

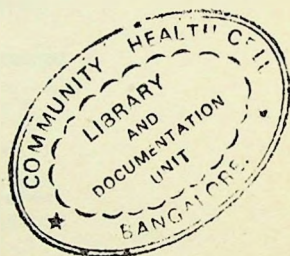
**REPORT ON THE  
TRAINING OF MEDICAL AND HEALTH PERSONNEL FOR  
THE  
UNIVERSAL IMMUNISATION PROGRAMME  
IN PONDICHERRY**



**DEPARTMENT OF  
PREVENTIVE AND SOCIAL MEDICINE  
JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL  
EDUCATION AND RESEARCH  
PONDICHERRY**

1991

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*Edited by*

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## **Acknowledgement**

Grateful thanks to :

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The Directorate General of Health Services and Assistant Commissioner (Immunisation), Ministry of Health and Family Welfare, for the financial and other support,

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UNICEF for the financial grant and for the supply of training modules.

## **1. Introduction**

The Government of India, Ministry of Health and Family Welfare started a scheme in 1985 with the aim of achieving universal immunisation coverage as a part of the Expanded Programme on Immunisation and improving management of diarrhoeal diseases and also providing prophylactic treatment against nutritional anaemia with iron and folic acid to women with haemoglobin levels of 10 gm. per cent and children with levels of 8 gm. percent in the country as a whole to be achieved by 1990.

Pondicherry was one of the union territories included in the initial phase of the Universal Immunisation Programme. The programme envisaged the involvement of medical colleges by utilising the services of medical students and faculty to support health departments in improving immunisation coverage, planning and organising training of medical and health personnel, assist surveillance and conduct of independent evaluation programmes. The department of Preventive and Social Medicine of the Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER) was to organise and conduct these activities in the Union Territory of Pondicherry.

The health services infrastructure in Pondicherry consists of nine major hospitals including JIPMER, 3 Community health centres, 11 Primary health centres, 70 sub-centres and 26 dispensaries. Under the ESI scheme, there are 11 dispensaries besides a 50 bed hospital.

In addition to this, there are 677 Anganwadis of the Integrated Child Development Services scheme (ICDS) actively co-ordinating in the immunisation and other health programmes.

JIPMER commenced the training programmes of medical and health personnel in October 1986. These programmes were systematically planned and conducted in a sequential manner. Usually, after completing training of a batch of medical Officers, the training of health assistants, health workers and the Anganwadi workers was undertaken from the same Community health centres, Primary health centres, sub-centres and ESI dispensaries so as to develop an effective, motivated and trained team for those areas.

The particulars of the training courses held from 1986 to 1991 are shown in Table-I and Annexure I.

## **2. Objectives of the Training**

Initially, the training was related to the Universal Immunisation Programme (UIP) components only. Later on integrated training courses for the programmes addressed to the women and children were organised as per the recommendations of the ministry of Health and Family Welfare and the Central Technical Committee of the ICDS. These integrated programmes included UIP, Diarrhoeal Diseases control programme (DDC), Acute Respiratory Diseases control (ARI) and the ICDS. To meet these goals suitable training objectives were drawn. It was expected that the training would enable the participants to develop the following abilities:

### *Universal Immunisation Programme*

1. Prepare a plan of action and chalk out strategies of implementation for the coverage of eligible children and pregnant women in the PHC areas.
2. Arrange a briefing session of concerned staff to explain the objectives of the programme and the strategies of implementation.
3. Place an indent for the required quantities of vaccine with the Deputy Director (Immunisation), Govt. of Pondicherry. Maintain cold chain properly in PHC and in the outreach as per recommendations (i.e.  $+2$  to  $8^{\circ}\text{C}$ ).
4. Check that all supplies and equipment required are available.
5. Arrange for wide publicity to encourage community participation.
6. Ensure regular monitoring and supervision of work.
7. Ensure completion of recommended immunisation schedule at the right age.
8. Send monthly feed back to the Deputy Director (Immunisation).
9. Participate in the epidemiological evaluation programme.

### *Diarrhoeal diseases programme management*

10. Perform the following steps whenever the child is brought with diarrhoea:-
  - a) Assess the degree of dehydration by clinical examination.
  - b) Select treatment plan to prevent or treat dehydration.
  - c) Collect stool specimen by anal tubing method and transport of the same to the nearest laboratory for confirmation.
  - d) Record the data.
11. Perform the following steps to implement Oral Rehydration Therapy Programme:-
  - a) Train Para-medical Workers in the health centre area.
  - b) Plan and supervise educational programmes for mothers.
  - c) Ensure supply of oral rehydration salt (ORS).
  - d) Monitor and supervise the ORT programme.
  - e) Advise mothers about feeding during and after diarrhoea.
  - f) Explain to the mothers about the inter-relationship among nutrition, infection and diarrhoea.

### *Management of Acute Respiratory Infections*

12. Perform the following steps whenever a child is brought with Acute respiratory infection (ARI):
  - a) Assess the clinical severity of ARI viz: mild, moderate and severe.
  - b) Select treatment plans to treat ARI and to impart health education to prevent the same.
  - c) Recording of the data.



### *ICDS components*

1. Be aware of the objectives, organisation and resource allocation of ICDS.
2. Identify the beneficiaries and the benefits under the ICDS programme.
3. Take effective part in the implementation of health components of the scheme.
4. Plan and implement continuing education for Anganwadi workers.
5. Be aware of the role of State Coordinator and Consultant of ICDS.
6. Prepare and transmit monthly reports.

### **3. Contents of the Programme**

Under the Universal Immunisation Programme, the following topics were covered:—

- 1) Management of the cold chain system,
- 2) Conducting vaccination session,
- 3) Evaluation of vaccination coverage,
- 4) Conducting disease surveillance and
- 5) Manual of Health Workers.

Under the Oral Rehydration Therapy Programme, the following topics were covered:—

- 1) Treatment of diarrhoea,
- 2) Diarrhoeal disease control programme and
- 3) Nutritional care during diarrhoea.

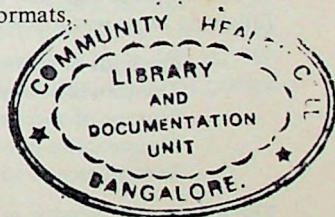
Under the ICDS programme, the following topics were covered:—

- 1) Introduction, concept, objectives and organisation,
- 2) Role of State Co-ordinator and Consultant,
- 3) Monitoring and continuing education system for health components and its feedback,
- 4) Administrative and financial aspects of ICDS,
- 5) Social welfare components, its functioning and reporting,
- 6) Contents of continuing education programme at the project/PHC level with its review and implementation,
- 7) Discussion on MMR and MPR—Reporting formats,
- 8) Monitoring of growth and development,
- 9) ARI and its management.

### **Methodology**

#### *Group discussion:—*

For universal immunisation aspects, small group discussions and short presentations by guest faculty were the techniques adopted. Participants were encouraged to take part actively in small group discussions. Self study of modules prepared by the ministry of Health and Family Welfare of the Govt. of India on UIP and ORT and supplied by the UNICEF were used.





### *Demonstration :-*

The method of assessing dehydration in children was demonstrated with the help of cases brought from the hospital. The three components, i.e. history taking (ask), observation (look) and clinical examination (feel) were emphasised during the demonstration.

Facilities are available for the laboratory confirmation of poliomyelitis at JIPMER. The method of collection, storage and transportation of specimen for laboratory investigations of suspected cases of poliomyelitis was also demonstrated.

### *Guest lectures :-*

Guest lectures were delivered on some topics. They were followed by intensive discussions.

### *Use of A.V. aids :-*

During the entire course, a number of 35 mm. transparencies, extrans, overhead projections and video clips were used. Three video films on rationalised use of drugs and acute respiratory infections were shown.

### *Faculty/Guest Lecturer :-*

The resource persons were from the departments of P & SM, Paediatrics and Microbiology of JIPMER. The guest lecturers were invited from the departments of Health & Family Welfare Services and Social Welfare of the Govt. of Pondicherry. The list of faculty members and guest lecturers is shown in Annexure-II.

## **5. Evaluation**

### *i) Pre and Post tests :-*

In each course a pre and post test was conducted by using a questionnaire.

It was observed that the knowledge of about half of the medical officers in the following areas was inadequate.

- Methods of estimating the vaccine requirement,
- Thermosensitivity of vaccines,
- Storage of vaccines in different parts of the refrigerator.
- Maintenance of cold chain system.
- Surveillance of vaccine preventable diseases.

The existing knowledge of health assistants (male & female) and health workers (maie & female) on indications and contraindications of vaccination and sterilization procedures to be taken to maintain the potency of vaccines during outreach activities were some of the areas which needed improvement. Similarly the correct immunisation schedule and interval between the doses were some of the aspects which needed updating for the Anganwadi workers.

Following the training there was significant improvement of knowledge and understanding in these aspects by the participants. (see the pre and post test scores):-

	Pre test	Post test
Medical Officers:		
<i>Mean</i>	66%	83%
<i>Range</i>	50% to 78%	68% to 98%
Health assistants and health workers:		
<i>Mean</i>	68%	92%
Anganwadi workers:		
<i>Mean</i>	52%	85%

#### ii) *Programme Evaluation Results*

The programme evaluation results indicated that the participants felt that:-

- a) the objectives of the programme were specified by the course managers,
- b) the methodology adopted encouraged their active participation and there were opportunities for free discussion,
- c) the learning atmosphere was friendly,
- d) the background materials provided were helpful,
- e) A.V. aids were adequately used,
- f) training programme was useful and
- g) even though the programme had a tight schedule, they had learnt a lot.

## 6. Training of Medical Interns

It was decided to provide training to medical interns as well from 1988. The Department of Preventive and Social Medicine organised this training during the twelve weeks posting of interns in the rural and urban health centres. The modules covered in these training sessions were "Manage the cold chain, Conduct vaccination sessions and Evaluate vaccination coverage." Copies of these modules were provided by the southern zonal office of the UNICEF. During the period from 1988 to 1991 a total of 210 medical interns have undergone this training. This would be carried out in future also for every batch of interns.

## 7. Conclusion

The systematic training has improved the knowledge and motivation of the medical officers, paramedical and anganwadi workers. Better supervision, timely supply of vaccines, establishment of cold chain system and health education activities have among other things contributed to the high coverage of vaccination of the target group in the Union Territory of Pondicherry.

TABLE-1

<i>Serial Number</i>	<i>Category of Personnel trained</i>	<i>No. of courses held</i>	<i>No. of personnel trained</i>
1.	Medical Officers	8	151
2.	Health assistants and health workers	10	305
3.	Anganwadi workers	11	486
4.	Trained dais	2	24
5.	Community health guides	2	22
6.	Medical interns		210

# ANNEXURE-I

## Particulars of Training Courses held from 1986 to 1991

	<i>Batch</i>	<i>Period of Training</i>	<i>Total no. of Participants</i>
MEDICAL OFFICERS	I	15-10-86 to 18-10-86	14
	II	3-12-86 to 6-12-86	19
	III	27-10-87 to 30-10-87	21
	IV	16-02-88 to 19-02-88	15*
	V	20-11-88 to 1-12-88	18
	VI	25-1-90, 27-1-90, 29-1-90 & 30-1-90	19
	VII	21-9-90, 22-9-90, 24-9-90 & 25-9-90	20
	VIII	2-3-91 to 6-3-91	25
HEALTH ASSISTANTS (M & F) and HEALTH WORKERS (M & F)	I	24-10-86 & 25-10-86	34
	II	11-12-86 & 12-12-86	33
	III	10-12-87 & 11-12-87	28
	IV	16-02-88 & 17-02-88	20*
	V	18-02-88 & 19-02-88	25*
	VI	24-01-89 & 25-01-89	34
	VII	6-02-90 & 7-02-90	24
	VIII	11-03-91 & 12-03-91	36
	IX	13-03-91 & 14-03-91	35
	X	18-03-91 & 19-03-91	36*
ANGANWADI WORKERS	I	5-11-86	42
	II	6-11-86	43
	III	7-11-86	40
	IV	21-01-87	39
	V	22-01-87	43
	VI	23-01-87	42
	VII	6-12-88	60
	VIII	7-12-88	60
	IX	8-12-88	56
	X	21-02-90	38
	XI	22-02-90	23
TRAINED DAIS	I	21-02-90	14
	II	22-02-90	10
COMMUNITY HEALTH GUIDES	I	21-02-90	12
	II	22-02-90	10
MEDICAL INTERNS			210

\* Training conducted at Karaikal.



## ANNEXURE-II

### List of Resource Persons/Guest Lecturers

#### JIPMER

Dr. D.K. Srinivasa,  
Professor of P. & S. M.  
and Consultant ICDS

Dr. R.K. Puri,  
Former Prof. of Paediatrics

Dr. M. Danabalan,  
Assoc. Prof. of P. & S. M.

Dr. S. Srinivasan,  
Head of the Dept. of Paediatrics

Dr. P. Nalini,  
Assoc. Prof. of Paediatrics

Dr. S. Badrinath,  
Assoc. Prof. of Microbiology

Dr. S. Mahadevan,  
Assoc. Prof. of Paediatrics

Dr. Ajit Sahai,  
Assoc. Prof. of Biometrics,  
Dept. of P. & S.M.

#### GOVT. OF PONDICHERRY

##### *Department of Health and Family Welfare*

Dr. Gilbert Benjamin,  
Director of Health & FW,  
State Co-ordinator, ICDS

Dr. (Mrs.) Andree Karunakaran,  
Deputy Director (Immunisation)

Dr. V. Palanivelu,  
Deputy Director (FW & MCH)  
and Senior Adviser (ICDS)

Dr. M.J. Alphonse,  
Deputy Director (ESI)

Dr. M.A. Purushothaman,  
Senior specialist Paediatrics

Dr. K. Janaki,  
Junior Specialist Paediatrics

Dr. A.R. Nellian,  
Junior Specialist Paediatrics

Dr. P. Thangaraj,  
Medical Officer

(Contd. . . .)

ANNEXURE-II (Contd.)

Dr. M. Bala Soudarssanane,  
Asst. Prof. of P. & S.M.

Mr. G. Ramalingam,  
Lect. in Stat. & Demography,  
Department of P. & S.M.

Dr. G. Ravitchandirane,  
Medical Officer

Dr. Uma Sankar,  
Medical Officer

Dr. G.S. Adinarayana,  
Medical Officer

*Dept. of Social Welfare,  
ICDS*

Mr. N. Arumugham,  
Joint Director

Mrs. R. Chand Sultana,  
CDPO

Mrs. A.P. Gandhimathi,  
CDPO

Mrs. R. Gomathi,  
Organiser, ICDS