NOT FOR PUBLICATION

JOINT COMMITTEE ON VACCINATION AND IMMUNISATION

Minutes of the meeting held on Friday 1 May 1987

Present: Sir John Badenoch - Chairman
Professor J E Banatvala
Dr M F H Bush
Professor J G Collee
Professor A M Geddes
Professor R W Gilliatt
Professor P Grob
Dr P F Grundy
Professor D Hull
Dr I G Jones
Professor H P Lambert
Dr J Noble
Dr J 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
Dr E Miller)

Mr N M Hale)
Dr A Smithies)
Mr R L Cunningham)
Dr A Fenton Lewis)
Dr R G Penn)
Dr G Singer) DHSS
Mrs F Leenders)
Mr C P Galvin)
Dr D M Salisbury)
Dr F Rotblat)
Dr H Williams)

Dr J Barnes) 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 — HEA
Dr N S Galbraith — CDSC

1. Apologies for Absence

Apologies were received from Professor Campbell, Dr Citron, Professor Knowelden, Professor Miller, Dr Reid and Professor Smithells.

2. Announcements

The Chairman welcomed Mr Hale, Mr Cunningham and Dr Smithies to the meeting. He said that Dr Hilarie Williams would be attending to assist with item 10 - the paper on AIDS and Immunisation. Dr G Singer from MED PCR would be speaking to item 13.3 the Childhood Immunisation Campaign. Dr Christine Miller and Dr Elizabeth Miller attended for several items.

A paper had been tabled concerning the membership of ARVI. This membership was agreed by the JCVI.

3. Minutes of the Meeting held on 7 November 1986

Item 5. Rubella Vaccination Policy - JCVI(86)18

5.1 Meeting at PHLS on 12 June 1986: Dr Smith asked that the second paragraph be amended as follows:

"The available evidence showed that eradication of CRS was probably impossible with the present programme. Even where very high vaccination rates in schoolgirls had been achieved, as in Manchester, some two to three per cent of women remained liable to infection during pregnancy and were at risk as long as the rubella virus continued to circulate in the population. Diagnostic problems in pregnant women would also continue with the present programme. Immunity following rubella vaccintion appears to last in most recipients for at least 16 years, but questions about the persistence of rubella antibodies would no longer be crucial if an eradication programme proved successful in preventing outbreaks of infection. Although the meeting was not able to bring forward a unanimous set of recommendations, the great majority of the participants recommended that the present rubella vaccination programme of 10 to 14 year old girls should be augmented by the vaccination of both boys and girls in early infancy, using measles/rubella/mumps vaccine. The three main advantages of such an augmented policy were

a. a further reduction in the incidence of CRS with the prospect of eventual elimination,

b. a decrease of diagnostic problems in pregnant women and of terminations,

c. a probable increase in measles vaccination uptake resulting from the inclusion of mumps vaccine - reported from other countries as a benefit."

"The meeting had accepted that there was a possibility, based on the results of mathematical modelling, that an incompletely successful eradication programme could lead to an increase in CRS some years in the future. However, the general conclusion

was that, provided surveillance of the results of the programme continued, such a development could be dealt with by suitable supplementary vaccination programmes."

The meeting had also discussed the question of rubella vaccination in pregnancy and the need for serological testing of adults prior to immunisation. There was a general feeling that screening need not be undertaken where this might interfere with the acceptance of vaccine, although the meeting specified that evidence on the safety of vaccine in pregnancy was as yet incomplete.

Page 3, second paragraph - Recommendations

Delete last sentence and insert

"Most people at the meeting were of the view that this rate could be achieved with MMR vaccine and that the change was necessary."

5.2 Rubella - Paper on Implications of JCVI(86)18 JCVI(86)19

First paragraph, line 5, delete "morbidity from"
Line 5 to read "careful programmes of surveillance of measles, ..."

Item 9. BPA/JCVI Working Group

9.2, Page 7, Second Paragraph

Professor Campbell suggested a correction to the third line of the paragraph which should now read "should suggest that as an alternative other suitable prophylactic measures against febrile convulsions might be adopted".

9.2, Page 7, Recommendations for Addition to Whooping Cough Section of Memorandum (JCVI(86)24)

Members suggested that Section IV and V of sub-paragraph a. be replaced with one section ie "Children with non-progressive neurological disorder".

4. Matters Arising

Vaccination and Immunisation Acceptance Rates

On the suggestion that the Republic of Ireland be asked to send a representative to the meetings of the Joint Committee, Dr Donaldson said that he had approached the Ministry of Health in the Republic concerning this matter.

Professor Hull asked if the CMO's Committee on Communicable Disease would be reporting to the JCVI. Professor Geddes said that ~~this~~ Cmo was an ad hoc Committee of the Sub Committee which was considering notification of communicable disease, ~~and it would present a report on completion of the work.~~ The proceedings of the Committee of Inquiry and its Sub-Committees were confidential

Item 6. Hepatitis

Page 5, Paragraph 2.

It was reported that the projected study by the Thames Valley Police to produce prognostic information on the long-term effectiveness of vaccination had not gone forward because individuals declined to participate in the study.

Other matters arising, apart from those mentioned here, were considered on the main agenda.

5. Measles

PHLS meeting held on 18 November 1986 to discuss the uptake of measles vaccine

Action recommended by this meeting JCVI(87)1

Dr Christine Miller speaking to this paper said that the main recommendations included:

a. The JCVI should issue clear guidelines together with advice as to what contra-indications were true or false.

b. The DHSS should appoint a named person responsible for immunisation and that this person be known to the health service.

c. Regional and District Health Authorities (DHAs) should be accountable for their vaccination performance.

d. Districts should be encouraged to appoint persons responsible for immunisation policy; and also regularise the division of immunisation work between GPs and health authority Medical Officers.

e. GP clinics where immunisations were given should be more attractive and use every opportunity of attendance at clinics to offer immunisation; this is especially important for deprived families.

Dr Smith observed that the various means of improving immunisation had been discussed so often that it should be possible to produce a set of proposals. The Chairman stated that the DHSS had introduced an accountability procedure between Ministers and the Chairman of Regional Health Authorities and that this accountability extended to DHAs. It was suggested that a telephone 'hot line' be provided for advisory clinics to answer questions and to provide reliable advice to doctors and nurses.

The use of compulsion in immunisation was discussed with particular regard to school entry. Members urged caution in this approach. It was suggested that if needy families see the doctor more often then such visits provided an opportunity for immunisation.

All members agreed that accountability with regard to immunisation was most important.

The Chairman in summing up said that immunisation was a most important NHS Policy and that the recommendations before them, after editing, should be put to the NHS Management Board and then promulgated to the NHS with a separate copy to the nominated persons in districts.

7. Rubella

6.1 Report of the meeting of the Combined Rubella/Measles Sub Committee held on 3 April 1987

The Chairman explained the reasons why the Report prepared by Professor Knox was not put before the last meeting of the Joint Committee held in November 1986. He said that this report has been examined by a meeting of the Combined Measles/Rubella Sub-Committee and he called upon Dr Smith to report on this meeting.

Dr Smith introduced draft minutes of the meeting. He drew attention to new information on rubella associated terminations of pregnancy.

~~Turning to the paper by Professor E G Knox "Evolution of Rubella Vaccine Policy in the UK", Dr Smith observed that neither of the models by Professor Knox or Dr Miller had been validated.~~

Professor Knox in his paper described programmes of rubella vaccination women, which were augmented by vaccinating young boys and girls with MMR vaccine. If uptake of MMR was greater than 50 per cent, some benefit could be derived and with an uptake of 70 per cent there was considerable benefit. With an uptake of MMR of 85 per cent, rubella would be eliminated and at that stage it might be possible to stop the teenage programme of rubella vaccination.

Dr Smith reported that the sub-committee disagreed with the conclusion of the paper that in order to achieve success, the vaccination programme would need to be made compulsory.

Dr Christine Miller had presented a paper which demonstrated that there was a 3:1 cost benefit in adopting a programme of MMR vaccination.

Advice from Professor Jackson and from Dr Brian Birkhead of the Clinical Operation Research Unit, University College Hospital had been summarised at the end of the draft note of this meeting. This advice agreed that the models of Knox and Miller together with that of Anderson suggested that the addition of MMR into the childhood vaccination programme should produce a reduction in the incidence of the congenital rubella syndrome.

The meeting of the Combined Measles/Rubella Sub Committee had concluded that with careful monitoring and surveillance, the present rubella programme be augmented with MMR. It ~~would~~ might be possible to cease teenage vaccination of schoolgirls sometime in the future.

Dr Smith reported that the meeting also considered a paper by Dr Anderson on mumps which showed that 60 per cent uptake of mumps vaccine would be beneficial. There would be an increase in the interepidemic period and in spite of a rise in the average age of infection there would be a decrease in the incidence of total mumps related complications.

With regard to the criticism of these models Dr Elizabeth Miller stressed that they could only be successfully validated by mounting a programme of MMR vaccination, together with a careful surveillance and monitoring programme.

Dr Bush asked if the introduction of MMR would make it necessary for mumps and rubella to be made notifiable; there was difficulty in the clinical diagnosis of these conditions. Dr Christine Miller said that this matter was being explored by CDSC, and Dr Elizabeth Miller reported that serological testing of a national sample was being undertaken by the Preston Public Health Laboratory. Professor Geddes said that the Acheson Committee may suggest changes in the legislation on the notification of disease. In the ensuing discussion, the difficulties of making a firm diagnosis of rubella were recognised and although it might be possible to confirm the diagnosis by serology, obtaining blood samples from children would be difficult. Dr Elizabeth Miller said that a salivary antibody test for rubella was being developed by the Virological Research Laboratory of the Central Public Health Laboratory.

Dr Galbraith observed that the RCGP trends in rubella tended to match the laboratory data. It was also reported that rubella antibody had now been detected in vaccinated persons 21 years after vaccination.

6.2 Report of launch of video for mothers from ethnic minorities

Mr Wilson reported the launch of this video and those members who had seen the film reported that it was a good contribution to the rubella campaign.

7. Measles, Mumps and Rubella Vaccine (MMR)

7.1 Minutes of the meeting of the Working Party to discuss MMR vaccine held on 23 Janury 1987

Dr Salisbury report that the first meeting discussed the reasons for the change to MMR, together with tentative arrangements for a meeting of nominated officers. The meeting also discussed the licensing and supply of MMR and two manufacturers who would provide the vaccine for trials had been identified. The range between the prices of MMR vaccine suggested was discussed. There was brief discussion on cost benefit analysis (which had been based on the more expensive vaccine). In addition, various catch-up programmes to bridge the gap between infants protected with MMR and older children with acquired protection were discussed together with means of informing the health service of the change in policy; this was especially important to Regional General Managers and Regional Medical Officers. Adoption of MMR would involve modification of district computer programmes and involvement of the National Rubella Council.

7.2 Report of the meeting of the Working Party held on 25 February 1987

Dr Salisbury said that the Working Party had been expanded to include Dr Kurtz of the Health Education Authority and Mr Hale (DHSS Information Division). The meeting had considered surveillance of symptoms of adverse reactions from MMR and supplies of vaccine. The meeting had considered and had studied various mathematical models to indicate the best type of catch-up programme to use. A programme aimed at four to five year children at the time of their pre-school booster immunisation appeared to be most effective in the reduction of ~~calculating~~ rubella. The

circulating

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disincentive effect of the use of immunoglobulin was also noted. It was also noted that the data sheet for the Merieux MMR vaccine contra-indicated the use of the vaccine with children with a past or family history of convulsions. Medicines Division would be asked to approach Merieux to ascertain whether they would be willing to adopt an appropriate modification to this data sheet.

A further meeting of the Advisory Group was planned for 9 June this year; the intention of the meeting was to produce a programme for the introduction of MMR.

In the ensuing discussion, Professor Hull pointed out that play-groups do not necessarily embrace all pre-school children. Dr Salisbury replied that they would need to find ways to target all children under the age of five. The Chairman said that the Working Party will produce such a programme and that this would be put to the meeting of the duly appointed officers. There was a need to get the Product Licences correct.

The Joint Committee discussed the difficulty of using immunoglobulin with MMR with children who had a history of convulsions was discussed. The situation with MMR was complicated:-

a. Children of school age are more likely to have a history of convulsions.

b. The effect of rubella and mumps antibodies contained in gamma-glob-ulin on MMR is unknown.

The committee felt that there were no longer grounds to justify that practice and that guidance should be made available of other means of managing pyexia after Measles or MMR vaccination.

7.3 World Health Day. MMR - Announcements by PS(H) and CMO — JCVI(87)2

This paper was presented for informatino

8. Hepatitis

8.1 Policy concerning vaccination against hepatitis B (Paper by the Department) — JCVI(87)3

Dr Penn speaking to this paper drew the attention of the meeting to a Leader from the BMJ of 24 January 1987 - ("Time for Action on Hepatitis B Immunisation") which pointed out that vaccine uptake has been low even among health staff at risk, although the British Dental Association had recommended that all dentists, dental nurses and hygienists in direct contact with patients should be immunised and the Royal College of Nursing has advised nurses to do likewise.

In a subsequent letter to the BMJ (Vol 294, page 771, 21 March 1987), Professor Zuckerman had highlighted the present problem with four particular points.

(a) Firstly, the ratio of sub-clinical and anicteric infections to clinical infections varies with all types of viral hepatitis but it is generally accepted to range from 5:1 to as many as 20:1.

(b) Secondly, notifications rates of acute clinical hepatitis are known to be notoriously unreliable and may vary according to seve-ral factors.

(c) The Royal College of Nursing and others have stated that it is impossible to identify nurses at 'high risk' of exposure to hepatitis B, since staff rotate continuously.

(d) The WHO and other national health authorities have recommended immunisation against hepatitis B for health care workers and medical, dental and nursing staff who have frequent contact with blood or needles (or indeed direct contact with patients or body fluids).

A paper by Dr Sheila Polakoff - Acute Viral Hepatitis B: Laboratory Reports 1980-84 BMJ Vol. 293, pages 37 and 38 - 5 July 1986, showed that the incidence of hepatitis B was highest amongst drug abusers but that health service staff had a higher than average incidence of disease. In a recent letter, Dr Polakoff (BMJ Vol. 294, page 1031 - 18 April 1987) rebutted some of the points made by Professor Zuckerman and questioned the reliability of sources of information reporting the incidence of hepatitis B amongst health service workers.

In a further paper, Dr Polakoff warned against deducing firm trends from figures derived from single or two year periods. There were indications that the incidence of hepatitis B amongst health service staff was not increasing.

A further paper by C A Carne et al (BMJ Vol 294, pages 866 to 868 - 4 April 1987) showed that an adequate response to hepatitis B vaccination is significantly less likely to occur in homosexual men who are positive for HIV antibody than those who are negative.

8.2 Revised advice on hepatitis B vaccine — JCVI(87)4
Paper by the Department

Dr Penn said that health authorities want more advice about priorities for hepatitis B vaccination seen against continued demands from particular groups demanding increased vaccination. It was observed that the new recombinant vaccines, to be introduced in the near future would be no cheaper than plasma derived vaccine.

The Chairman observed that although hepatitis B vaccination involves a great deal of expenditure, he would find it hard to make constructive suggestions on the reduction of vaccination amongst the groups quoted in this paper.

In the ensuing discussion it was noted that despite the anxiety amongst the police concerning infection with hepatitis B, there was little increase in incidence of hepatitis B amonst them in recent years. Dr Grundy observed that there were a lot of requests from police in Wales for vaccination. Dr Selkon said that there was a lack of studies on the target population for vaccination. Once this had been achieved from British data it would then be possible to define who should be vaccinated. The Chairman said that pressures did not allow sufficient time for this: clear guidelines were needed now, especially for NHS employees and there was a need to inform the public. Professor Banatvala said that there would be difficulties even then as to how best to select those to be vaccinated and there was also the question of the need for booster doses. Dr Schild reported that eight new vaccines were being considered throughout the world. Professor Geddes said that a follow-up study on homosexual men (quoted in the Lancet) had shown that members of this group may have a low antibody response to hepatitis B vaccine, nevertheless, it was important to protect this group with vaccination.

Dr Selkon stressed the need to demonstrate protection and suggested the use of intradermal vaccination to economise on the use of hepatitis B vaccine. Dr Smith said that if a solid and enduring immunity following intradermal vaccination could be demonstrated then this economy might be used. Dr Selkon observed that Professor Zuckerman had stated that the vaccine should only be used in a way in which it had been shown to be effective (a comparison with typhoid vaccine). Dr Schild pointed out that the antibody response curve to hepatitis B vaccine was shallow. Dr Bush suggested that priorities could be grouped roughly into 3 categories:

(a) those where there was a constant day to day risk and who needed vaccincation;

(b) those where there was an occasional risk and were passive immunisation with HBIg (followed by active nominant) was appropriate;

(c) those with no applicable risk.

Brigadier England enquired which groups should be screened before vaccination and whether or not there should be post vaccination screening for high risk groups. Dr Penn pointed out that MMWR (1985) 34(22) pps 313 said that screening was only cost effective in groups where there was a high prevalence of hepatitis B.

Professor Hull said that there was inconsistency in vaccinating babies within 72 hours of birth, they should be vaccinated as soon as possible after delivery. Dr Selkon pointed to the advice that haemophiliac children should be vaccinated by the subcutaneous route: this was a dangerous procedure: he suggested that such children should be protected by intradermal vaccination.

It was agreed to refer this matter to an early meeting of the Advisory Group on Hepatitis (AGH) and that the report of the AGH be circulated to members of the Joint Committee by the Chairman.

9. BCG

9.1 Report of the BCG Vaccination Sub Committee held on 11 March 1987

Dr Bush said the Sub Committee was considering the matter of keloid scarring after BCG vaccination. The inclusion of advice in the Memorandum from a case/control study of the efficiency of BCG in ethnic minorities, together with papers on the problems of identifying 'at risk' groups on entry into this country.

9.2 Cross-infection and the Heaf gun
Paper by the Department JCVI(87)5

Dr Bush said that the main matter considered by the Sub Committee was a possibility of cross infection with the Heaf gun with the AIDS virus. Two sets of experimental evidence were considered:-

(a) Professor Cooke of the Hospital Infection Division of the Central Public Health Laboratory had shown that the present method of flaming produced variable temperatures in the head of the Heaf gun and did not consistently destroy spores of Bacillus subtilis innoculated on to the head of the gun.

(b) Complementary experiments were carried out by Professor Selkon at the PHLS Laboratory, Oxford which showed that when the head of the gun was immersed in cultures of poliomoyelitis virus and herpes simplex virus, the ability to produce a viral growth from the needles after flaming by the usual method, was not sustained. Dr Bush concluded saying that flaming of the Heaf gun by the present technique appeared to produce a variable result and that the final revision of the BCG section of the Memorandum has had to be held back until a decision on this matter could be taken.

Dr Selkon said that he had performed a further six experiments with poliomyelitis and herpes viruses and also studies on human immunodeficiency viruses (HIV); none of these had yielded growth of virus after flaming in the recommeded way. It was calculated that the chance of HIV escaping this type of sterilisation was 1 in 10^{12}. It was also noted that CDSC had not detected a case of hepatitis B in the past 10 to 14 years which was associated with Heaf testing. Dr Jones pointed out that detachable Heaf gun heads, which could be autocalved, were now available. Dr Bush said that when the BCG Sub Committee last looked at this method, the Heaf guns used could not guarantee consistency of Skin punture pressure and could not therefore guarantee a uniform depth of penetration. Some members suggested that it might be possible to purchase detachable, autoclavable heads for the Heaf guns, now currently in use in the Health Service. Dr Smith said that he was reassured by the evidence of Dr Selkon's experiments but that one had to consider ~~observer~~ user variability in the thoroughness of flaming of Heaf guns. Professor Collee pointed out that Professor Cooke's experiment presupposed a heavy bacterial load on the head of the Heaf gun which was an unrealistic situation.

The Chairman said that this matter would be considered by the Microbiology Advisory Committee at its next meeting on 8 May 1987. Brigadier England said that the Armed Services still used Heaf testing extensively and were anxious to know whether the present method of flaming was sufficient.

10. AIDS and Immunisation
Note of the Joint JCVI/EAGA Working Group held on 3 April 1987 to consider immunisation of HIV positive individuals

The Chairman said that the Advisory Group had been asked three main questions:

(a) The advisability of administering both live and inactivated vaccines to individuals who are known to be HIV positive - whether symptomatic or asymptomatic?

(b) To consider whether screening for HIV infection was advisable before administering certain vaccines?

(c) To advise whether or not augmented doses of inactivated vaccines should be given to those known to be HIV positive in view of the possibility of impaired immune capacity?

The papers studied by the Group were reassuring to the extent that 200 children who were HIV antibody positive had already been given live vaccines without evidence of harm. There had been only two reports so far of severe adverse reaction one with vaccinia and the other with BCG. A study of 30 children born to HIV positive mothers were all positive at birth but the majority lost their antibody and only two retained HIV antibody. A further

paper indicated that only 60 per cent of HIV antibody positive patients were given measles, mumps and rubella vaccine (MMR) prior to diagnosis had protective levels of measles antibody after immunisation. There was a risk of vaccine-associated poliomyelitis when OPV was introduced into a family where there was a immunosuppressed individual. Also, only a proportion of HIV patients developed a satisfactory level of antibody after receiving plasma-derived hepatitis B vaccine. A similar fact was also observed with yeast-derived hepatitis B vaccine.

In general, the advice which emerged from these papers was that:

(a) Live virus and live bacteria vaccines should not be given to children and young adults who are immunosuppressed in association with AIDS or other clinical manifestations of HIV infections.

(b) The possible danger that the stimulation of the immune system by vaccination may be detrimental is more theoretical than real.

(c) As with other patients with immunosuppression the administration of influenza and pneumococcal vaccine is recommended.

(d) Passive immunisation with immunoglobulin is recommended for children exposed to measles and chickenpox.

The Chairman turned to the recommendation of the US Advisory Committee on Immunisation of the U S Advisory Committee on Immunisation Practice concerning Immunisation of HIV antibody positive individuals. Members proposed the full guidelines.

(1) Symptomatic HIV antibody positive individuals

a. Should not receive live vaccine

b. But may receive inactivated vaccines in accordance with existing recommendations.

c. Children and young adults with AIDS or other clinical manifestations of HIV infection should be given passive immunisation with the appropriate immunoglobulin following significant exposure to measles or varicella (Similar to other immunosuppressed patients).

(2) Asymptomatic HIV antibody positive individuals

a. May be given live vaccine for appropriate indications with the exceptions of BCG and also smallpox vaccine.

b. Should receive inactivated vaccine where indicated.

Other considerations were:-

(a) It is unnecessary to give augmented doses of inactivated vaccine to either category 1 or 2 as this will not enhance protection.

(b) The Joint Committee agreed that the use of Inactivated Polio Vaccine (IPV) would be safer if the family contacts of the vaccinee were known to have AIDS, AIDS related conditions (ARC) or other causes of immuned suppression. However it was suggested that, since HIV

infection mainly compromises cell mediated immunity, the risk of contact-vaccine-associated poliomyelitis was exceedingly small; therefore it was not considered worthwhile advising the use of IPV.

(c) Asplenic children or those with sickle-cell anaemia; it was advised that these children be protected with pneumococcal vaccine.

(d) It was advisable Homosexual men should be immunised against Hepatitis B.

(e) The use of additional passive immunisation should be recommended, despite the previous administration of a full course of vaccine, if any HIV individual is exposed to infection.

The Chairman pointed out that these recommendations, [illegible] should be regarded as interim and should be put to the next meeting of EAGA, as firm recommendations produced by the JCVI.

11. Whooping Cough

11.1 Present Position - Paper by the Department — JCVI(87)6

11.2 Extract of a Paper prepared by CDSC for "Community Medicine" — JCVI(87)7

Dr Barnes, speaking to these papers, said that the present epidemic appeared to be nearing an end, since the weekly notifications to the Office of Populations, Censuses and Surveys (OPCS) was now between 300 to 400 notifications a week, thus indicating a return to the inter-epidemic level.

The paper to be published (produced by CDSC) showed that the expected autumn upsurge of notifications was not observed either in Regional Health Authorities with poor or good uptakes of pertussis vaccine; this paper also indicated that OPCS notifications of whooping cough were still mirrored by reports from the Royal College of General Practitioners and isolation of Bordetella pertussis by the PHLS; and also that there was a correlation between the incidence of whooping cough in RHAs and the uptake of pertussis vaccine.

Nevertheless, 59,500 cases had been reported in the current epidemic compared with 83, 500 in the 1981/83 epidemic; a fall of 19 per cent. Attack rates for whooping cough amongst children under five years old had fallen from 5 per thousand in the epidemic year 1978 to 2.8 per thousand in 1983. The lowest level of attack rate observed was in the 1970 to 1973 period of 1.6 per thousand.

Professor Hull pointed out that in the Northern, Yorkshire, North East Thames, North West Thames, South East Thames, South Western and West Midlands Regional Health Authorities, there was a tendency for notifications to peak at about the 37th week of 1986. He also observed that the Thames Regions, as depicted in the correlation figure, indicated that the North East Thames and South West Thames Regions were well off the line of correlation.

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12. Influenza

12.1 Minutes of the meeting of the Advisory Group on the Antigenic Composition of Influenza Vaccine held on 29 October 1986

Dr Smith said that this was an ad hoc meeting which had been reported verbally to the last meeting of the Joint Committee, indicating the decision to introduce a monovalent vaccine containing the new strains of Influenza A H1N1 virus.

12. Minutes of the meeting of the Advisory Group on Antigenic Composition of Influenza Vaccine held on 31 March 1987

Dr Smith said that this meeting had heard that there had been little activity with influenza A H3N2 virus. There had been more activity with influenza A H1N1 virus. This was the ninth successive winter with a low incidence of influenza.

There has been some drift with H1N1 influenza virus and H3N2 virus is changing in such a way that the WHO could not recommend a suitable strain for inclusion in the vaccines in February this year.

It had in fact now been decided that the new vaccine should contain influenza A H1N1 A/Singapore/6/86 H3N2 A Leningrad/360/86 and B/Ann Albort/1/86 like antigens.

It was decided that a CMO letter should be issued in early autumn stating that at risk groups at all ages should be considered for vaccination. Currently the Merieux vaccine was not recommended for children under 14. It was hoped to bring the recommendations on the use of this vaccine into line with other vacccines.

Dr Smith reported that during the year, up to March 1987, 51 adverse reactions had been reported to influenza vaccine with the use of 1.6 million doses of the vaccine. The group had also noted that the vaccine at present in use in the UK, had an expiry date of 18 months after the date of manufacture. Dr Rotblat agreed to look into this matter. Professor Lambert asked if the data sheet specified a lower age limit for the administration of the vaccine and he said that the data sheet in the US recommended that the vaccine could be given from the age of six months onwards. Dr Rotblat pointed out that in order to achieve this with the UK vaccines, there must be a variation in the vaccine licence.

13. Uptake of Immunisation

13.1 Immunisation activity which took place on World Health Day - 7 April 1987 JCVI(87)8a

(a) Report of the meeting held at the London School of Hygiene and Tropical Medicine

Dr Salisbury reported that this was an assembly of nominated officers responsible for immunisation from health authorities. At this meeting Dr Begg had read a paper on immunisation performance in DHAs focussing on pertussis and measles vaccination. Factors such as social depriviation and lack of computers were some of the principle causes of failure to achieve high uptake. Dr Gill from CDSC had read a paper on vaccination uptake. Dr Jones had read a paper on management of immunisation in Fife where the Health Authority had a high public profile with regard to advice on immunisation.

Dr McGuinness had spoken on community related issues and pointed to the gulf between the priorities as perceived by the medical profession compared with those by the patients. There then followed a Panel discussion in which one of the main issues which emerged was the confusion concerning consent to immunisation. In the afternoon, Dr Orenstein (Centers for Disease Control, Atlanta, Georgia, USA) spoke on the adoption of MMR in the USA and issues concerning the effieciency of this vaccine. CMO spoke on accountability concerning immunisation and the need to improve the uptake of pertussis vaccine. He announced the introduction of MMR vaccine but gave no date for the full implementation of this change. Dr Nicoll spoke on the myths concerning contra-indications to vaccination and the means of improving training on immunisation.

Professor Zuckerman spoke of the importance of genetic engineering in producing new vaccines.

(b) On the same day, a luncheon for Famous Mothers had been arranged by the National Rubella Council and concurrently the option of MMR in principle was announced by PS(L).

The Chairman hoped that these exercises would be reported in the media. The meeting questioned the dedication and commitment of appointed officers and Professor Gilliatt expressed his reservations concerning reported adverse reactions to MMR in the USA.

13.2 Reports of Visits to Health Authorities carried out in October 1986 JCVI(87)9

Dr Barnes speaking to this paper said that one Health Authority with a poor uptake of immunisation and one with a better uptake were visited in the Merseyside and North Western Regional Health Authorities making four Health Authorities in all. In general, the reason for poor uptake was because many families had a multiplicity of social and economic problems which competed with immunisation as a priority for health care. There was a folklore that immunisation was unnecessary and that measles was not regarded as a serious illness. The literature issued by the then HEC was regarded as unsuitable for the population in these areas. There was lack of computerisation of records and insufficient staff to follow-up defaulters from vaccination, and above all, no health authority plan for implementation of immunisation. On the other side of the coin, the health authorities which performed better mostly did not have these disabilities and were already performing well before the most recent reorganisation in the Health Service.

The meeting considered that the reasons for poor uptake given to the visiting team were unconvincing and that poor performance indicated poor health service policies.

Members asked if the number of individuals employed in immunisation services had fallen. It was pointed out that generally, numbers employed in areas with poor uptakes was equal to or even higher than those in health authorities with good performance. The Joint Committee asked that such visits should continue and that those authorities already visited should be followed up and that new ones be selected for visits.

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13.3 Childhood Immunisation Campaign - Paper by the Department's Regional Medical Services — JCVI(87)10

Dr Singer introducing this paper said that the Regional Medical Service consisted of a network of Departmental Medical Officers who were in liaison with general practitioners. These Regional Medical Officers were asked to survey the effect of the whooping cough vaccination campaign which was launched in the autumn of 1985. During the period of three months, 1400 GPs were visited and some 1250 (84 per cent) had heard of the Childhood Immunisation Campaign. Of those who had heard of the campaign, half had displayed posters. The survey revealed that health authorities and general practitioners do not always exchange data and information and that a large proportion of doctors had little knowledge of action being taken by their health authority, unless a computerised recall system was in use. There was some indication that the campaign is proving more effective in the Southern half of England.

Dr Smith remarked that it was interesting that GPs do not appear accountable for their performance with regard to immunisation. Dr Jones suggested that it would be helpful if there was a competitive interest among practices with regard to performance. Dr Bush observed that since 1974, unification of GPs with the NHS had a deleterious effect on the target of 100 per cent of infant immunisation done by GPs in his area, Suffolk.

13.4 A survey of pre-school immunisation programmes. Summary Report of a Paper and Correspondence with Dr Norman Begg — JCVI(87)1

Dr Barnes said that this was a survey of 193 districts who had replied to a questionnaire. It was discovered that only 88 districts were currently using an appropriate method to calculate immunisation uptake rates, using an appropriate denominator. Districts with computerised record systems were more likely to calculate uptake rates correctly and to achieve a higher uptake rate than those districts using a manual system. Less than 50 per cent of districts provide feed-back of statistical information to the individual immunisation centre. Only 34 districts provided training in immunisation for general practitioners. As with the points considered at the PHLS Measles meeting, social deprivation provision of health visitors, confusion and ignorance among health professionals concerning contra-indications to immunisation, all produced obstacles to the achievement of better immunisation uptake.

The Joint Committee recommended that the findings of this survey should be edited and distributed to nominated officers.

13.5 The COVER Programme for Rapid Evaluation of Vaccination Uptake - Extract from CDR 87/12 — JCVI(87)12

Dr Barnes said that this paper attempted to assess the total amount of immunisation received by a cohort of children on reaching a certain period of life, say the age of two years or on school entry. thus, the cumulative uptake of immunisation was somewhat higher than that assessed by the normal uptake rate assessed at the end of the second birthday.

13.6 (a) Comparison in use of Health Services between a deprived and endowed community — JCVI(87)13

Paper by Marsh G N and Jenning D M
Archives of Diseases in Childhood, 1987,
Vol 62, Pages 392 to 396

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(b) Immunisation of children by a nurse without a doctor present — JCVI(87)13a

Paper by Jefferson N, Sleight and MacFarlane A. BMJ 1987, Vol 294; Pages 423 to 424
See commentary on these papers

Dr Salisbury said that these two papers were complementary and contained useful information for an appropriate audience. The first sturdy compared two groups of children matched for age and sex, the first a deprived group and the second consisting of more endowed controls from a neighbouring area with better social and economic conditions. This study showed that deprived children visited their doctors more often than did the controls. Therefore, there was default in offering immunisatioin and alerting parents to this need.

The second paper described 148 children who were referred to a specially trained nurse for failing to complete the courses of immunisation. The study demonstrated that such children could be successfully vaccinated at home. There was one possible case of anaphylactic shock which was appropriately treated by the nurse.

Professor Hull observed that there was a need for guidance from the Joint Committee on the appropriate treatment for anaphylaxis. Members also discussed the need for proper management structuring to enable nurses to do such work. The Chairman said that there was a need for circular with recommendations on this subject.

14. ARVI

14.1 Minutes of the meeting held on 3 October 1986

Professor Gilliatt said that the October meeting of the JCVI had seen these draft minutes which included an "in-house" review of the National Childhood Encephalopathy Study. The minutes which had now been agreed by ARVI, together with the agreed conclusions was evidence that pertussis vaccine was a potential though rare cause of serious adverse reactions.

14.2 Report of the meeting held on 6 February 1987

Professor Gilliatt said that the CSM had asked ARVI for an updating of policy with regard to the use of pertussis vaccine. ARVI had produced such a statement which went to the meeting of the CSM at the end of February and had been entered into the minutes of the CSM.

14.3 Suspected adverse reactions to vaccines - Reports on Yellow Cards registered during the period 12 September 1986 to 12 January 1987 — JCVI(87)14

Professor Gilliatt said that this paper contained report of anaphylaxis and anaphylactoid types of reactions occurring soon after measles vaccine. He reminded the Joint Committee that Dr Zutshi had been following up such reactions and that this aspect of adverse reactions might become important with the introduction of MMR.

15. Polysaccharide Vaccines
Paper by Dr J W G Smith

Dr Smith said that the polysaccharide capsules of organisms such as the pneumococcus, meningococcus and Haemophilus influenzae B were valuable antigens although their response differed from other vaccines in that young children under the age of two years, tended not to respond to the antigens.

With regard to pneumococcal vaccines, he said that the JCVI had issued tentative guidelines for the use of the vaccine which were to be included in the Memorandum 'Immunisation against Infectious Disease'.; at the time these were not used since the vaccine then was not licensed. Since the vaccine is now licensed again, it was suggested that the guidelines be included in the Memorandum.

Haemophilus influenzae B (HIB) vaccine

Dr Smith had included the US recommendations for the use of this vaccine as an appendix to his paper, together with an update taken from the MMWR.

Meningococcal Vaccine

The problem in this country is Group B meningococci for which there is at present no available vaccine. A meeting had been held in September last year with international experts concerning the use of meningococcal vaccine. As a result, there was a wish to secure a licence for A, C, Y and W135 polyvalent meningococcal vaccine and to encourage research on the development of vaccines effective against Group B meningococci.

The Chairman asked if meningitis caused by Haemophilus influenzae B (HIB) was becoming more important in this country. Dr Smith said that in the US one child in 500 developed the condition and the risk was higher amongst Eskimo and American Indian children. Professor Hull remarked that in the UK one child in 2,000 developed an invasive HIB infection and that the attack rate seemed to be increasing and that the same effect was observed in other countries. Dr Schild said that NIBSC had established a research group for meningococcal infection and vaccine development.

It was decided to formulate guidelines on the use of meningococcal and pneumococcal vaccine. The Chairman asked Professor Geddes and Dr Smith in collaboration with Professor Moxon's Sub Committee on pneumococcal vaccines of the MRC CDVIP to produce reviews on this subject.

16. Memorandum 'Immunisation against Infectious Disease' 1987 Edition

Mr Wilson said that it was hoped to now produce this new edition in the summer of this year.

17 WHO Expanded Programme on Immunisation
Report on Policy for information — JCVI(87)16

Report of the European Advisory Group of WHO Expanded Programme on Immunisation (EPI) WHO meeting, Copenhagen 10-12 September '86 — JCVI(87)16a

Dr Salisbury said that these reports were for information and the the second paper was precise extracting the main decisions of this Advisory Group. He said that he would be attending a WHO EPI meeting in Moscow at the end of May this year.

18. Any other business

The Chairman told members that Professor Gilliatt was retiring from the JCVI and his appointment at the Institute of Neurology (University of London) in order to take up an appointment in the USA. On behalf, of the members of the Joint Committee, the Chairman thanked Professor Gilliatt for the valuable contribution he had made to the work of the Committe and wished him well in his new appointment.

The Chairman also said that Professor June Lloyd had retired from the Committee and expressed thanks on behalf of the Committee for the work she had done.

Professor Gilliatt replied and said that the work of ARVI especially the identification of adverse reactions to vaccines was imperitive for the success of long-term vaccination programmes. It was therefore important that the Secretariat has both the manpower and time to carry out this important task.

19. Date of the next meeting

The next meeting will be held on Friday 23 October 1987.

Meetings for 1988 are:

Friday 22 April 1988

Friday 21 October 1988

JC Bell
23.10.87

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