

JOINT COMMITTEE ON VACCINATION AND IMMUNISATION
 MINUTES OF MEETING HELD ON 3 NOVEMBER 1981

PRESENT: Dr J Badenoch (Chairman)
 Professor F S W Brimblecombe
 Dr M F H Bush
 Dr D K M Citron
 Professor G W A Dick
 Professor J A Dudgeon
 Professor R W Gilliatt
 Professor A A Glynn
 Professor N R Grist
 Professor P Grob
 Professor H P Lambert
 Dr J Noble
 Dr T M Pollock
 Dr D Reid
 Dr J W G Smith
 Sir Charles Stuart-Harris
 Dr W O Williams

Secretariat

Mr A W Jones Secretary
 Miss E McCarthy
 Dr J Barnes }
 Dr J Steadman } Medical Secretaries

Also Present

Dr J M S Dixon - Chairman, Canadian National Advisory Committee
 on Immunisation
 Dr E M Ross - National Childhood Encephalopathy Study
 (for item 5(d))
 Sir Robert Williams - Chairman of Advisory Group on Hepatitis
 (for item 10)

Dr T Geffen	}	DESS
Dr R D Andrews		
Dr J Holgate		
Dr R Alderslade		
Mrs D Patey		
Miss M E Stuart		

Dr A B Young	Scottish Home and Health Department
Dr W C D Lovett	Welsh Office
Dr R Logan	Northern Ireland
Dr D Bartley	Health Education Council
Brigadier N W J England	Ministry of Defence

1. Apologies for absence

Apologies for absence were received from Professor Hull, Professor Knowelden, Dr Schild, Dr Small, Dr Whitehead and Dr Harris (DESS).

2. The Chairman introduced and welcomed Brigadier England, Miss Stuart and Dr Dixon, Chairman of the Canadian National Advisory Committee on Immunisation. He also welcomed Dr Ross who was attending for the item on Whooping Cough. As this was Dr R D Andrews' last attendance before his retirement, the Chairman expressed to him the thanks of the Committee for all the help and advice he had given to them.

Location of Secretariat

JCVI(81)9

The Chairman drew attention of members to this paper and pointed out that the locations referred to were all in Alexander Fleming House.

3. Minutes of meeting held on 9 April 1981

Item 3(a) penultimate line:- The statement that "OPV should be discarded not later than 3 to 4 hours after opening the container" was vague and it would be better to say that it should be discarded at the end of the vaccinating session.

Item 5(b) - Professor Gilliatt said that "crude incidence" should replace "attributable risk rate" in the penultimate line of the minute.

Item 12 - Professor Dick, referring to the penultimate and last line of the first paragraph, said that he disagreed with the statement that immunity was slow to develop when IPV was used; in fact demonstrable antibody occurred within one week of the first dose.

Subject to the above amendments the minutes were then agreed and signed as a correct record of the last meeting.

4. Matters arising

a. Item 10 Revised Memorandum on Immunisation against Infectious Diseases

Dr Steadman said that early in the New Year it was hoped to publish the introduction, together with sections dealing with techniques of vaccination, schedules of vaccination and immunisation, pertussis, BCG and rubella. These would be followed by the sections on measles, diphtheria, tetanus and poliomyelitis.

b. Item 12 - Supply of Oral Polio vaccine

JCVI(81)10

Dr Barnes said that the first section of the paper gave the monthly uptake of oral poliovaccine for the first half of the year. This was followed by the supplies of vaccine which were immediately available to the Department, and the final part of the paper quoted supplies of vaccine which were in the pipeline. He said that although the present situation appeared to be satisfactory it could be adversely affected by increased demands caused by small outbreaks of poliomyelitis and failures of batches of vaccine.

5. WHOOPING COUGH

a. Publication of the Whooping Cough Report

The Chairman referred to the publication of the Whooping Cough Report.

Members had no comments.

b. Contra-indications to Whooping Cough Vaccine

JCVI(81)11

Dr Steadman said that there had been only one change in the contra-indications which were seen by the Committee at the last meeting and that was in (ii)(a) where a general reaction was qualified by the wording "including a neurological reaction". The change was accepted.

c. Whooping Cough Vaccination Campaign

Dr Geffen said that the Minister of Health had accepted that health authorities should be allowed to conduct local campaigns at a time suitable to themselves with encouragement from the Department. The campaigns would be aimed to increase the uptake only of whooping cough vaccination although there could well be a spin-off effect on other forms of vaccination. The Department would be writing to health authorities within the next two months. There had been some criticism at the delay but it had been realised at the outset that a campaign mounted in the summer would not have prevented any possible upsurge of whooping cough this winter. The Chairman reminded members that the next upsurge of whooping cough might not be as benign as the last. Members suggested that in the campaign stress should be placed upon inner city areas and conurbations and that all health authorities should be encouraged to pull their weight. Ideally, as in the rubella campaign, a named person should be made responsible for the execution of the campaign. It was pointed out that the imminent restructuring of the NHS made monitoring of the health authorities with regard to the campaign more difficult, and that the Regional Health Authorities would need to exercise a supervising role. The tactical importance of Community Health Councils in such campaigns was emphasised and it was suggested that their aid should be enlisted. The Department would liaise with the Health Education Council over a poster for the campaign. Sir Charles Stuart-Harris observed that a 40% uptake of the vaccine ensured continuance of the disease; the uptake rate had to be improved.

d. Comments on Professor Stewart's letter

JCVI(81)12A

The Chairman said that he had invited Professor Stewart to attend the meeting but he had been unable to do so. Since the majority of the comments in the letter concerned the National Childhood Encephalopathy Study, Dr Ross had agreed to attend. The Chairman said that the Committee on Safety of Medicines had been kept in the picture and he would be replying to Professor Stewart after the meeting. He then invited Dr Ross to comment on the letter.

Commenting on point 1, Dr Ross said that there was no other practical method other than a case-control study to arrive at a relative risk of brain damage arising from vaccination; from this an attributable risk had been derived. Cases of serious neurological disease of unclear aetiology had been carefully defined in the study. It would not have been possible to have spread the net wider to include simple febrile convulsions as the numbers involved would be extremely large. He pointed out that other studies, such as the PHLS

North West Thames Study, were looking at the natural history of such brief seizures. Professor Gilliatt observed that in the Meade Panel Study one-third of children with brain damage were not admitted to hospital. In both the Meade and Dudgeon studies there were examples of children who had a fit soon after vaccination which was followed by a fit at a later time and then followed by cessation of development. It was very difficult to assess this as a random event. Professor Dudgeon said that if minor conditions had been included in the NCES the professions concerned would not have been able to co-operate in the study as they did.

Professor Brimblecombe observed that progressive fits in the absence of vaccination were often seen. Dr Smith said that the possibility of a follow-up of children with minor fits was being explored by the MRC.

The Chairman concluded that much was not known about the natural history of brain damage in the young.

With regard to point 3 Dr Ross said that there were great difficulties in assessment of risks, which was why all age groups had been included.

Dr Smith pointed out that there was no data and no study method to support the figures which Professor Stewart quoted. Dr Alderslade said that estimates of attributable risk should be viewed with considerable circumspection and those estimates had wide confidence limits. It was pointed out that page 120 of the Whooping Cough Report gave the relative risk of all the children in the NCES whereas page 121 gave a similar relative risk for children aged 2 - 12 months.

With regard to point 4 Dr Ross said that this statement was erroneous. The study had co-operated with Professor Emery in his survey of Sudden Infant Death Syndrome which covered a large part of England. Death certificates had been examined, cases had been looked for, home visits had been made and parents had been questioned on the history of immunisation.

The Chairman, speaking to point 5, said that the possibility as to whether or not long term pulmonary complications now followed whooping cough was unknown. Professor Lambert said that his case control study at St George's was going well and now included 1,000 children, 300 of whom had had pertussis and 700 as controls. Dr Pollock observed that the complications seen in the 1974/75 outbreak were of the same type as those seen in the 1978/79 outbreak when there were far fewer hospital admissions.

The Chairman said that point 6 applied to any vaccine and Dr Smith observed that there was variability in the pharmacologically active principles in any vaccine.

Dr Ross said it was hoped to carry out a further follow-up of the NCES material if research support could be obtained. He said that there was a great amount of useful data which had not yet been analysed.

The meeting then considered Professor Stewart's paper on deaths from whooping cough in Great Britain (JCVI(81)12). Dr Williams, referring to page 5 of the paper, said that deaths from whooping cough tended to be under-notified; he knew of three such instances in West Glamorgan during 1978 and 1979. On the other hand, at times of outbreaks of whooping cough the disease tended to be over-notified; this had the effect of lowering the fatality ratio. However, the fall in fatality ratio could not be explained on medical grounds alone. Dr Pollock said that the claim that only 7 bacteriologically confirmed cases were found out of 198 deaths was not correct; he himself knew of at least 13. The fatality ratio and number of deaths had not fallen for children under 6 weeks old compared with children aged between 6 weeks and 6 months. Dr Bush said that he would have expected the case fatality ratio to fall. Dr Steadman explained that the ratio had fallen during the 1940s and early 1950s but between 1953 and 1976 it had remained steady at about 1 death per 1,000 notifications and had fallen abruptly during the recent epidemic. Professor Brimblecombe said that this data emphasised the danger of whooping cough to infants under the age of 6 weeks.

The Chairman concluded that it would probably not be wise for the Committee to make a formal reply to this paper. (Members also thought that controversial replies to correspondence to the medical journals might not add support to the whooping cough vaccination campaign.) It was agreed that the Chairman should write to Professor Stewart to say that the JCVI had considered the points in his letter and make some general statement about them.

6. RUBELLA

a. Meeting of the Rubella Vaccination Sub-Committee held on 15 September 1981
Professor Dudgeon, said that the incidence of rubella in England and Wales was low in 1980 and had remained low in 1981. There was however an increase in the number of terminations of pregnancy following inadvertent rubella vaccination. The National Congenital Rubella Surveillance Programme showed

a decrease in incidence of rubella in children of mothers born after 1956. He considered that this surveillance programme should continue. No serious neurological reactions were included in the adverse reactions to rubella vaccine reported in the past year. Ministers had not accepted the Committee's recommendation that sero-testing of adult women should be dispensed with if the doctor was satisfied that adequate contraceptive precautions were being taken. Dr Geffen and Dr Steadman explained that the reasons for this decision were mainly financial. Sir Charles Stuart-Harris said that as far as he could remember this was the first occasion on which Ministers had rejected the advice of the JCVI. It was agreed that Ministers should be asked for more information about the reasons for their decision.

In connection with the National Rubella Vaccination and Pregnancy Study Professor Dudgeon said a letter issued by the Royal College (RCOG) JCVI(81)21 implied that Almevax was more teratogenic than Cendevax. He would take steps to attempt to correct this view.

The Chairman invited Dr Dixon to describe the rubella vaccination programme in Canada. Dr Dixon said that policy varied from state to state, some adopting the US method of vaccinating in the second year of life and others the UK selective technique. He said there was some evidence that in states which vaccinated young children epidemics of rubella, with concomitant rises in cases of congenital rubella syndrome, did not occur. Sir Charles Stuart-Harris was unhappy about the UK selective programme and considered that something should be done to reduce the transmission of virus amongst young children and thus reduce the risk to mothers. There was discussion concerning the length of immunity following vaccination. Dr Pollock described the study in Haringey which showed that although the HI antibody was lost, patients still were positive for rubella under RIA. Professor Banatvala was also conducting a challenge study on vaccinated women at St Thomas's Hospital. It was agreed that rubella vaccination policy should be reviewed at the next meeting of the Rubella Sub-Committee.

b. The CMO/CNO letter which recommended the reduction of the minimum age for rubella vaccination of schoolgirls from 11 to 10 years was noted.

c. Rubella immunity status and post-partum vaccine uptake in pregnant women JCVI(81)13

Dr Steadman said that the Department wished to obtain more information about rubella vaccination in adult females and its effectiveness. He said that we did not have enough information on the extent of screening of antenatal patients and their subsequent post-partum vaccination. It was suggested that all health authorities should be asked to supply information on the numbers of antenatal females who were sero-tested, together with their rubella status and numbers of those where rubella vaccination was given post-partum. Such a step would provide a better idea of the community immunity to rubella and allow performances to be monitored both at a local and at a national level. Members agreed wholeheartedly that an approach should be made to the Steering Group on Health Service Information for such information to be collected.

7. Immunisation Scheduling - Letter from Dr Dale, Chairman of the Immunological and Registration Procedures Sub-Group JCVI(81)14

The Chairman said that the Schedules left considerable scope for modification but he could visualise that practical difficulties could occur. It was agreed that Dr Dale should be advised to seek the advice of the Medical Secretaries on any immunisation computer programme which was considered to be incompatible with JCVI advice.

8. ARVI

a. Adverse Reactions Reported to the CSM JCVI(81)15

Dr Barnes said that the paper summarised the adverse reactions reported to the CSM since the beginning of 1981 which had been considered by ARVI. He pointed out that a substantial proportion of these reactions originated from the North West Thames Study.

b. Report of the ARVI meetings held in June and October 1981

Professor Gilliatt said that at the June meeting the report on measles vaccine had been finalised, and contra-indications to whooping cough vaccine discussed. The Sub-Committee had decided to look at the association between rubella vaccine and Still's disease. It was hoped at a later date to discuss the NCES data on infantile spasms; at the moment figures for age-related controls were not available. The meeting had also discussed the best use of the yellow card system and there was a feeling that more information should be obtained from them. In particular, a system should be devised whereby convulsions or other serious complications could be routinely followed-up.

He mentioned that there might be delay in processing yellow cards of vaccine reactions if there was an excess of reports due to some other particular drug and that means were being sought of avoiding this difficulty. He said that members also questioned whether the CSM computer was programmed with all the information necessary for analysis of reactions.

With regard to the meeting held in October it had been decided to look at arthropathy following rubella vaccination in view of recent papers indicating that rubella virus remained active in joints years after infection. The Sub Committee had decided to prepare a report on influenza; recent work in America indicated that GBS had not been found to be associated with vaccines which lacked the swine flu antigen. It had been decided to form an informal panel of the clinical members of ARVI so that they could be contacted in case advice was needed about recording more difficult reactions.

9. MEASLES

ARVI Report on adverse reactions

JCVI(81)16

After Professor Gilliatt confirmed that there was little change from the draft seen by the Joint Committee in April, the paper was accepted.

Dr Dixon announced that Canada hoped to achieve the same level of eradication as had been accomplished in the United States: at present their incidence rate was 10 times higher than that in the USA, despite a vaccine uptake rate of nearly 90%.

10. ADVISORY GROUP ON HEPATITIS

The Chairman welcomed Sir Robert Williams to the meeting and invited him to speak to this subject.

a. Report on Hepatitis Vaccine

JCVI(81)17

Sir Robert said that the US MSD vaccine was derived from antigenic material obtained from the plasma of carriers. Similar vaccines were being investigated and tested elsewhere and other methods of obtaining antigenic material or purifying it were being tested. He emphasised that the testing of the vaccine for efficiency and safety depended upon the use of chimpanzees. At the last meeting of the AGH a list of indications for use of the vaccine had been drawn up and he sought the guidance of the Joint Committee on how best this list could be agreed. It was suggested that antibody tests be carried out before vaccination, and that active immunisation be given in addition to

passive immunisation of infants born to carrier mothers and to consorts of patients with acute hepatitis B.

Dr Dixon said that the vaccine was expected to be licenced in the USA shortly and the product would become available in May or June 1982. Those likely to be offered vaccination were:

- i. health laboratory staff exposed to human blood;
- ii. patients on dialysis or patients receiving regular doses of plasma products, such as haemophiliacs;
- iii. active homosexual males with more than one partner;
- iv. regular needle users;
- v. populations with a high incidence of hepatitis B surface antigen (20% prevalence of individuals with hepatitis B markers with a sero conversion rate of 1% a year); and
- vi. staff in institutions for the mentally subnormal.

He concluded by saying that the test for core antigen was preferred to that for surface antigen.

The Chairman suggested that a Joint Working Group be set up between the Joint Committee and the Advisory Group on Hepatitis to consider the priorities of categories for vaccination in this country. This was agreed. Sir Robert said that there was a recommendation for passive immunisation of infants born to carrier females, especially those of Chinese origin. The Chairman suggested that this matter be referred to the Joint Advisory Group for consideration and this was agreed.

11. Standardisation of Information in Data Sheets JCVI(81)18

Dr Smith thought that efforts should be made to minimise inconsistency of advice on data sheets.

- i. With regard to generic data sheets, he suggested that the licensing authority write to individual members of the JCVI via the Medical Secretariat of the Joint Committee in order to obtain a consensus view.

- ii. Ideally, specific product data sheets should be reconciled with JCVI advice. The licensing authority should be asked to take account of Joint Committee advice.

Both lines of action were agreed.

12. Testing and monitoring of vaccines in the field JCVI(81)19

Dr Pollock said that special problems arose with vaccines and it might be necessary to look at each individual vaccine in turn. Professor Gilliatt said that this paper had been considered by ARVI but he felt it was beyond the remit of that Committee. Dr Smith realised that there was great difficulty in getting this sort of work done. The MRC CVDIP had advised on the need for the review of various vaccines but that he had reservations about the wisdom of setting up yet another Committee. The Chairman considered that members would need to give further thought to this problem and he asked the Department to prepare a paper for the next meeting.

13. Vaccination Seminar 13-15 May 1981 JCVI(81)20

The Report was noted.

14. Vaccination of NHS Staff JCVI(81)21

Mr Jones said that this paper had been withdrawn as the comments from health authorities on the memorandum had only just been received and were not yet ready for the Committee to consider.

15. Annual CMO letter on Influenza

This was noted.

16. Any other business

a. Dr Bartlett drew attention to the new HEC leaflet on Immunisation.

b. Dr Dixon referred to meetings of his own Committee which had, among other things, considered a national policy on Hepatitis B immunisation, conducted a review on the indications for giving pneumococcal vaccine to persons over the age of 60, and reviewed the policy on rubella vaccination. He had also attended a meeting of the US ACIP which had considered hepatitis B vaccine, was considering whether a basic course of oral poliovaccine of just 2 doses, was satisfactory and had advised that inactivated polio vaccine (IPV) should be offered to the unprotected unvaccinated contacts of recently vaccinated children. A trial had been carried out on subjects given human

diploid cell rabies vaccine either intradermally or subcutaneously in doses of 0.1 ml. In both cases a satisfactory antibody response had been achieved but it was recommended that when the vaccine was given by this method, antibody tests should be carried out subsequently. The Chairman thanked Dr Dixon warmly for his contributions to the meeting.

17. Date of next meeting

This had now been fixed for 22 April 1982. Provisional arrangements were also made for a meeting on 4 November 1982.