

*Report of the Expert Group on*

*Life Saving Anaesthetic Skills*

*for*

*Emergency Obstetric Care :*

*Training Programme for*

*MBBS Doctors*



*Maternal Health Division  
Department of Family Welfare  
Ministry of Health & Family Welfare  
Government of India  
New Delhi*

*Jai Prakash Narayan Apex Trauma Centre  
(Emergency Response Centre-Aprelude)  
Casualty & Emergency Services  
Department of Anaesthesia & Intensive Care  
All India Institute of Medical Sciences  
New Delhi*

**REPORT OF THE EXPERT GROUP ON  
LIFE SAVING ANAESTHETIC  
SKILLS FOR EMERGENCY  
OBSTETRIC CARE**

**Training Programme for MBBS Doctors**

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# ACKNOWLEDGEMENTS

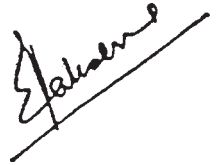
As Chairman of the Expert Group, I would like to thank Shri Prasanna Hota, Secretary (Family Welfare), Department of Family Welfare for his valuable help and support.

I would like to place on record my grateful thanks to all the members of the Expert Group. But for their untiring work and initiative, it would not have been possible to finalise the training modules and complete the Pilot Training Project.

I would like to express grateful thanks to Shri S.S. Brar, Joint Secretary, Dr. V.K. Manchanda, Dy. Director General (MH), Dr. D.C. Jain, Deputy Commissioner (Trg.) Dr. Narika Namshum, Assistant Commissioner, Dr. Himanshu Bhushan, Assistant Commissioner and other members of the Maternal Health and Training Division of the Department of Family Welfare for their support and help. Apart from providing valuable support during the deliberations of the group, they also helped in organizing secretarial and infrastructure assistance in an excellent manner.

I would like to express my deep appreciation of the support provided by Dr. Arvind Mathur, National Professional Officer, WHO – India. I have no hesitation to say that his involvement and help greatly facilitated the work of this Expert Group. I would also like to thank the representatives of UNICEF, UNFPA and European Commission for their valuable contributions during the deliberations of the Expert Group.

I would also like to acknowledge the contribution of the support staff of the Department of Anesthesia, All India Institute of Medical Sciences, particularly Miss Payal Soni and Mr. Rajender Mehta. The Committee must also express thanks to Mrs. Reeta Madaan, Shri Shailender Singh and Shri Pradeep Kumar Sohpaal for their valuable secretarial support.



**Dr. Ravi Saksena**  
Chairman, Expert Group and  
Honorary Adviser to the Department of Family Welfare, Government of India.

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# Life Saving Anaesthetic Skills for Emergency Obstetric Care: Training Programme for MBBS Doctors

## 1. Introduction

- 1.1 All pregnant women are at risk of obstetric complications and life-threatening complications occur during labor and delivery. Every year more than 1,00,000 women die in India due to causes related to pregnancy. The main causes of maternal mortality are the complications resulting from haemorrhage, unsafe abortions, eclampsia, sepsis and obstructed labor. Deaths from most of these causes are preventable with provision of good quality ante-natal, natal and post natal care, safe institutional delivery services, timely referral and provision of emergency obstetric care.
- 1.2 Under the Reproductive & Child Health Programme, it is envisaged that emergency obstetric care is provided through a network of First Referral Unit (FRUs) at sub-district/community health center level. Shortage of specialist manpower, particularly Anesthetists has been a major bottleneck in operationalising the FRUs. Under the RCH Programme, efforts were made to hire the services of Anesthetists from private sector at a payment of Rs.1000/- per case. Despite this, the feed-back suggests that there is an acute lack of anesthetists particularly in sub-district areas and even in the private sector. Considering this situation, the “Working Group on Health Care for Women and Children for Tenth Five Year Plan”, constituted by the Planning Commission in their Report observed that ‘shortage of Anesthetists is perhaps the single most important cause of inadequacy of emergency care in Government Hospitals particularly in rural areas’. Further, the Steering Committee on Family Welfare for the Tenth Five Year Plan have also recommended that ‘post of specialists in CHCs should be filled; reorientation, skill up-gradation and redeploying existing manpower should be the method used to fill critical gaps.
- 1.3 Experiences from other countries like Pakistan, Bangladesh, Thailand and even USA suggest that they have adopted a system of training graduate doctors and nurses in the skills of administering anesthesia to tide over the non-availability of specialists in this field. The Department of Family Welfare organized a Workshop of experts under the Chairmanship of Secretary (Health & Family Welfare), Government of Chattisgarh during March, 2002 to deliberate on these issues and suggest future course of action. Experts in Anesthesia including office bearers of the Chattisgarh Chapter of Indian Society of Anestheologists, World Health Organisation (WHO) and European Commission (EC) participated in the meeting. The recommendations of this Workshop are at **Annexure – I**. An important recommendation of the Workshop was that a training programme on Anesthesia for emergency obstetric care for general medical practitioners (MBBS) particularly in rural / peri-urban areas should be developed and that an expert committee should be constituted for developing curriculum, training material and guidelines for the training programme. Accordingly, Government of India constituted an Expert Committee under the Chairmanship of Dr. Ravi Saksena, Professor of Anesthesia, All India Institute of Medical Sci-

ences, (AIIMS) New Delhi vide Order No.M-12015/22/2002-MCH dated June 04, 2002 (**Annexure-II**), with the following Terms of Reference :-

- Develop a curriculum and course content for a short course for MBBS Doctors to be trained in Anesthesia for Emergency Obstetric Care.
- Develop guidelines for trainers and suggest the duration of the training course.
- Develop criteria for certification of competency
- Suggest norms for identification of training institutions, requirement in terms of equipment etc for the training
- Develop criteria for evaluation of the training programme.

1.4 Dr. Ravi Saksena was also designated as Honorary Advisor to the Department of Family Welfare for Anesthesia Resuscitation & Critical Care.

## **2. Working of the Expert Group**

2.1 The first meeting of the Expert Group was held on 16-17<sup>th</sup> August, 2002 at the All India Institute of Medical Sciences (AIIMS), New Delhi and was inaugurated by Shri JVR Prasada Rao, the then Secretary, Department of Family Welfare, Government of India. Dr. P.K. Dave, the then Director, AIIMS, New Delhi expressed support of the Institute for facilitating the work of the Expert Group and also for making the services of the Institute available for conducting the training programmes.

2.2 The Expert Group subsequently met for three days in October 2002 during which the curriculum for the training programme was finalized. It was felt that the training should be of 18 weeks duration and should aim at imparting competencies in various skills required for management of obstetrical emergencies. It was also decided that the training programme should be named as 'Training of MBBS doctors in Life Saving Anesthetical Skills for Emergency Obstetric Care'. It was decided that the experts should finalise the training material in the form of various modules along with facilitators guide and log book for trainees. One of the important outcomes of the deliberations was that besides the medical colleges, a substantial part of training should be held at district hospitals to acquaint the trainees with the situations as they prevail at district/sub-district level. In order to understand the working of district / sub-district health institutions, a meeting of the Expert Group was subsequently held at Raipur with the participation of the Faculty of the Medical College, Raipur and Anesthetists from nearby district hospitals. The experiences and feedback from this meeting have been incorporated in the curriculum, training material and the guidelines.

2.3 At this stage, it was decided in consultation with the Department of Family Welfare, Govt. of India to pretest the training programme by holding a pilot training programme over a period of 18 weeks at AIIMS, New Delhi. The programme was inaugurated by the Hon'ble Minister of Health & Family Welfare on 20<sup>th</sup> March, 2003. Eight MBBS doctors from the State of Chattisgarh participated in the training programme. At the end of training at AIIMS the trainees were sent to Raipur Medical College for practicing anesthetic skills under the State set up. The members of the Expert Group visited Raipur Medical College for getting feedback from the faculty members of anesthesia under whom these trainees were posted. The feedback from these visits and the experiences from pilot training programme has been utilized for finalizing the curriculum and training modules. The updated training modules can now be used for the future training programmes. On completion of the training, a detailed review of the experiences was made by the Expert Group.

2.4 The Expert Group have also deliberated and suggested guidelines for identification of training centers, criteria for selection of participants and procedure for certification etc (**Annexure- III**). In addition to these guidelines, the Expert Group felt it necessary to make some specific recommendations which are given in the subsequent paragraphs.

### **3. Recommendations :**

3.1 The experience during deliberations of the Expert Group and the feed back from the pilot training programme suggests that it is possible to impart competencies in various life saving anesthetic skills required for handling obstetric emergencies during a period of 18 weeks. The feedback also suggests that it is possible for an MBBS doctor to acquire necessary competencies in handling such cases.

3.2 The training programme should be conducted at medical colleges identified by the State Governments as per the suggested criteria. The duration of the training programme should be 18 weeks and out of this at least 4 weeks should be spent in a district hospital.

3.3 While initially it was felt that the training programme should have a batch size of 10 participants, the experience from the pilot and visit to Raipur Medical College suggests that the needs of the identified Medical Colleges for training their post graduate students also needs to be kept in view. It is, therefore, felt that 6-8 trainees would be an optimum size depending on the case load and considering the number of post graduate students in the identified Medical Colleges.

3.4 Government of India should develop mechanisms for ensuring the quality of training held in various medical colleges and district hospitals. It may be possible to do so by constituting a separate cell in the Department to oversee that the guidelines suggested by the Expert Group are

followed by the training institutions as well as by the State Government. The Cell besides monitoring the training programme, could also follow-up and supervise the trainees at their place of posting and feedback of these follow-ups then can be reviewed and incorporated from time to time in the training programme.

- 3.5 Two Faculty members from each of the State Medical Colleges identified for training, should be given orientation to the training programme for two days preferably at AIIMS. These trained faculty will then train the anesthetists from the District Hospitals where the training programme for the MBBS doctors will be conducted.
- 3.6 The training programme involves large investments in terms of time and money. Besides this, the purpose of the training is to fill the critical gaps in operationalising First Referral Units till such time that specialist anesthetists become available. The Expert Group is of the opinion that the number of trainees should not exceed more than 15 to 20% of the need for operationalisation of First Referral Unit.
- 3.7 It would be necessary to equip
  - i. The Medical Colleges where training is held with at least one manikin for facilitating hands on training of the participants. The specifications for the manikin can be finalized by Department of Family Welfare in consultation with the Honorary Advisor.
  - ii. The district hospitals where training is held as also the First Referral Unit where the trainees are to be posted after completion of their training, should be equipped with a Boyle's apparatus. The specifications currently in use for this equipment in the RCH Programme are considered adequate.
  - iii. Resuscitation kits as detailed at **Annexure-IV**, should be provided at each of the First Referral Units.
  - iv. The district hospitals where training is held as also the FRUs should be provided with the necessary anesthetic and resuscitation drugs.
  - v. The lists of these drugs has to be in keeping with the drugs included in the training programme and should be finalized in consultation with the Chairman, Expert Group.
- 3.8 To review the work of trained doctors initially an annual review of the training programme should be conducted. It is also suggested that Continued Medical Education (CME) Programme should be developed and held every three years for the trained doctors.



**Recommendations of Workshop on Anesthesia Services for Emergency Obstetric Care Held at Raipur ( Chattisgarh ) on 07-03-2002**

1. It was agreed that maternal mortality is unacceptably high and has to be addressed urgently and comprehensively. For this, a comprehensive approach with personnel, infrastructure and resources needs to be adopted. Shortage of anesthetists was identified as an area of major concern.
2. The strategies to meet the challenge of shortage of anesthetists were discussed in details and there was a consensus on the need to take steps both in the immediate and long-term. It was agreed that;
  - i The training of general medical practitioners (M.B.B.S) in anesthesia for emergency obstetric care particularly in rural / peri urban areas should be taken up immediately. This course should also include development of skills in resuscitation and emergency care.
  - ii Eventually, training in resuscitation and emergency care for a limited period for all Medical doctors posted from primary health centers and above in the country should become a regular feature in the public sector.
  - iii Steps should be initiated to Increase the number of postgraduates seats in anesthesia as per the need of the country keeping the long-term perspective in mind.
  - iv. Make appropriate changes in the M.B.B.S curriculum to equip the medical graduates to undertake emergency resuscitation and anesthesia.
3. For the implementation of the training of MBBS doctors, it was recommended that an expert committee should be constituted for developing curriculum, guidelines, criterion for evaluation of competency, norms for selection of training institutes and criterion for evaluation for the training programme etc.
4. There was a general acceptance that CPA issues do not affect the trained graduates and that these issues are the same and would affect any Registered Medical Practitioner.
  - i The Government should take proactive steps to provide indemnity to the trained doctors which may include providing insurance cover etc.
  - ii The need for creating an awareness about the provisions of CPA among Medical doctors was strongly felt. Steps need to be taken in this direction for developing IEC material both for doctors and the lay public.

5. A high proportion of maternal mortality and mortality due to trauma and other emergencies occur even after the patient reaches the casualty / emergency room in a hospital due to lack of adequate resuscitation. As such, it should be ensured that the personnel managing casualty / emergency rooms are adequately trained and equipped for resuscitation of emergencies. This responsibility, it was felt, could be entrusted to the Department of Anesthesia in the hospitals.

No.M-12015/ 22 /2002-MCH  
Government of India  
Deptt. of Family Welfare  
Nirman Bhawan, New Delhi  
Dated June 04, 2002

ORDER

The Government of India has decided to constitute an Expert Committee in the Ministry of Health and Family Welfare to develop a training course for MBBS doctors in Anesthesia in Emergency Obstetric Care. The composition of the Committee will be as follows :-

Dr. Ravi Saksena Honorary Advisor to GOI. Chairman Core Group ( LSASEmOC) Professor of Anaesthesia & Head Emergency Response Centre, AIIMS, New Delhi.	Honorary Advisor, Anesthesia, Resuscitation & Critical Care and Chairman of the Committee.
Dr. R.C. Bhola, Director of Medical Education, Raipur	Member
Dr. Kiran Malhotra Professor & Head Department of Anesthesiology, GSVM Medical College, Kanpur	Member
Dr. Jyotsna Wig Professor of Anaesthesia, PGI Chandigarh	Member
Dr. V.K. Mohan, Asstt. Professor, Department of Anaesthesia AIIMS, New Delhi	Member

Dr. G.S. Sadera, Member  
Asstt. Professor  
Deptt. of Anesthesia, AIIMS, New Delhi.

Dr. Neeraj Bhardwaj Member  
Anesthesist, Escorts Heart Institute &  
Research Centre, Okhla, New Delhi.

Dr. Rajeev Kumar Member  
Anesthetist,  
16 Priyadarshini Apartments  
A - 4, Paschim Vihar,  
New Delhi.

9. One Representative of NIHFW Member  
10. Deputy Commissioner (Trg.) Member  
11. Asstt. Commissioner (MH-II) Member  
12. Deputy Director General (MH) Convenor

2. Representatives of donors and international agencies, State Governments, other experts can be co-opted on the Committee as and when required, with the approval of the Competent Authority. The secretariat of the Group will be located at the office of Dr. Saxena in AIIMS.
3. The terms of reference of the Expert Committee shall be as follows :-
  - (i) Develop the curriculum and course content for training of MBBS doctors in Anesthesia, Resuscitation and Emergency Care, particularly for treatment of cases requiring emergency obstetric care at FRU/CHC level. The group will also develop guidelines for the trainers and suggest the duration of the training course.
  - (ii) Develop criteria for certification of competency of the trainees.
  - (iii) Suggest norms for identification of training institutions, requirements in terms of equipment etc. for the training and also develop criteria for evaluation of the training programmes.
4. The Committee would submit its report within two months.

Sd/-  
K.D. Maiti  
Director (MH)

**Guidelines for conducting the Training Programme for MBBS Doctors on Life Saving  
Anesthetic Skills For Emergency Obstetric Care**

**1. Identification of training centers**

- a) Only such medical colleges, which have sufficient case load in their casualty/emergency departments and also that of cesarean sections, as well as adequate faculty, preferably 50% of sanctioned strength of faculty should be there in their departments of Anaesthesia, should be identified. The identification of training centers may be done jointly by the State and Central Govt.
- b) Preference should be given to colleges, which are recognized by Medical Council of India (MCI) / Diplomate of National Boards (DNB) for PG training in Anaesthesia.
- c) The senior faculty of these colleges will need to be oriented on various aspects of this training programme at least for two days.
- d) Availability of accommodation for housing the trainees should also be taken care of
- e) The possibility of having regional medical colleges / institutes as centers for the training should be explored particularly keeping in view the needs of smaller states which do not have a medical college.
- f) The identified medical colleges must have provision of necessary equipment as well as at least one manikia as this is considered to be a critical input for hands-on-training.

**2. Selection of Participants/Trainees**

- a) The selected participants should have put in at least 5 years service and should not have less than 10 years service left in the State Services.
- b) While selecting the participants it would be desirable to enlist only such MBBS doctors who are willing to undergo this training programme and undertake to serve in the identified FRUs after their return from their training.

### 3. Undertaking by State Government

#### UNDERTAKING

The Government of .....nominates.....(List enclosed) Medical Officers, working in the State Health Services for undergoing 18 weeks Training Programme on Anesthesia for Emergency Obstetric Care being organized by Government of India at the All India Institute of Medical Sciences (AIIMS), New Delhi. It is certified :

- a) The participants have been selected as per the criteria laid down for the Training Programme.
- b) That the First Referral Units (FRUs) / Community Health Centres (CHCs) where the participants will be posted after completion of the above mentioned training have been identified keeping in view the fact that these will become fully operational for providing emergency obstetric care with the posting of the nominated officer after they return from their training. A list of such FRUs/CHCs is enclosed.
- c) That the nominated participants will be posted at the identified FRUs/CHCs on return from their training for a period of not less than 3 years.
- d) That the willingness of the nominated officers has been taken for undergoing the Training Programme along with an undertaking that they are willing to serve in the identified FRUs after their return from training for not less than 3 years.

(Secretary)  
Government of.....

- An undertaking to be furnished by the state government as above.
- The State Government should take steps to indemnify or insure the trained medical officers against any Court proceedings / Civil suits if arising out of Emergency obstetric care at FRUs.

#### 4. Procedures for Certification

During the training in Medical College, review and assessment of training and trainees will be done preferably by an Expert Group member/representative. The detailed procedure is given as below:

##### **Criteria for certification of successful trainees of Life Saving Anesthetic Skills for Emergency Obstetric Care**

A trainee must have done the below mentioned procedures required number of times and shall be confident in doing the same procedure in future in obstetric patients.

	<b>Procedure</b>	<b>Number</b>
1.	Intravenous Canulations	50
2.	Central Venous Canulations	10
3.	Maintenance of airway and oxygenation	25
4.	Laryngeal mask airway Insertion	25
5.	Endotracheal Intubations and Extubation	25
6.	Lumbar Puncture & Spinal Anaesthesia	50
7.	CPCR	20

To detect and treat the following if required in emergency

- Airway Obstruction
- Hypovolemic Shock
- Cardio respiratory Arrest

**The overall assessment of the trainees will be three tier.**

**Tier I** Internal Assessment by Trainers at AIIMS/ State Training Institute, which will be done in two Mid Term Internal Exams of 100 marks each. These exams will contribute 40% in the final assessment and will have 70% and 30% practical.

**Tier II** This will be Internal Assessment by the HOD Anaesthesia at the State Medical Colleges.

This will comprise of 100 marks and will have practical component only and will contribute 20% to final assessment.

**Tier III** The final assessment will be held at AIIMS/ State Medical College/ Certifying Institute and will be of 200 marks. Assessment will be done by 3 or 4 examiners. Two of them will be Core Group Members, one internal and one external expert.

The overall break up will be as follows:

	<b>Theory</b>	<b>Practical</b>
Tier I	140	60
Tier II		100
Tier III	100	100
Total	<hr/> 240	<hr/> 260



### 5. Trainee's Day-to-day logbook

Trainee's day-to-day logbook for procedures/competencies achieved is placed below.

Trainees's day to day logbook for clinical procedures/competencies achieved.								
Procedure	Intravenous canulations	Lumber Puncture & Spinal Anaesthesia	Maintenance of airway and oxygenation	LMA insertion/ tracheo oesophageal combitube	Endotracheal intubations & extubation	CPCR	Central Venous Canulations	Signature of the Supervisor with the date
Number	50	50	25	25	25	20	10	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
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21.								
22.								
23.								
24.								
25.								

26.									
27.									
28.									
29.									
30.			Supervisor's remarks on Detection and Treatment of - Air way Obstruction - Hypovolemic Shock - Cardio Respiratory Arrest.  (Satisfactory/Good/Very Good.)						
31.									
32.									
33.									
34.									
35.									
36.									
37.									
38.									
39.									
40.			Any other remarks:          Name: Signature of the Supervisor: Date:						
41.									
42.									
43.									
44.									
45.									
46.									
47.									
48.									
49.									
50.									

Instructions for filling the logbook.

- 1) The Trainees in groups of 1-2 should be put under the guidance/supervision of one of the faculty members during their posting in O.T.'s etc. The supervisor should be responsible for overseeing of their day-to-day progress.
- 2) Dates of the procedures to be filled in columns by the trainees.
- 3) Supervisors should put initials every day.
- 4) The minimum required number of the procedures is indicated under each head.
- 5) The final signature of the supervisor to be put at the end of the training.

**6. Suggested weekly schedule of training :**

**SCHEDULE FOR THE TRAINING “ TRAINING PROGRAMME FOR MBBS DOCTORS ON LIFE SAVING ANAESTHETIC SKILLS FOR EMERGENCY OBSTRETRIC CARE”**

**Posting Schedule (18 weeks)**

A) Medical College / Training Center

- 1) Emergency Services/Casualty : Six weeks
- 2) Operation Theatre
  - General Surgery : Two Weeks
  - Obstetric : Four Weeks

B) District Hospital / Similar Setup : Four to Six Weeks

**Schedule for Lectures / Demonstrations (To be covered at Training Institutes/ Medical College)**

**WEEK - ONE**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Introduction To The programme				
2	Basics of Anaesthesia				
3	Operation Room Management				
4	Medico Legal Implications of the course				
5					
6	Recapitulation				
S	U	N	D	A	Y

**WEEK -TWO**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Airway Anatomy & Positioning	Dummy Exercises			
2	Spinal Anatomy& Positioning				
3	Changes in Pregnancy				
4	Physiology of Spinal Anaesthesia				
5	Physiologic Considerations in Pregnancy				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK -THREE**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Observe Spinal A. & Q and Ans.				
2	Observe Intubation & (Q&A)				
3	Intubation Practice- Dummy				
4	Intubation Practice- Dummy				
5	Airway Gadgets- ET-Tube LMA OPA TE-Combitube				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-FOUR**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Components of machine				
2	Maintenance of machine				
3	Readiness/ Checking of machine				
4	Pre Anaesthetic check up				
5	Pre medication				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-FIVE**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Cardiopulmonary Resuscitation				
2	Vascular Cannulation- IJV, SV				
3	Ventilation with Ambu bag with OEA				
4	Defibrillation				
5	Fluid Therapy				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-SIX**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Acid base/ Electrolyte				
2	Modalities of pain relief				
3	General anaesthesia				
4	Regional block				
5	Regional Anaesthesia (Spinal& Epidural A)				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-SEVEN**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Post anaesthesia care/ recovery				
2	Discharge from the recovery				
3	Side Effects/ Complication of Anaesthesia				
4	Difficult Intubation Cart & Drill				
5	Anaesthesia Record Keeping				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-EIGHT**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Anaemia & Pregnancy				
2	COPD & Pregnancy				
3	Diabeties Mellitus				
4	Hypertension/Pre-eclampsia/Eclampsia				
5	Chronic renal failure & Pregnancy				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-NINE**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	RHD & Pregnancy				
2	Liver disease & Pregnancy				
3	Trauma & Pregnancy				
4	APH & PPH				
5	Difficult Airway & Pregnancy				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK -TEN**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Inhalational anaesthetic agent				
2	Intravenous agents				
3	Opiod Analgesic				
4	Non-Narcotic Analgesic				
5	Drugs for premedication				
6	Recapitulation				
S	U	N	D	A	Y

**WEEK-ELEVEN**

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Depolarizing M. Relaxant				
2	N. Depolarising M. & Reversal Agents				
3	Local Anesthetic Agents				
4	Vasoactive & Sympathomimetics				
5	Prokinetics & Antiemetics				
6	Recapitulation				
S	U	N	D	A	Y




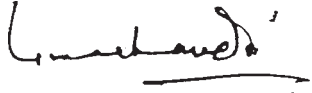


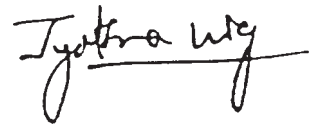

**WEEK-TWELVE**

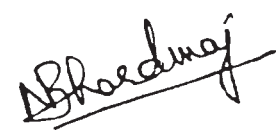
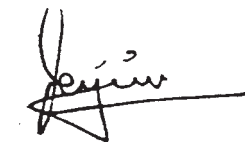

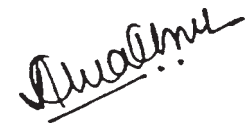
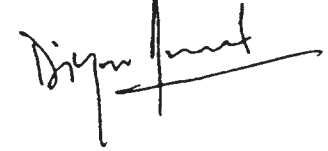

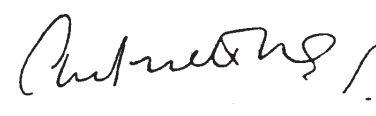

DAY	Theory/ Demonstration Class	Practical Exercise	Trainer's Name	Remarks	
1	Case Presentation- APH with FD				
2	C.P-RHD with Pregnancy				
3	C.P- Difficult airway with pregnancy				
4	Discussion on Instruments				
5	Mid Training Evaluations				
6	Recapitulation				
S	U	N	D	A	Y

### Recommended Resuscitation Kit

1. Adult/Neonatal Ambu Bag with o2 Reservoir
2. Anatomical Face Mask. No. 0-5
3. Oropharyngeal Airways. 0-5
4. Laryngoscope-Curved Blade
5. Laryngoscope-Straight Blade
6. Endo Tracheal tubes size 0-8. 6 of each to be replaced every year.
7. Oxygen Cylinder with Oxygen therapy devices.
8. Emergency Drugs. I.V. Canulae, I.V. Fluids, I.V. Sets.
9. Naso pharyngeal Airways
10. Adhesive Tape
11. Laryngeal Mask Airway, All Types
12. TO Combitube
13. Manual Suction
14. Chest Seal
15. Emergency Chest Drained Kit
16. Mini Tracheostomy/Cricothyrotomy Kit
17. Magill's Forceps
18. Bain's Circuit

Signed by the Members of the Expert Group

Name of Member	Designation	Signature
Dr. Ravi Saksena Honorary Advisor to GOI. Chairman Core Group ( LSASEmOC) Professor of Anaesthesia, Department of Anesthesia & Intensive Care, All India Institute of Medical Sciences New Delhi - 110 029.	Chairman	
Dr. V.K. Manchanda, Deputy Director General (MH) Department of Family Welfare Govt. of India, New Delhi.	Convenor	
Dr. R.C. Bhola, Head of Department of Anaesthesia, Raipur Medical College, Raipur Chattisgarh	Member	
Dr. Kiran Malhotra Professor & Head Department of Anesthesiology, GSVM Medical College Kanpur	Member	
Dr. Jyotsna Wig Professor of Anaesthesia, PGI Chandigarh Chandigarh	Member	
Dr. V.K. Mohan, Asstt. Professor, Department of Anaesthesia AIIMS, New Delhi	Member	

<p>Dr. Neeraj Bhardwaj Assistant Professor Department of Anaesthesia All India Institute of Medical Sciences New Delhi.</p>	<p>Member</p>	
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<p>Dr. A.K. Sood Professor and Head (Education &amp; Training) NIHFW, Munirka, New Delhi.</p>	<p>Member</p>	
<p>Dr. Arvind Mathur WR office, WHO, Nirman Bhawan, New Delhi - 110 011.</p>	<p>Member</p>	
<p>Dr. Dinesh Agarwal UNFPA 53, Jor Bagh, New Delhi.</p>	<p>Member</p>	
<p>Dr. Kate Dickson Programme Officer, UNICEF</p>	<p>Member</p>	
<p>Dr. A. Pirie European Commission, D-127, Panchsheel Enclave</p>	<p>Member</p>	
<p>Dr. D.C. Jain Deputy Commissioner (Training) Deptt. of Family Welfare Govt. of India, New Delhi.</p>	<p>Member</p>	

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Member

*H. Bhushan.*