000 instead of 10,000 were requested. Regular donors were asked to make every effort to attend if called, but not to do so otherwise to conserve stocks for the future. New donors were asked to telephone the freephone number. In fact, during the first day of the appeal 19,000 donations were collected and 20,000 on the following day. In 4 days, 50,000 donations were collected and 60,000 persons had given their names for call up in the future. The National Directorate had harnessed the media to support the appeal and the publicity given in the press, on radio and on television was extensive. A few examples of the headlines in the newspapers are shown in Fig. 11·3. It was an exceptional example of how the public responded to an emergency and it demonstrated also how difficult it was to control such a situation. Indeed, the effect was not confined to this country. The number of donations collected in Adelaide, Australia, a country not involved in the Gulf War, doubled during this period (R. W. Beal, pers. comm.).

The RTCs were overwhelmed with donations for several weeks. The number of donations collected far exceeded those required for the Middle East and by careful management blood stocks were at higher than normal levels until the Autumn of 1991.

The medical assessment of donors

In the UK BTS/NIBSC Guidelines there was a section on the medical assessment of donors. This was included in an attempt to change the disparate action taken by RTCs in the selection of donors. There were, however, a number of illnesses for which decisions were required after publication of the guidelines. The National Directorate, working in conjunction with the Standing Advisory Committee on Donor Selection of the *Red Book*, published a compendium of these illnesses and how they should be handled.

Early in 1993, Dr Gunson received a number of complaints from donors that they had been accepted for blood or plasma donation at one RTC but had been rejected at another.

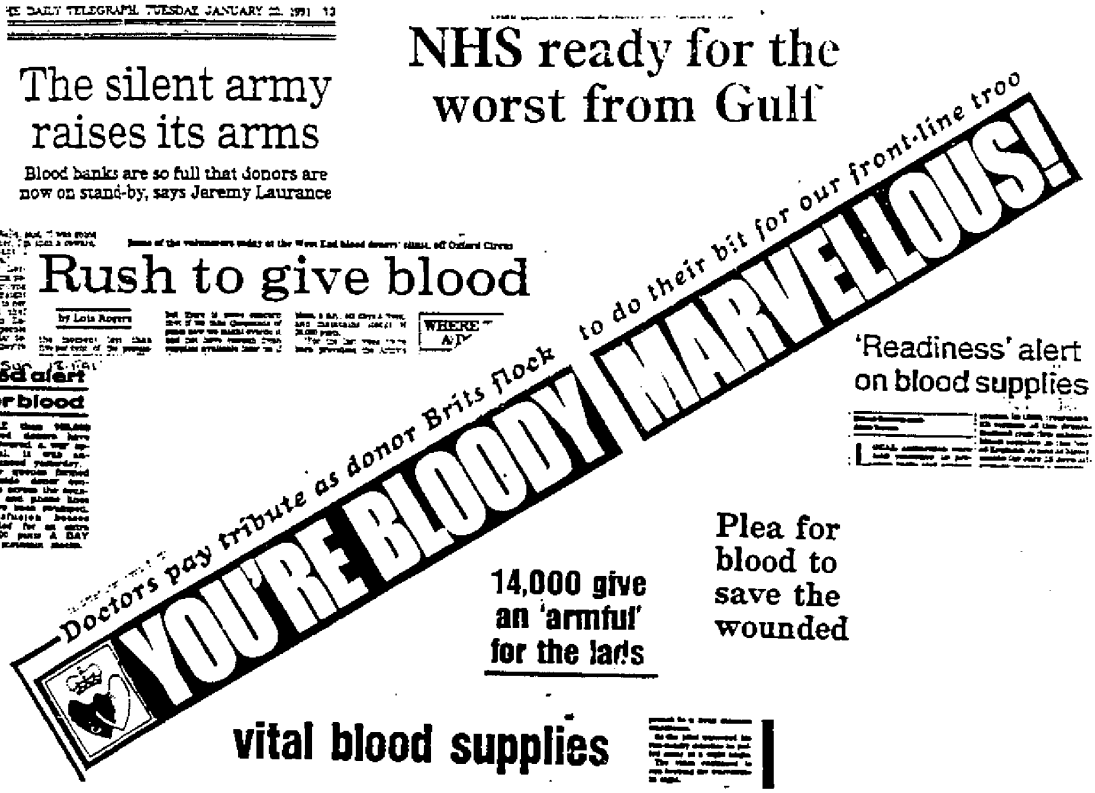

Fig. 11·3 Examples of newspaper headlines at the beginning of the Gulf War.

He set up a working party on the medical assessment of donors, whose work continued after the National Directorate was disbanded.

The demise of the National Directorate

In 1990, the DoH published a White Paper, *Working for Patients*. The result was that, from April 1991, RHAs planned to devolve RTC budgets to Districts. From that date RTCs would have to recover their operating costs through reimbursement for products and services. For this system to be effective, it was necessary for RTCs to work closely with users on the details of their supply requirements across the range of products and services.

To assist RTCs, the National Directorate established a financial sub-group which looked at methods of costing and related matters. Efforts were made to achieve a national costing system which was adopted by most but not all RTCs. The introduction of budget devolution was not standard throughout the country. In some regions cost per item was introduced, in others block contracts were negotiated either for both products and services or for services alone.

Drs Gunson and Moore were concerned at this fragmentation of the Service which had the effect of marginalizing the National Directorate. The lack of executive authority to implement national strategies was a major disadvantage. Successful initiatives, such as quality assurance and the MIS, could only be taken so far without a national strategy for capital and revenue investment. Agreement for such expenditure had to be given by 14 regions. With the devolution of budgets, users were involved with developments in the NBTS since any extra funds would have to be raised from the price they had to pay for products and services. Although the blood transfusion expenditure was a small percentage of the total hospital budget, increased costs of blood products were not popular with hard-pressed budget holders. Without national management, it was difficult to put forward novel policies that would be acceptable to all RTCs or to define savings which might help to pay for developments.

With the support of the NMC and the majority of the RTDs, although some reluctantly, the advantages of a nationally managed service were put forward to the DoH. Indeed, these had been adequately summarized by the authors of the 1987 management report, viz: "...a nationally managed BTS would provide the most certain method by which organizational change, and hence cost savings, can be achieved. It alone provides the potential to completely and effectively rationalize the blood collection and processing functions; the location of centres in which these tasks are undertaken; and to ensure that supply and demand can be balanced and the requirement for plasma achieved. Furthermore, it offers the best prospect of achieving uniformity, where this is desirable, and co-ordination throughout the BTS."

The request for a nationally managed service was turned down. It has to be recognized that, at that time, DoH policy was directed towards devolution and the creation of a Special Health Authority to manage the NBTS had little appeal.

However, during 1991, CBLA asked the management consultant company, Touche Ross, to recommend options for its future strategy and organization. Because any organizational change at the CBLA would have an effect on the NBTS, the National Directorate commissioned Ernst Young to investigate whether there was a continued role for a central body in the NBTS, and what were the organizational options for any such body. Several options were put forward and these were discussed by RTDs at a meeting held in June 1991. The favoured option was that a National Blood Authority was formed and that it should establish contractual arrangements with RTCs for cellular components and plasma for fractionation.

Events moved quickly. After a meeting of interested parties in July 1991, the DoH issued a consultative document on 19 September. The proposal was to establish a Special Health Authority, the National Blood Authority (NBA), which would replace the National Directorate and the CBLA. RTCs would contract with the NBA for the provision of blood, cellular components and plasma, but would continue to be managed locally.

A technical working party was set up by the DoH to consider how the NBA could operate on a contracting basis. As discussions proceeded it became apparent that it would be difficult for the NBA to intercede between RTCs and their hospitals as it would be too remote a body. For the NBA to contract directly with the hospitals was considered impractical. These considerations, together with the impending changes for RHAs, led to the conclusion that the NBA should directly manage BPL, IBGRL and the RTCs. An announcement was made to this effect by Tom Sackville, Parliamentary Undersecretary of State for Health, on 27 November 1992.

REPRISE

Despite the limited powers of the National Directorate, it was able to harness effectively the talents and resources of the RTCs across a wide range of activities, e.g. quality assurance, blood donor recruitment, the plasma supply, costing and pricing issues and the medical assessment of donors. That so much was achieved in the short time it existed is a testament to the quality of the advice and the cooperation of the RTCs.

The National Directorate guided the NBTS at a time of rapid change within the wider NHS, as the reforms of the NHS and Community Care Act led to Trusts and Health Authorities developing new management and financial structures of their own. Support was given by the Directorate to RTC management with more rigorous insights into matters essential to their business. More importantly, perhaps, it

helped to establish that the NBTS code of ethics towards its donors and patients need not be prejudiced by a more business-like approach to management.

The National Directorate encouraged the growth of co-operative working in many different disciplines and at many different levels, provided valuable cross-fertilization of ideas and gave meaning to the term 'national' in the NBTS. It provided an essential foundation and developed a common aethos in preparation for changes which were to follow.

