

NOT FOR PUBLICATION

JOINT COMMITTEE ON VACCINATION AND IMMUNISATION

MINUTES OF THE MEETING HELD ON FRIDAY 7 NOVEMBER 1986

Present: Sir John Badenoch - Chairman
Professor J E Banatvala
Dr M F H Bush
Professor A G M Campbell
Professor J G Collee
Professor A M Geddes
Professor R W Gilliat
Professor P Grob
Dr P F Grundy
Professor D Hull
Dr I G Jones
Professor J Knowelden
Professor H P Lambert
Dr J Noble
Dr J B Selkon
Dr G C Schild
Dr J W G Smith
Professor R W Smithells

Professor J M S Dixon)
Dr C L Miller) By Invitation

Sir Donald Acheson)
Dr A Fenton Lewis)
Dr R G Penn)
Mrs F Leenders) DHSS
Ms C Moriarty)
Mr C P Galvin)
Dr D M Salisbury)

Dr J Barnes)
Dr J R H Berrie) Secretaries
Mr L T Wilson)

Brigadier N W J England MOD
Dr A D M McIntyre SHHD
Dr S N Donaldson DHSS, NI
Dr Z Kurtz HEC

1. Apologies for Absence and Announcements

The Chairman welcomed the Chief Medical Officer to the meeting together with Professor Dixon and Dr Miller who was speaking to the item on Rubella. He also welcomed Professor Campbell, Professor Geddes and Dr Jones. Apologies for absence had been received from Dr Citron, Dr Galbraith, Professor Glynn, Professor Lloyd and Dr Reid.

The Chairman drew attention to the papers which had been tabled, ie the acceptance rates of vaccination from Wales, Dr Miller's amendment to her own paper, Dr Selkon's letter on Intradermal Hepatitis B vaccine, Dr Dixon's notes and the AMA Panel Report on adverse reaction to Pertussis vaccine.

Professor Smithells then showed a video on Measles vaccination.

2. Minutes of the Meeting held on 25 April 1986

These were signed as a correct record.

3. Matters arising

There were none.

4. 4.1 Vaccination and Immunisation Acceptance Rates
England 1985.

JCVI(86)17a

Dr Berrie, introducing this paper, said that in 1985 the previous upward trend in Whooping Cough vaccine uptake had remained at 65% (as for 1984), but that uptake of Measles vaccine had improved from 63% to 68%. Other vaccinations had showed a slight advance. He drew attention to the odd situation in the North East Thames RHA where Bloomsbury had the lowest uptake of Whooping Cough vaccine at 24 per cent compared with the highest uptake, at West Essex, of 89 per cent. Members observed that even the highest uptake rates did not achieve target levels, and it was suggested that these "league tables" be circulated to the Health Service.

Vaccination and Immunisation Acceptance Rates -
Northern Ireland 1985.

JCVI(86)17b

Dr Donaldson pointed out that over the last year the uptake of Measles vaccine in Northern Ireland had increased from 25 to 46 per cent. He reported that there had been a big campaign in the Republic of Ireland which had been very successful.

Vaccination and Immunisation Acceptance Rates -
Scotland.

JCVI(86)17c

Dr McIntyre reported that the rates for children born in 1984 and vaccinated by 30 June 1986 was 69.1 per cent for Whooping Cough and 74.9 per cent for Measles vaccination.

Dr Grundy reported that the poorest uptakes for both Measles vaccination and Whooping Cough vaccination were in mid-South and West Glamorgan.

It was suggested that the Republic of Ireland be invited to produce vaccination acceptance rates and also be invited to send a Representative to the meeting of the Joint Committee.

At this stage the Chairman invited the Chief Medical Officer to address the meeting. Sir Donald Acheson said that he was very pleased to address the JCVI which was one of the only two Standing Medical Advisory Committees and whose work was highly regarded. The improvement of the acceptance rates in England from 1978 to 1985 indicated that the trend was in the right direction.

Secretary of State had expressed interest in vaccination and immunisation and wanted to have a further drive to increase uptake in the New Year. CMO reminded the meeting that the Public Accounts Committee had examined officials on the uptake of immunisation earlier this year and had been critical of the Department for the variation of uptake rates of immunisation by District. Queries on cost effectiveness had been answered by reference to work in the USA showing that vaccination was cost effective. CMO reminded the Joint Committee that 7 April 1987 is World Health Day which, this year, would focus on Immunisation. He said that his Inquiry on Public Health Function included the control of communicable disease and that a Sub-Committee on that aspect of Public Health, to be chaired by Professor Geddes, had just been set up. CMO pointed to various problems which at present beset preventive medicine such as the uncertainty as to lines of accountability and confusion of roles within the Health Service, on variation in performance and he mentioned the accountability review system which produced a good opportunity to set targets. CMO suggested that targets be set for all diseases against which immunisation is available and that results be published. WHO had given targets for Europe for the year 2000, and CMO asked why the UK should not reach these targets before that date.

4.2 Oral Report on Visits by Officials to District Health Authorities.

Mr Wilson reported that two Regions had been visited recently by Officials and from whom two Districts, one with high uptake and one with low, had been selected for a special visit. A visit to a third Region would follow.

5. Rubella Vaccination Policy

5.1 Meeting atPHLS on 12 June 1986.

JCVI(86)18

Dr Smith speaking to the paper said that 80 people had attended the meeting.

The meeting had considered not only the eradication of the Congenital Rubella Syndrome (CRS) but also the problems associated with therapeutic abortion. The meeting did not recommend changing existing policy of

Rubella vaccination at 10-14 years but augmenting it, since even with high rates of vaccination in schoolgirls it had been shown that 2-3 per cent of women are likely to remain susceptible to Rubella. Dr Smith also said that diagnostic problems with regard to Rubella would continue with the present programme; as an aside the meeting also discussed the question of Rubella vaccination in pregnancy. The meeting had also considered the recommendation that serological testing should be performed wherever possible, but need not be undertaken where this might interfere with the acceptance or delivery of vaccine. Immunity following Rubella vaccination lasts for 16 years and questions as to the persistence of Rubella antibody would be crucial in the absence of circulating wild Rubella virus. Dr Smith described three advantages of an augmented policy of Rubella vaccination:-

- a. A further reduction in the incidence of CRS with the prospect of eventual elimination.
- b. A decrease in terminations and diagnostic problems caused by the continuing presence of Rubella and the risks of contact in pregnancy.
- c. A possible increase in Measles vaccine uptake resulting from the inclusion of Mumps vaccine - reported from other countries as a benefit.

Recommendations

It was recommended that the existing Rubella programme be expanded by the use of Measles, Mumps and Rubella vaccine (MMR) in the second year of life. Surveillance both serological and otherwise would be needed to identify any possible effects that such a change of policy would have on the incidence of Mumps. An acceptance rate in excess of 68 per cent (the 1985 figure for Measles vaccine) was an essential requirement. Most people at the meeting were agreed that this change was necessary.

5.2 Rubella - Paper on Implications of JCVI(86)18

JCVI(86)19

Dr Miller introducing this paper stressed that the intention was to augment existing policies without waiting for an 80 per cent uptake of Measles vaccine but because of this it would be necessary to carry out a careful programme of surveillance of morbidity from Measles, Mumps and Rubella, to see that there was no rebound of these illnesses into older age groups. This surveillance would be carried out on children aged 5-6 and 10-11.

Professor Banatvala described the resources used in recent outbreaks of Rubella and Dr Miller said that in Manchester 1,000 women had been investigated for contact with Rubella in a recent outbreak.

Professor Gillliatt enquired about the risk of adverse reactions. Professor Lambert stated that favourable results on safety had been reported both from Finland and USA. Dr Jones said that in a recent trial the combined Measles, Mumps, Rubella vaccine was the more popular preparation. Professor Knowelden said he was in favour of augmentation of the present programme with MMR vaccine. The Chairman asked whether it might not be possible to announce the introduction of MMR vaccine on WHO Immunisation Day in April 1987. He said that this might be done at a meeting of persons responsible for vaccination from District Health Authorities. Dr Smith emphasised the need for adequate forward planning of this move, and the need for adequate surveillance of adverse reactions was emphasised by Professor Grob who offered his system of reporting information from general practice. Professor Hull stated that he was involved in a study comparing MMR with Measles vaccine and presumed that there must be others. The importance of involvement of manufacturers at an early stage was also emphasised. Professor Gillliatt said that ARVI should be involved at the commencement of this programme. CMO pointed out that it would be necessary to show that the new programme would be cost-effective and Dr Miller stated that she and her colleagues had started to look at this - in the USA, MMR was cost-effective.

5.3 Inadvertent Vaccination in Pregnancy -
Paper by Professor Smithells.

JCVI(86)20

Professor Smithells told the meeting that there appeared to be no teratogenic risk from Rubella vaccine and that it might be possible to set a target after which inadvertent Rubella vaccination could be ignored. He suggested:- "When 500 cases of vaccination of non-immune women with RA 27/3 Rubella vaccine between one week before and four weeks after conception have been collected from reliable sources without the occurrence of Rubella-type defects in the offspring, it should be accepted that this vaccine presents no significant hazard to a human embryo."

Members wondered how long it would take to collect 500 such cases, although fewer women who are inadvertently vaccinated are now having their pregnancies terminated. In the meantime it was decided that it would be reasonable to modify the wording in the Memorandum using such phrases as "Although vaccine is not a significant teratogenic hazard etc"

6. Hepatitis

JCVI(86)21

Dr Penn introduced the draft of the section on Hepatitis in the memorandum, modified at the recent ad hoc meeting of the Advisory Group on Hepatitis, and questioned whether there should be more detail of specific appointments of individuals who should receive Hepatitis B vaccine, although such designation may cause other individuals to be excluded, perhaps mistakenly. It was noted that the Hepatitis B vaccine data sheet did not conform with JCVI guidance and Professor Hull suggested that the contraindications on the data sheet should conform with those quoted in the Memorandum. The Chairman suggested that this matter be referred to the Advisory Group on Hepatitis.

The draft of a letter from Dr Selkon, awaiting publication in The Lancet was received. It was observed that Intradermal Immunisation had been as effective as Intramuscular and was seven times less expensive. No side effects had been observed but this route of administration was not recommended in the Data Sheet. Dr Smith pointed out that absorbed vaccines given interdermally tended to produce local reactions.

Professor Smithells considered that the proposed guidance should state specifically that there is evidence that there is not transmission of HIV from (HBIg) immunoglobulin. Dr Selkon noted that Thames Valley Police Study might produce prognostic information on the long-term effectiveness of vaccination in individuals.

Other points on the changes in the text of this section:-

15.1.3 Professor Lambert felt this sentence should be more specific - the word "occupational" was vague - and there might be a sentence added about other Hepatitis B vaccines.

15.3.2 Professor Lambert said that it was anomalous to single out students (para 6) and not to mention junior medical staff.

Professor Lambert also felt that 15.3.3(4) and 15.8.1(b) should describe policy with regard to infants of mothers who are carriers of Hepatitis B.

On paragraph 15.3.2 Professor Geddes suggested that in Line 3, the word "particularly" be omitted and replaced by a simple full stop. Then a sub-heading "Particular Groups to be Included" should be followed by the list.

Paragraph 15.8.2 is intended to reassure, so conversion from a negative to a positive tone would help - to say "There is epidemiological evidence that administration of intramuscular immunoglobulin is not associated with seroconversion" etc.

15.3.2(4) Professor Collee mentioned the problem of 'poor responders' to vaccine and Professor Campbell suggested the answer would be to omit the second sentence, thus avoiding further screening.

15.3.4 Dr McIntyre thought the words 'consideration' and 'should be considered' were vague.

7. Recent Developments in Immunisation in North America

Professor Dixon reported on a recent meeting of a sub-committee of the Canadian National Advisory Committee on Immunisation (NACI) and on two meetings of the US Immunisation Practices Advisory Committee (ACIP). NACI would shortly issue a statement advocating the use of a monovalent (new H₁N₁ strain) Influenza A vaccine for at-risk groups under 35; they had already issued advice on the administration of live vaccines to HIV subjects. ACIP made similar recommendations on influenza vaccine. They noted that the goal of elimination of Measles had not so far been achieved, and more than 50% of cases occurred in over 10 year olds; they advised that children who had been immunised against Measles at 12 months might need re-immunisation during outbreaks. In addition, those born after 1956 and visiting countries where Measles is endemic, should be re-immunised.

The Merck Hepatitis B Recombinant Yeast Cell Vaccine was now licensed in USA and will be available in 1987, although no cheaper than present vaccine. There was discussion on the need for Booster Immunisation at 5-7 years after initial vaccination; this would require serology and the ACIP came to no conclusions on this.

HIV and the Use of Live Vaccines: Professor Dixon reported that there would be more permissive use of live vaccines in symptomless HIV infants but that IPV was recommended in place of OPV because of the possible risk to other immuno suppressed family contacts.

The routine childhood immunisation schedules now include the administration of 7 antigens (DTP, Polio and MMR) in the 15 months after birth. Recommendations for Varicella Zoster vaccine will be issued next year. 85% efficacy of Haemophilus Influenzae type B Immunisation was maintained.

A single dose for intra-dermal pre-exposure use in rabies contacts was available but was contraindicated in individuals receiving chloroquine.

8. Influenza

JCVI(86)22

Dr Smith pointed out an error in CMO JCVI(86)22 letter (CMO(86)15 of 30 August 1986. In the second paragraph, Line 12, the word 'elderly' should be deleted.

Dr Smith then reported on the recent ad hoc meeting of the Advisory Group on the Antigenic Composition of Influenza vaccines. This had been held to consider the problem posed by the appearance of new Influenza A (HN) strains. It was agreed at the meeting that there had been sufficient drift to make the use of a new antigen adviseable in the at-risk groups irrespective of age, especially in view of the fact that a new strain had already caused a sharp outbreak at a boarding school in Essex. The advisory Group further agreed that when the monovalent vaccine became available, probably by the end of December, a CMO letter should be promptly issued to recommend its use in appropriate patients as a supplement to the trivalent vaccine. Previously unvaccinated children aged 4-12 years (especially those with Cystic Fibrosis) should receive two doses of trivalent and two doses of monovalent vaccine.

9. BPA/JCVI Working Group

Note of the Meeting held on 26 June 1986.

The Chairman drew attention to several important matters discussed:-

- a. The immunisation of premature infants, the consensus being that chronological rather than post-conceptual age should be the criterion.
- b. The need for Training in Immunisation.
- c. The lack of evidence that there is any correlation between DPT and sudden infant death syndrome.
- d. The advantages of absorbed triple vaccine.

Unconfirmed Note of the Meeting held on 30 September 1986.

The Chairman reported that after discussion it was agreed that in the revised Memorandum the paragraph on the use of Immunoglobulin with Measles vaccine should suggest that in addition other suitable prophylactic measures against febrile convulsions might be adopted.

Professor Campbell pointed out the disincentive effect of following the present recommendations and the Joint Committee endorsed the suggestion of the Working Group.

The Chairman stated that the question of amendments to the sections of the Memorandum (a) Introduction, (b) Whooping Cough, would be considered when he had concluded his report of the meeting. He moved on to the summary report from Maidstone of an investigation into failure to reach measles immunisation target. Members agreed that the most disturbing feature was that a minority of health professionals could exert a disproportionately bad effect on a campaign.

Recommendations for Addition to
Introduction of Memorandum

JCVI(86)23

The Chairman opened the discussion on this paper by stressing the need to emphasise the special note at para 1.2.5. Members agreed that this important point should be placed at the end of para 1.1.1. The words "such serious conditions as" should be deleted from 1.2.2(b). It was also agreed that the conditions listed in para 1.2.3 should each be given a separate line for emphasis, and that in para 1.2.4 Influenza should be put in one category (hypersensitivity to egg products) and Measles (and Mumps) in another (anaphylactoid reactions to egg).

Recommendations for Addition to Whooping Cough
Section of Memorandum

JCVI(86)24

The Chairman identified the changes proposed in para 3.5.1(b)

3.5 Contra-indications to Whooping Cough vaccination.

3.5.1 a. 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.

b. Vaccination should not be carried out in children who have a history of any severe local or general reaction to a preceding dose. The following reactions should be regarded as severe:-

Local:

An extensive area of redness and swelling which becomes indurated and involves most of the antero-lateral surface of the thigh or a major part of the circumference of the upper arm. This reaction may increase in severity with each subsequent injection.

General:

Fevers 40.5C; anaphylaxis; bronchospasm; laryngeal oedema; generalised collapse; prolonged unresponsiveness; convulsions occurring within 72 hours.

A 'history of cerebral irritation' is deleted and 'history of cerebral damage in the neonatal period' and 'history of fits and convulsions' are transferred to "Groups requiring special consideration" para 3.5.2(a).

3.5.2 a. There are certain groups of children in whom the advisability of Whooping Cough vaccination requires special consideration. These groups are:

i. Children with a documented history of cerebral damage in the neonatal period.

ii. Children with a personal history of convulsions.

iii. Children whose parents or siblings have a history of idiopathic epilepsy.

iv. Children with developmental delay thought to be due to a neurological defect.

v. Children with neurological disease.

b. For these groups 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 particular care. Doctor should seek advice in each individual case. Where there is doubt, specialist advice should be sought.

There was considerable discussion on 3.5.2(a) but it was finally agreed that for (iii), it should be stressed that the risk was very slight and that (iv) and (v) should be combined under "children with neurological conditions which are stable" and grouped as "not a contra-indication", ie in 3.5.4.

3.5.4 A personal or family history of allergy is NOT a contra-indication to vaccination against Whooping Cough. For other false 'contra-indications' see 1.2.3.

The Chairman requested members to let Dr Barnes have any other comments in writing by the end of November so that the revision of the Memorandum could be speedily completed.

10. ARVI

JCVI(86)25

Professor Gilliatt reported on the minutes of ARVI meetings in February, June and October. At the last meeting, it was felt that desensitising allergens were not relevant to ARVI's terms of reference.

The unconfirmed minutes of the meeting of the Joint Sub-Committee on ARVI of 3 October 1986 needed modification. Item 5(a)(i) should show 5 patients who had neurological abnormality before immunisation, not 3 and in 5(a)(ii), day 0 was the day of vaccination regardless of the time. On Page 2, in (2) the figures 6 and 5 should be reversed in "compared with 6 after the second dose, and 5 after the third". "Outcome for patients ((iv), Page 3) should show "(2/14 compared with 7/12)" and the second paragraph begin "The outcomes of children who had vaccine-associated neurological disease etc"

Page 4 Line 4 should show "possible viral encephalitis" and in (b) Line 10 "while some appeared to be from the NCES". It was felt that the AMA Panel Report on Pertussis vaccine injury would have a selective bias for reporting of symptoms.

JCVI(86) a. and b.

The receipt of Yellow Card reports from 15 January 1986 to 11 September 1986 was noted.

11. BCG

JCVI(86)27

Dr Fenton Lewis reported on the modifications for BCG Section of the memorandum. In particular there were changes for the advice on the Heaf gun, infant vaccination, the variation of labelling of PPD with a footnote k(on Page 41) to explain the dilutions. The addresses of Page 46 were altered and local eczema was no longer a contraindication as opposed to generalised skin infection.

Dr Selkon commented that the rate of decline of tuberculosis in Scotland (8.1.1) was the same as that of England and Wales but the starting point was higher. It was also noted that there was no evidence of transplacental spread from BCG administration during pregnancy (8.8.1.b) and the alternative wording from the Canadian Guide to Immunisation suggested by Professor Dixon, was accepted. (8.8.1.a) should specify "high dosage corticosteroid". It was stated that this adjustment would also be made at other appropriate points in the Memorandum.

JCVI(86)28

There was discussion on the recommended 3 week interval between BCG and live virus administration and it was felt that evidence did exist to recommend this interval. Dr Selkon suggested the order of immunisations was relevant but Dr Smith felt that either order produced problems. It was agreed not to change this recommendation.

12. Whooping Cough

JCVI(86)29

Dr Berrie introduced a paper which showed that the number of cases in 1986 was greater than in non-epidemic years but less than in the last two epidemic years. The figures for the first and second quarters of 1986 were similar to the same periods in 1982 and 1978; those for the third quarter of 1986 were lower. Professor Hull suggested that a comparison be made between those regions with Pertussis vaccination rates below 65% and those above to correlate the incidence of Pertussis with immunisation rates, in particular to determine whether there was a more marked second peak in regions with lower uptake.

A CMO/CNO letter on Pertussis immunisation had been issued in July 1986.

Professor Lambert reported on two recent publications, the first showing no significant difference in reading attainment and physical development after Whooping Cough and the second showing no significant impact on lung function. Pertussis cases were more likely either to be atopic or to have a family history of wheezing illness. This disease may, however, occur more frequently or be more easily recognised in children with environmental or constitutional factors that predispose to respiratory morbidity.

13. Immunisation of HIV-infected Children
Extract from MMWR

JCVI(86)33

Dr Barnes stated that live virus vaccination was not recommended in symptomatic HIV sufferers but inactivated polio virus should be given. Non-symptomatic, immune-competent, HIV-positive individuals should also be immunised with inactivated virus, as otherwise they may be significant risks to other family members who may be immune-incompetent. Children of individuals with HIV infections should receive MMR but not OPV. Dr Bush asked if there were risks of giving BCG to immigrant children whose parents might be HIV positive and Dr Smith thought this might be contraindicated. The recommendations of Immunisation Practices Advisory Committee in MMWR, 26 September 1986, were noted, as was the intention to refer this matter to EAGA for consideration.

14. Amendments to JCVI Memorandum

JCVI(86)34

Sir John invited Committee Members to submit their comments in writing to Dr Barnes. Members were informed of the issue in September 1986 of a CMO/CNO Letter discouraging the use of jet injectors.

15. DHSS Statistical Bulletin on Vaccination & Immunisation - Draft Bulletin

JCVI(86)35

The Bulletin will be reviewed after re-printing.

16. Any Other Business

Dr Smith asked that polyvalent meningococcal vaccine should be licensed as soon as possible. It was agreed that a paper would be provided for the next meeting.

17. Date of Next Meeting

The next meetings of JCVI will be on Friday 1 May 1987 and Friday 23 October 1987.