Penrose Inquiry

Donations in prisons and donors with jaundice

Statement (2) by Professor Juhani Leikola

1. Finland started testing blood donors for Australia-antigen (Au-antigen or HBsAg) in 1970.

2. I commenced at the Finnish Red Cross Blood Transfusion Service (FRC BTS) in February 1975. The decision to stop blood collection in prisons was made before that time, so I have no personal recollections of the argumentation behind that decision. Something can be deduced from the documents available to me now and from interviews of some people working at the FRC BTS at that time.

3. The then Director of BTS, Professor Nevanlinna, wrote in 1955 a small text book on blood transfusion. It was intended for doctors, medical students and nurses. In the fourth edition (1972) of the book, where the foreword was signed in 1971, there are two pages on "serum-hepatitis". There are some sentences that are relevant from the point of avoidance of transfusion hepatitis (unofficial translations here are written *in italics*). *In our country research is going on currently on the epidemiology of Au-antigen and serumhepatitis* (page 153). *The screening for Au-antigen must be regarded as a major step for the safety of blood transfusion therapy. On the other hand, only about one quarter or one third at the most of the carriers of the hepatitis virus can be identified* (page 154).

4. In the early 1970's FRC BTS started a study on carriers of hepatitis virus. The study resulted in a doctoral thesis in 1974 (T. Helske: Carriers of Hepatitis B Antigen and Transfusion Hepatitis in Finland. Scandinavian Journal of Haematology, suppl. 22, pp. 1-65, 1974). Altogether 315,000 blood donations were tested with overall prevalence of 0.15 to 0.16 per cent HBsAg positives. The prevalence in prisoners was 0.7 to 1.0 per cent.

5. There are some statements concerning prisoners: "Illicit use of drugs no doubt accounts for a part of the acute cases of hepatitis type B and consequently for a few chronic antigenaemia with chronic hepatitis. – Together with tattooings this might at least to some extent explain the high prevalence of carriers among prisoners" (page 16). – "In Finland, prisoners are indisputably a risk group in which a high HBAg carrier rate appears to be associated with a high risk of acute and chronic hepatitis" (page 50).

6. It is likely that it was decided in 1974 to stop the mobile collections in prisons as of beginning of 1975, based on the findings of Dr. Helske. The main reason was to avoid transmission of hepatitis B virus but it was considered that there might be other, unknown viruses as well.

7. The Head of the Administration for Finnish Penal Institutions contacted the doctor responsible for blood collections (Doctor, later Professor Jukka Koistinen) and demanded explanations for this policy change. Professor Koistinen told me that the Head understood it after having seen the prevalence figures. However, afterwards there were a few requests from the Interior Ministry to recommence blood donations. I remember replying at least once during

my tenure as Director to the Parliamentary Commissioner when an inmate had complained for denial from blood donation. My explanation was presumably satisfactory since I did not hear from the case since.

8. Information on international practice in 1970's and 1980's is difficult to obtain. To the best of my knowledge, nothing was written on this aspect of donor selection in any international guidelines before 1983. It may have been discussed unofficially outside the meetings but I do not remember having participated in any talks of that kind, save the French case.

9. Professor van Aken informed me that blood collections by the Netherlands Red Cross Blood Transfusion Service never took place in prisons.

10. In France, the Tainted Blood Affair was much publicized in the media in the beginning of the 1990's. A doctoral thesis by Caroline Bay (Histoire de la transfusion. Tome 2. Le XX siècle, 1995) was available now for me. It contains a detailed description of the process. *20 June 1983. The Director General of Health, Dr. Jaques Roux, recommends to the transfusion centres to exclude donors at risk. The circular is not sent to the administration of penal institutes and has not the hoped-for effect on the responsible personnel of French blood transfusion* (page 130). *24 February 1984. La Société Nationale de Transfusion Sanguine signals the danger of collection in prisons* (page 131). *16 January 1985. Jaques Roux reconfirms the recommendations of the circular of 20 June 1983 and underlines that it must be applied immediately. This new circular does still not have any reference concerning collection in prisons* (page 132). *The report of IGAS (Inspection Général des Affairs Sociales) "Blood transfusion and AIDS in 1985", published in September 1991, underlines the disastrous effects by certain collection habits in Paris public and still more within penal institutions: the blood donations in prisons (representing 0.37 per cent of total donations) were responsible in 1985 for 25,4 per cent of the contaminations due to transfusion* (page 139). The report of IGAS is not available to me but the title of the report and the context refers to HIV contaminations and not hepatitis. The text does not indicate whether the patients with infection were haemophiliacs or non-haemophilia patients.

11. I remember having met Doctor Michel Garretta, the then Director of the National Blood Transfusion Centre in Paris, several times in the late 1980's. The AIDS issue was much discussed (there was not yet any legal action). I wondered to him why the French continued blood collections in prison when we in Finland had stopped it more than ten years earlier. He said that he had turned to the Ministry of Health (probably Dr. Roux) urging the Ministry to give guidelines precluding blood donation in prisons. He did not specify when he would have had this action. According to him, the Minister of Interior, a politically influential person, had resisted such a change of policy and had let the Ministry of Health know his opinion.

12. Until the Australia-antigen or HBsAg was found to be associated with "serumhepatitis", the main avoidable risks due to transfusion were thought to derive from blood group incompatibility, bacterial contamination of the blood vessel or transmission of syphilis. Transfusion hepatitis was seen as unavoidable albeit rare complication, mostly prevented by not using pooled, unheated blood and plasma products. After laboratory methods were developed to detect HBsAg it became soon clear that part of the cases of transfusion hepatitis could be prevented by systematic screening of donors. After numerous epidemiological studies it was also clear that not all transfusion hepatitis transmissions could be avoided, either due to lack

of sensitivity of HBsAg tests or existence of another virus or viruses. Examples of those studies have been discussed by Helske (p 9 and p. 46).

13. The blood donation sessions in prisons were advantageous is some respects. For the donor organisers they were convenient since assistance was always found for various arrangements, the inmates came punctually when appointment times were given and the wardens, like police force or military personnel, were known to be diligent blood donors. During holiday seasons these sessions could produce a supplement to the blood supply. The moral side for the sentenced was that blood donation was one way of paying back to the society for their crimes or other misdeeds. The inmates were appreciated as human beings and voluntary, unpaid blood donations could be seen as a small step in the process of reintegration into the society outside prisons.

14. On the other hand, it was conceivable that the donors might not be totally frank with their replies to the questions related to health matters or e.g. past use of intravenous drugs. The peer pressure was and is known to be heavy under those circumstances. However, I believe many Europeans were thinking at the time that the drug problem is much smaller in European penal institutions as compared with the American ones. Most of the research on hepatitis B was done in the United States. Therefore I think the investigators were readily willing to accept that the denial of using intravenous drugs was true.

15. Secondly, in the 1970's it was well established that the occurrence of hepatitis virus was more common in prisoners as compared to the population at large. Wallace et al. (1972) assumed that "the high incidence may be related to social habits and hygiene." This assumption was more or less copied to the later report by Barr et al. 1981. At the time when Wallace et al. wrote their report (probably 1971) knowledge on the routes of infection was not as clear as it was later. Hepatitis A virus, in contrast to hepatitis B virus, is water-borne and an infection could be related to poor hygiene. Other, more realistic thoughts about the aetiology of hepatitis B were expressed by Dr. Helske in 1974 (see 5.).

16. Taking into account the above considerations and the fact that the donations in Scottish prisons represented only a small fraction of the total blood supply, in my opinion it would have been reasonable to reconsider in Scotland in the latter part of the 1970's the policy of arranging blood donation sessions in penal institutions.

17. Of the policy of acceptance of donors with a history of jaundice I have no information except for Finland.

18. In the third edition of Nevanlinna's textbook (1967) it is written: *The incubation time [of serumhepatitis] is notably long, on average 70 days, from one month to even half a year, which of course makes the clarification of the aetiology more difficult* (page 147). Consequently, *if the donor has been ill with infectious jaundice, his blood must not be given before at least three years have lapsed* (page 101). The wording of the latter sentence remained unchanged in the 4th and 5th edition of the book (1972 and 1980, respectively). I do not know why the period of three years was selected as quarantine time. It might just reflect the prudent attitude of Professor Nevanlinna.

19. The donors were given a simple question: *Have you or have you had jaundice (liver inflammation, hepatitis)?* I have not had access to documents of the time in question that would show the attitude towards other or unknown causes of past jaundice. I believe at least a his-

tory of having had jaundice as a baby did not preclude donation. I believe also that the donor would have been referred to a doctor if he had a history of jaundice of unknown cause in the adulthood. Depending on clinical evaluation the donor may have been accepted or rejected for a period of three years or permanently.

20. On the basis of what was known at the time, in my opinion it was a reasonable policy to accept otherwise healthy individuals (after a quarantine time) but who gave a history of jaundice. In the past it was natural to think that the cause of jaundice would have been hepatitis A (after recovery blood is not infectious) since hepatitis B would have been detected in the laboratory. However, once it became clear by mid 1970's (reviewed in 1974 by Helske, page 9) that after clinical hepatitis B the patient may become chronic carrier of the virus with HBsAg levels below detection limits and that there could be another hepatitis virus causing first jaundice and chronic carrier state without clinical symptoms, the policy could have been reconsidered. However, I think that precluding all donors giving a history of jaundice would not have had major effect on the blood transfusion safety.

21. On the basis what we know now, and after the much changed attitude toward blood transfusion safety and risks due to infectious agents, it would have been reasonable to decide that donors with history of jaundice were not eligible for blood donation. However, it must be remembered that information given by the donors is not necessarily totally accurate. A rigorous prohibition to give blood could have lead especially regular donors to state "no" instead of "yes" to that particular question. In addition, the donor history that he gives himself is not fool-proof.

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Juhani Leikola