

## CURRENT ISSUES

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### The Sudan Association of Paediatricians

The Sixth Conference of the Sudan Association of Paediatricians (SAP) was held in El Fao in December 1982. This small town - being a budding settlement area in a large newly-born agricultural project - was chosen to symbolize the theme of the conference i.e. priorities in primary health care. The conference has been designed by the organising committee in the form of a workshop to discuss and formulate specific recommendations to help shaping a national plan regarding the pressing issues of child health in the Sudan. During the three days of the workshop, participants - including most of SAP members and representatives of distinguished local and international bodies dealing with child health - took active part in the three committees to which the workshop has been divided. These dealt with diarrhoeal diseases, malnutrition and immunization.

In this issue we included the recommendations of the Committee on Immunization and also cited the conclusions of the WHO/IPA Workshop on Immunization that preceded the XVII International Congress of Paediatrics. It is hoped that this will intensify the increasing awareness amongst SAP members of the activities of the Expanded Programme on Immunization Project which is currently undertaken in the Sudan.

#### WORKSHOP ON PRIORITIES IN PRIMARY HEALTH (FAO DECEMBER, 1982)

#### RECOMMENDATION OF THE COMMITTEE ON IMMUNIZATION

A major area of concern in improving health care delivery in any developing country is the operation of an effective immunization programme. The World Health Organization (WHO) has made a goal in that direction in its Resolution 27/57. This aims to reduce morbidity and mortality from diphtheria, pertusses, tetanus, measles, poliomyelitis and tuberculosis by providing immunization against these diseases for every child in the world by the year 1990. These childhood diseases were found in a recent survey conducted in the year 1979 to account for 32% of all deaths in eleven major cities in Sudan amongst pre-school children, let alone the less-privileged areas.

The country is therefore committed to an expanded immunization programme to reduce the magnitude of this problem and meet at the end the targets stated in the WHO resolution 27/57.

1. The immunization pannel - after thorough discussion - approved of and adopted the goals stated in the paper presented by the Central Office of the Expanded Programme on Immunization (EPI) Project. This aims in collaboration with other health services and non-governmental organizations at:

(a) Short term policy: 80% coverage of eligible children in 45 centres (towns) and surrounding areas of 2 to 4 hours drive radius and 75% of Gezira province.

(b) Long term policy: to cover 80% of the eligible children in each accessible primary health care (PHC) population and functioning PHC units, with the aim of meeting the targets stated in the WHO resolution 27/57.

2. The pannel is aware of the vital importance of the notification of the above-mentioned childhood diseases in all hospitals both inpatients and outpatients. In the way of improving that the pannel strongly recommended:

(a) Providing adequate clerical facilities for notification and keeping a record system in the various paediatric units throughout the country being supervised by the paediatricians concerned.

(b) Improving the existing infection disease units (the so-called quarantines) to provide a better record and better patients' care.

(c) Encouraging the implementation of disease surveys when necessary. This will work as a feedback for the immunization programme and encourage those who are involved e.g. paediatricians to conduct researches in that respect.

3. (a) The pannel adopted the immunization schedule followed by the EPI which consists of:

- ☐ BCG at birth or first contact with the baby
- ☐ First dose of oral polio vaccine (OPV) and triple vaccine (DPT) at 3 months
- ☐ Second dose of OPV and DPT at 4 months
- ☐ Third dose of OPV and DPT at 5 months
- ☐ Measles vaccine at 9 months
- ☐ School entry: Diphtheria/tetanus, OPV and BCG

This schedule is ment to be flexible and no maximal intervals need to be drawn between the first, second and third doses. Moreover, the child can have OPV, DPT and measles vaccine at the same time if the parents deferred the third contact to the 9th month.

(b) In 2-3 years time this schedule can be coupled with another campaign style schedule which needs only two contacts with the child of 6 months intervall to allow for effective coverage of rural areas with no existing health services. The PHC units will then act as focal points for conducting these campaigns. However, further research is recommended to be done in this respect to evaluate the efficiency of such programmes.

(c) The pannel approved of unifying the site of injecting the DPT vaccine i.e. the lateral side of the thigh to limit the chance and extent of provocation paralysis. Site of BCG should be the upper lateral aspect of left forearm.

4. (a) The pannel was informed by the EPI director about the cost of the programme and was assured that the cost would not be prohibitive for at least the comming 5 years.

(b) It also admired the efficacy and practicability of the "cold chain" system and vaccine monitoring devices followed by the EPI Central Office in Khartoum.

(c) Weak links in the "cold chain" could be monitored by recording the temperature exposure hitory of vaccines as they pass through the different points in the disbrubition system. However, more help is needed from the Regional Governments to assure continued supply of fuel and maintenance parts for the various items of the "cold chain" e.g. generators, cars, refrigerators. The pannel suggests that the Regional Governments should make a separate item within the health service budget for EPI activities in each region to cover these minor expenses.

5. The pannel has approved of the delivery of childhood immunization in Sudan within the context of the Primary Health Care Programme (PHCP). The role of each partner was discussed thoroughly and table was compiled to delineate the duties of manpower at the various levels (Table I).

Table I  
Roles and duties of manpower in the implementation of suggested immunization programme

Manpower	Provider	Reporter & Recorder	Trainer	Supervisor	Promotor	Supplier	Evaluator	Manager	Planner
1. Village midwife	+	+			+				
2. Primary health care worker (PHCW)/ nurse/vaccinator	+	+			+				
3. Assistant sanitary overseer	+	+			+				
4. Medical assistant/health visitor	+	+	+	+	+	+			
5. PHCW tutor			+	+	+				
6. Health education officer					+				
7. Nutrition officer					+				
8. EPI operation officer		+	+	+	+	+	+	+	+
9. Midwife inspector			+	+	+			+	+
10. Council medical assistant		+	+	+	+				
11. Public health officer			+	+	+			+	+
12. Medical officer		+	+	+	+			+	+
13. Medical inspector		+	+	+	+			+	+
14. Paediatrician and obstetrician		+	+	+	+			+	+
15. Community physicians (at all levels)		+	+	+	+			+	+
16. National director of EPI		+	+	+	+	+	+		+

The EPI Central Office in Khartoum is only responsible for technical supervision, guidance, evaluation and supplies of the necessary logistics. In each province a steering committee with the paediatrician playing a major role and including an EPI operation officer as convenor, community physician, obstetrician, peoples organization representatives, will be in charge of local planning implementation and supervision of the programme within the context of the regional health authority. The steering committee will act as the top of a pyramid, the base of which consists of the village midwife and the primary health care worker (being a nurse or vaccinator).

6. **Health education.** The pannel was quite aware of the vital role of health education in supporting the programme which can be effectively executed through:

(a) Mass media:

- ☐ Television: short films and slides
- ☐ Radio: public announcements, short songs etc
- ☐ Posters: the help of the Graphic Department of the Faculty of Fine Arts would be appropriate in this respect.

(b) Curricula: should be given priority in:

- ☐ Medical schools: where sound knowledge of the theoretical background and technique of immunization and the maintenance of the "cold chain" is needed both by the medical students and the postgraduate doctors. Curricula of medical assistant, nurses, midwives and community health workers should also be strengthened in this aspect.
- ☐ Primary, intermediate and secondary schools curricula should be improved to ensure effective child, child-to-child, child-to-parents and future parents' education about the importance of vaccination. Ideas in this line are providing schools with booklets published by EPI Central Office and exercise books with back-covers illustrating the immunization schedule and instructions about it.

(c) Influencing decision makers by involving them directly or indirectly in the steering committee of the different provinces and by personal communication through those who hold key health positions in the provinces: e.g. paediatricians, obstetricians and community physicians.

(d) Influencing pressure groups through specially designed talks and short seminars.



7. The pannel discussed the importance of endorsing laws and legislations by the various health authorities to back the immunization programme e.g. penalizing defaulting parents. It was agreed upon that such measures should not be taken without assuring adequate and convenient immunization services in this district. However, whenever there is any vaccination activity in the villages legislations to discourage defaulters should be implemented being supported by health education.

8. **Evaluation.** The group agreed upon the vital importance of evaluating the efficacy of the programme. This includes:

(a) Coverage evaluation: carried out periodically to ensure adequate immunization coverage in the various districts.

(b) Measuring antibody levels in children for the diseases included in the immunization programme.

(c) Survey and studies of immunizable diseases: to see whether reduction of incidence is achieved in 5-7 years time.

(d) Evaluation of the "cold chain".

(e) Auditing of the programme periodically.

9. Certain problems directly related to immunization were discussed and decisions were made about them. These included:

(a) Whooping cough encephalopathy: The pannel was aware of the fact that the advantages in term of protection for children of Sudan outweighs the risks of the adverse reactions of the vaccine.

(b) Tetanus antiserum (ATS): Its wide use in the Sudan (due to its low cost) for all types of wounds is quite hazardous (anaphylaxis etc). Two doses of the toxoid should replace ATS whenever possible.

(c) Rabies vaccine: Research and measures to enhance the elimination of the vaccine used now are strongly recommended and the human antirabies vaccine - though its cost is prohibitive - should be available for at least the health personnel who are at risk of managing cases of rabies in the various districts etc.

(d) Meningitis and typhoid: Those diseases need not be included in a national immunization programme since they can be dealt with by other measures. Moreover the

cost/efficacy of either of them does not justify their routine use.

Contents of such diseases should be within the responsibilities of the Epidemiology Department.

## XVII INTERNATIONAL CONGRESS OF PAEDIATRICS WHO/IPA PRE-CONGRESS WORKSHOP ON IMMUNIZATION

### CONCLUSIONS AND RECOMMENDATIONS

7 November 1983

#### 1. Introduction

Paediatricians have long taken a leading role in the delivery of immunizations and their influence often extends beyond the families under their care. Their role in preventing disease could be further extended if the National and International Associations become involved with and support the World Health Organization Expanded Programme on Immunization (EPI)<sup>1</sup>.

A Pre-Congress Workshop on Immunization for the XVII International Congress of Paediatrics was held at the World Health Organization Regional Office for the Western Pacific, 6-7 November 1983. During the workshop, technical papers were presented dealing with new vaccine development and conclusions and recommendations to promote the application of immunization services. Specific recommendations follow:

#### 2. Support for the expanded programme on immunization

Despite being one of the most powerful and cost effective weapons of modern medicine, immunization remains tragically unavailable or under-utilized, particularly in the developing world. As a consequence some five million children die from vaccine preventable diseases each year: ten children with each passing minute. An equal number are blinded, crippled or left with mental retardation.

<sup>1</sup>Established by the World Health Assembly in 1974, the EPI seeks to expand the geographic coverage of existing immunization services and to expand the number of vaccines of public health importance included within national immunization programmes.