JOINT WORKING PARTY OF THE BRITISH PAEDIATRIC ASSOCIATION AND THE JOINT COMMITTEE ON VACCINATION AND IMMUNISATION LIAISON GROUP

Note of a meeting held on Thursday 26 June 1986

Present:	Sir John Badenoch (Chairman)	- JCVI
	Professor A G M Campbell	- BPA
	Professor R.W Gilliatt	- JCVI
	Professor P R Grob	- JCVI
	Professor J K Lloyd	- JCVI
	Professor E R Moxon	- BPA
	Dr Euan Ross	- BPA
Also present:	Dr J Barnes	- DHSS
	Dr J R H Berrie	- DHSS
	Mr L T Wilson	- DHSS

1. Apologies for absence

Apologies for absence were received from Professor D Hull. The Chairman welcomed Professor June Lloyd and Professor E R Moxon.

2. Note of the meeting held on 30 January 1986

This note was agreed.

3. Matters arising

The Chairman said that all matters arising would be taken as agenda items. He stressed the desirability of producing firm recommendations on certain issues at this meeting; these recommendations could be confirmed at the next meeting of the Group in time for the JCVI meeting in November 1986.

4. Immunisation of premature infants - Paper - Immunisation of pre-term infants. Lingam et al & others, BMJ, vol.292, pages 1183-1185. BPA/JCVI(86)8

stated that a consensus was being reached that premature infants should be immunised in accordance with the routine schedule commencing at the third month after birth. An immune response did occur, and

even if less than that in full-term infants, the second dose should elicit a good response. This view was agreed.

5. Contra-indications to pertussis vaccination

5.1 - Role of immunisation advisory clinics. Paper by Lingam et al (and letters from Oxford and Glasgow), BMJ, vol. 292, pages 937-940 BPA/JCVI(86)9

There was discussion on this paper which reflected the success and the limitation of such clinics. It was agreed that paediatricians in District Health Authorities should be encouraged to develop such clinics on a wider scale. The Chairman emphasised the educative role of these clinics for peripheral workers and reiterated the importance of a named person in each health authority district who had responsibility for immunisation and who was accountable to the District Medical Officer.

5.2 - Paper - History of convulsions and the use of pertussis vaccine, Harrison C Stetler et al, J. of Paediatrics 1985, vol. 107, pages 175-179 BPA/JCVI(86)10

Professor Gilliatt introduced this paper which he said was mentioned at the previous meeting. pointed out that whooping cough was relatively uncommon in the USA and therefore the American arguments for postponing vaccination in children where there was a history of convulsions might not be pertinent in this country. observed that the degree of kinship was not specifically described in this paper.

remarked that a history of febrile convulsions in parents and siblings was significantly associated with the occurrence of febrile convulsions in the children described (Harker - BMJ (1977), vol.2, pages 490-493). Also children reported to the National

Childhood Encephalopathy Study (NCES) with an acute neurological illness were much more likely to have a personal history (22 per cent) or family history, in first degree relatives (21.5 per cent) of convulsions than were control children (1.8 per cent and 8.0 per cent respectively). However, no case child with a personal history of convulsions had received DTP vaccine within seven days and only one with a family history had done so. The same was true with controls. Thus, although children with personal or family histories of convulsions are more susceptible to acute neurological illness than those without, there is no evidence that DTP vaccine-associated neurological conditions in this series occurred through failure to observe these contra-indications. (D Miller et al (1986) - Pertussis vaccine and whooping cough as risk factors in acute neurological illness and death in young children. Proceedings of the 4th International Symposium on Pertussis, Joint IABS/WHO Meeting, Geneva, Switzerland 1984. Biol. Standard, vol 62, pages 389-394).

referred to a paper concerning "Seizures following Childhood Immunisation" by Hirtz, D G., Nelson K B and Ellenberg J H (J. of Pediatrics (1983); vol. 102, pages 14-18). This reported 10 seizures following DPT and 10 following measles vaccination. More than half of these had a personal or immediate family history of febrile convulsions. One of the children had a right focal seizure lasting 6 hours after DPT immunisation and had significant speech deficit on long-term follow-up. No child developed epilepsy, and results in all children with brief seizures were normal on follow-up 7 years later.

observed that there was little or no evidence that convulsions produced permanent damage and asked whether or not children with neurological abnormalities had a worse risk of permanent handicap following vaccination compared with the risk of damage following an attack of whooping cough. said that follow-up of children who had whooping cough in Glamorganshire in 1978/79 revealed three children with previous neurological illness; in two of these, their condition appears to be unaffected by the whooping cough, but the third child was worse.

5.3 Failure to vaccinate against whooping cough - Paper by D Stevens et al. Archives of Diseases in Childhood 1986; vol.61; pages 382-387 BPA/JCVI(86)11

Members noted that the commonest reason for withholding whooping cough vaccine was a personal or family history of convulsions. There was no disagreement to the proposition that the present wording concerning contra-indications to whooping cough vaccine in the DHSS Memorandum, lacked clarity.

5.4 Contra-indications to whooping cough vaccine - Paper prepared by Professor A G M Campbell BPA/JCVI(86)8A

At the Chairman's suggestion this paper was considered in conjunction with the current paragraph concerned with contra-indications to whooping cough vaccination (paragraph 3.5) contained on page 4 of the Memorandum 'Immunisation Against Infectious Disease'.

"3.5.1a It is advisable to postpone vaccination if the child is suffering from any acute febrile illness, particularly respiratory, until fully recovered. (Minor infections without fever or systemic upset are not regarded as a contra-indication)."

It was agreed that this recommendation should be unchanged

"3.5.1b Vaccination should not be carried out in children who have:

(i) a history of any severe or local general reaction (including a neurological reaction) to a preceding dose" It was considered that a definition of a "severe local reaction" was needed.

After discussion Professor Campbell suggested the following text:

"An extensive area of redness and swelling which becomes indurated and involves more than half the antero-lateral aspect of the thigh or half the circumference of the arm. (Subject to the vaccination being carried out in a satisfactory manner). This type of reaction may increase in severity with each subsequent injection."

With regard to general reactions, indicated that certain other types eg. anaphylaxis, general collapse, bronchospasm, laryngeal oedema, prolonged limpness/unresponsiveness and encephalopathy should be added to the "severe" category.

There was discussion concerning the reactions described as moderate in paper especially as to whether or not persistent crying for greater than 3 hours or screaming attacks after 48 hours constituted a possible contra-indication to further vaccination. drew attention to paragraph ii.29 of the Dudgeon Panel Report contained in the Whooping Cough Report of 1981 which stated that "in the epilepsy group there was only one such case in which the parents' description of the persistent

screaming after the first and second injections would fit in with this particular symptom compared with case 18, for example, where the child became restless and cried incessantly. In the encephalopathy group there were 2 cases in which screaming with rigidity was reported".

pointed out that the studies in the North West Thames Region by Pollock et al, and by Cody et al in the United States, suggested that persistent crying and screaming were not followed by permanent handicap. In the ensuing discussion it was noted that there might be little difference between diphtheria, tetanus vaccine and DTP in causing such attacks. It was suggested that it was important not to extend contra-indications too widely and to recommend doctors that if there was doubt, the local immunisation advisory clinic or paediatrician should be consulted. It was also suggested that mild, moderate and severe local and general reactions be defined in the text of the Memorandum which immediately precedes the definition of contra-indications.

"3.5.1b - Vaccination should not be carried out in children who have:

(ii) a history of cerebral irritation or damage in the neonatal period, or who have suffered from fits and convulsions."

It was proposed that the phrase "cerebral irritation" should be deleted and that "damage in the neonatal period" should

be placed in the following section 3.5. c as requiring special consideration (eg the "referral" category). This was agreed.

"3.5.1 c There are certain groups of children in whom whooping cough vaccination is not absolutely contra-indicated but who require special consideration as to its advisability. These groups are:

(i) children whose parents or siblings have a history of idiopathic epilepsy;

(ii) children with developmental delay thought to be due to a neurological defect;

(iii) children with neurological disease.

3.5.2 For these groups of children the risk of vaccination may be higher than in normal children but the effects of whooping cough may be more severe, so that the benefits of vaccination would also be greater. The balance of risk and benefit should be assessed with special care in each individual case."

Apart from adding "damage in the neonatal period" to this list the meeting suggested that doubtful cases should be referred to a special immunisation clinic or paediatrician for assessment with regard to immunisation.

"3.5.3. A personal or family history of allergy has in the past been regarded as a contra-indication to vaccination but there is now a substantial body of medical opinion which no longer considers this to be so. Doctors should however use their own discretion in each individual case."

The meeting agreed that the last sentence should be deleted.

"3.5.4 Even when pertussis vaccine is contra-indicated an infant should be considered for immunisation against diphtheria and tetanus."

It was agreed that this paragraph should stay.

The Chairman asked to prepare a new section on whooping cough for the Memorandum to be ready for consideration at the next meeting of the Working Group.

6. Myths about contra-indications to whooping cough vaccine

1. Paper by Dr Angus Nicoll - contra-indications to measles and whooping cough vaccination reality and mythology. The Practitioner, June 1986, vol 230 pages 593-597 UN-NUMBERED PAPER

   Paper by Professor Campbell - Contra-indication myths BPA/JCVI(86)19A

These papers were discussed together. It was agreed that a summary, prepared with the advice of Dr Nicoll, should be prepared for the DHSS Memorandum.

7. Site of injection

referring to the unconfirmed minutes of the meeting of the JCVI of the 25 April 1986, reported that clearance of the Working Group's previous recommendation by the General Medical Services Committee of the British Medical Association is still awaited. mentioned the need to recommend strongly that jet injectors should not be used for immunisation and this was agreed. The recently reported outbreak of hepatitis B associated with jet injectors (reported in the US Morbidity, Mortality Weekly Return) was considered to reinforce this view.

8. Target for uptake of whooping cough vaccination
Letter from Dr M F H Bush - BPA/JCVI(86)14
Paper - extract from the National Audit Office Report on immunisation BPA/JCVI(86)15

The letter from stressing the constraints to setting a target to pertussis immunisation was considered in conjunction with the observation of the National Audit Office (NAO) Report that no target was set. It was noted that the JCVI might be asked to set a target as had already been done for measles and rubella immunisation. The meeting suggested that a target of over 90 per cent had no intrinsic dangers.

9. Need for training of medical students, postgraduates and other health service staff in immunisation - Paper by the Department BPA/JCVI(86)16

The paper by the Department was considered. The meeting felt that the Memorandum on Immunisation might be made available to students at various points in their training, eg at the appropriate time during the undergraduate study of paediatrics and during vocational training for general practitioners. The Royal Colleges could be asked for their

views on this matter. The Chairman stated that he hoped to address the Chief Medical Officer's Committee on Community Medicine and would be including the training aspect in relation to community physicians. It was agreed that the designation of a responsible person for each district would assist in this field as in others.

10. Sudden Infant Death Syndrome (SIDS)
Paper - Abstract of Dr Angus Nicoll's Paper given to the York meeting of the BPA in May 1986 BPA/JCVI(86)17

Professor Gilliatt quoted from the minutes of the meeting of ARVI held on the 7 February 1986 - "the Sub-Committee discussed two sets of comments on the DHSS paper (received at its previous meeting) calculating the likelihood of a chance association between DPT and the the Sudden Infant Death Syndrome (SIDS). It was not felt that further studies were required at the present, particularly in the light of Dr Fine's paper, which indicated that the DHSS calculations were of the correct order of magnitude in spite of the assumptions which had been made in the course of the calculations. It was also agreed that the whole subject of DPT and SIDS would be reviewed by the Committee when the final report of the American Case Control Study became available."

11. Low uptake rates of vaccination in certain health authorities.
Abstract from the report of the National Audit Office BPA/JCVI(86)18

introduced the abstract from the NAO Report. The uptake of whooping cough and measles vaccination was unsatisfactory nationally and there was wide variation between health authorities.

stated that immunisation performance was now considered in the Departmental Regional Reviews. It was planned to visit some districts to investigate why uptakes were so poor. pointed out that when "responsible officers" were designated they would be accountable. Professor Campbell stressed the need for monitoring within health authorities including the study of the performance of individual practices and the need for the "responsible person" to visit each practice. stated that the "responsible officers" might report to a special JCVI Advisory Group/Sub-Committee and that he would raise this matter at the next meeting of the JCVI.

12. Age limit for whooping cough and measles vaccination:
Report from the JCVI meeting held on the 25 April 1986 BPA/JCVI(86)19

Dr Barnes introduced this topic. It was agreed that it would be appropriate simply to remove a few limiting words from the relevant portion of the advice contained in the sections in the Memorandum concerning these two diseases.

13. Use of adsorbed v. plain pertussis vaccine

reported that in the case of monovalent pertussis vaccine only the plain form was at present licensed; also that when health authorities ordered triple vaccine they needed to specify the adsorbed variety to be sure of getting it. While appreciating the practical problems the meeting recommended the exclusive use of adsorbed monovalent pertussis and adsorbed triple vaccine (when available).

14. <u>Alleged allergy to eggs as a contra-indication to measles vaccine.</u>

The meeting noted that the JCVI had agreed to the group's recommendation that only "exceptionally severe" allergy would be considered as a contra-indication for vaccination against measles and whooping cough.

15. <u>Measles, mumps and rubella vaccine</u> (MMR)
<u>Paper by</u>

spoke to this note emphasising that this was an addition to the existing immunisation programme which would attract little or no extra resources. It was agreed that rubella vaccination of schoolgirls and susceptible adult females should be continued. Dr Ross mentioned that in Sweden the introduction of MMR had resulted in a 15 per cent increase in the uptake as compared with the use of measles vaccination alone. At a recent meeting at Colindale a wide spectrum of views had been expressed; it was hoped that a note of this meeting would be published. agreed that there was some resistance to the introduction of MMR; he considered that Professor Knox's models of the outcome of rubella vaccine had been too pessimistic about the value of adding MMR to our existing programme - had indicated that such an addition might result in a possible increase in the pool of susceptibles and thus arise in the number of cases of congenital rubella, even if the present vaccination of schoolgirls and susceptible adult females continued. He considered, however, and this was generally agreed, that MMR should be introduced at the same time as a big drive to improve the uptake of measles

vaccination. If 85 per cent could be reached, the Chairman emphasised the role of responsible officers in this matter; if uptake was improved the present objections by some authorities would be overcome. The Chairman said that the report of the Colindale meeting would be considered by the Rubella Vaccination Sub-Committee of the JCVI.

16. Consent to immunisation - a Paper by the Department BPA/JCVI(86)20

This paper was introduced by Dr Barnes. The Department's legal advisers have stated that the system of overall signed consent was unacceptable. considered that such rigid advice was only to be expected from a legal source. If signed consent was required at each visit this might act as a disincentive to immunisation.

17. Antibody response and clinical reactions in children given measles vaccine with immunoglobulin - Paper by S Lingam, CL Miller, Marian Clarke and Jane Pateman BMJ 1986; vol 292; pages 1044 and 1045 BPA/JCVI(86)21

The said that the question of the use of immunoglobulin in children with a personal family history of convulsions was considered at the last meeting of the Measles Sub-Committee and that the JCVI had recommended that this subject be discussed by the Joint/BPA Advisory Group. and others were unconvinced by the arguments in the paper by Lingam et al concerning the use of immunoglobulin in these circumstances. The immunoglobulin had to be specially ordered and the whole concept was a disincentive to parents. The Chairman undertook to take these observations to the next meeting of the JCVI.

18. Any other business

18.1 mentioned the discussion at the February 1985 meeting of ARVI on the use of inactivated poliovaccine for the siblings of immunosuppressed children. offered to produce a paper on this subject, which he considered was a sound idea, for the next meeting of the group. The Chairman said that the matter could then go on to the JCVI.

18.2 offered to produce a paper on polysaccharide vaccine especially vaccine to protect children against haemophilus influenzae B infection, for the next meeting. The Chairman invited Professor Moxon to produce such a paper.

19. Date of the next meeting

The next meeting is to be held on Tuesday 30 September 1986.