

FOGSI Update on EmOC training program

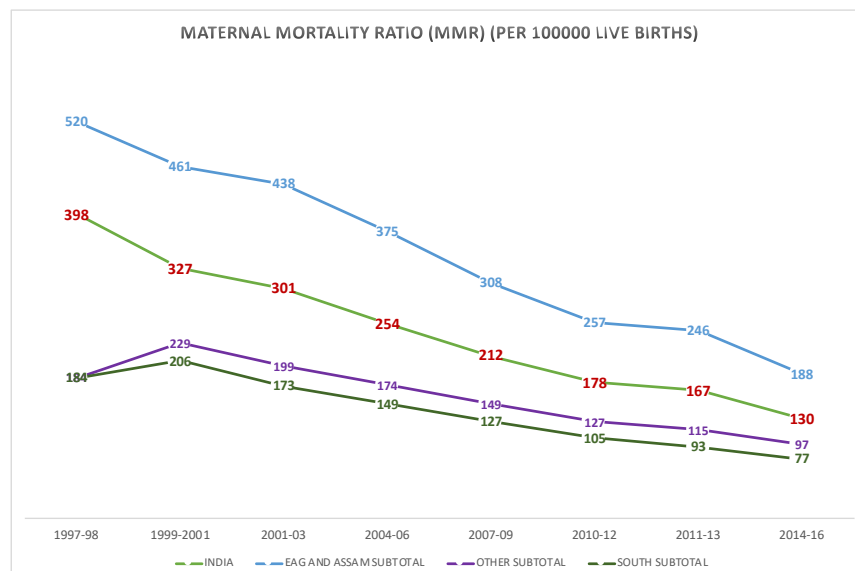
EmOC program which was running since 2006 in partnership with Government of India – Ministry of Health and Family Welfare (Maternal Health Division), FOGSI and program management support from Avni Health Foundation came to a formal end in 2017 after completing 11 successful years. The purpose of the program was to train MBBS doctors in comprehensive obstetric management, whom the State health dept may then post at FRUs, Delivery points, 24X7 PHCs so as to attend the emergencies relating to pregnancies and childbirth, thereby prevent the maternal and infant deaths and thus help in reducing the MMR and IMR in the medium and long terms.

Given below are our cumulative achievements since we began the program implementation.

Cumulative Achievement till September 2017

S.no	Description	Target Given by GOI	Achievement
1	Setting up Nodal Centers for Training of Master trainers	03	06
2	Setting up of Tertiary center for training MBBS doctors	20	34
3	Setting up of District Hospital training center for MBBS doctors	160	258
4	MBBS doctors trained	2000 (5 year)	1824
5	Master trainers trained	Nil	221
6	District Hospital Master trainer trained	Nil	403

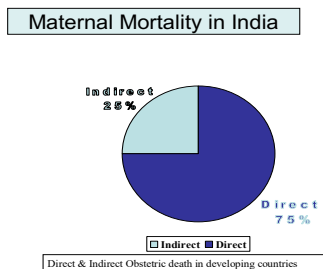
EmOC program was one of the many programs that GOI had initiated to reduce MMR in India, and EmOC a path breaking initiative, contributed to the overall reduction in MMR.



Maternal Mortality Ratio (MMR) in India has shown an appreciable decline from 398/100,000 live births in the year 1997-98 to 301/100,000 live births in the year 2001-03 to 254/100,000 live births in the year 2004-06 to 212/ 100,000 live births as per the latest RGI-SRS survey report, released in July 2011. However, to accelerate the pace of decline of MMR in order to achieve the NRHM and MDG Goal of less than 100 per 100,000 live births and less than 109 per 100,000 live births by 2015 respectively, there is a need to give impetus to implementation of the technical strategies and interventions for maternal health. One of the main reasons for the high MMR has been identified as the lack of high-quality emergency obstetric and newborn care (EmONC) in rural areas. Currently most medical colleges in India prepare specialist physicians as the only providers of EmONC services, catering largely to urban populations. General medical officers, who tend to have limited skills in managing maternal and newborn complications, however, typically serve rural populations.

Maternal mortality – A burning issue in India

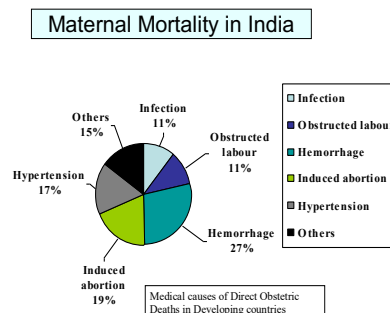
India has an unacceptably high maternal mortality ratio of 4-5 per 1000 live births (SRS 1998) 20% of Global maternal deaths occur in India. Besides for every maternal death, there are twenty women who suffer severe morbidity so that their lives are not worth living. These women suffer from long term disability such as chronic pain, vesicovaginal or rectovaginal fistula, impaired mobility and damage to reproductive system leading to infertility or prolapse of uterus. 70% of India’s population lives in rural areas where MMR is high due to lack of prompt and adequate treatment.



Causes of Maternal deaths

Direct causes: -

Hemorrhage (postpartum or ante partum) sepsis, complications of unsafe abortion, prolonged or obstructed labour, and hypertensive disorders of pregnancy, especially eclampsia are some of the complications, which can occur at any time during pregnancy and labour and without any forewarning.



These maternal deaths are preventable by evidence-based intervention. A swift and competent Emergency Obstetric Care service using resources effectively can

have a significant impact on pregnancy outcome.

Other problems that contribute for increased maternal mortality in India.

Maternal mortality is not merely a health disadvantage but also a reflection of social and gender injustice. The low social and economic status of girls and women, limits their access to education, appropriate nutrition as well as health and family planning services. All this directly impacts pregnancy outcomes. The overriding causes of high mortality in India are poor access to emergency obstetric care in case of a complication and absence of skilled birth attendant at delivery. Any skilled birth attendant also needs the backup of a functioning health system, i.e. having minimal infrastructure for managing life threatening complications in pregnancy & labour like availability of life saving drugs, safe blood, functioning operation theatre with electricity, running water and anaesthetist and 24 hours emergency obstetric care. These infrastructures are lacking in many small towns and villages of India.

Key Strategies to save life of pregnant women are: -

- a) Skilled birth attendance at delivery
- b) Emergency obstetric care
- c) Timely and effective referral system
- d) Availability of safe abortion services.

Why focus on emergency obstetric care?

Over the past several decades, maternal health programs have used antenatal screening to try to identify women at risk for complications. Though useful these efforts have not succeeded in reducing maternal deaths. It is proved by many studies that many women who develop complications do not have any known risk factors. Once an unpredictable complication occurs, she will require emergency services. As a result 24 hrs, quality EmOC services will be required to save a woman who develops life-threatening complications.

There are three types of delays that can affect a woman's chance of surviving an obstetric emergency.

- A) Delay in problem recognition and decision-making.
- B) Delay in reaching a health facility.
- C) Delay in receiving care at health care facility.

Having a quality 24 hrs EmOC services can prevent the last delay.

Public Health Concept:

We have undertaken various public health intervention programs to reduce MMR for last 50 years. Unfortunately, they have not yielded desired results. The emerging Public Health evidence in the field of Reduction of MMR tell us a different story. With the exceptions of prevention of anemia, tetanus vaccination, universal availability of safe -abortion services and off-course high quality family planning services, none – Training of Traditional Birth Attendants, High risk screening - can significantly reduce MMR. The Public Health studies have clearly demonstrated that:

1. Most critical complications occur amongst low-risk patients.
2. They cannot be predicted or prevented effectively.
3. They must be managed effectively in time.

The management of critical complications needs high quality, accessible and timely interventions. This forms the basis of Emergency Obstetric Care.

It is proved by various studies that organization of such Emergency Obstetric Care proves the cheapest – cost –benefit factor to the administration with reference to the estimated maternal death prevented.

Defining Emergency Obstetric Care

Emergency obstetric care is often discussed in terms of basic and comprehensive care that is provided to a woman with obstetric complications.

Basic EmOC

In basic EmOC facility, skilled birth attendant should be able to administer parenteral antibiotics, parenteral oxytocic drugs, parenteral anticonvulsants for preeclampsia and eclampsia perform manual removal of placenta, perform manual removal of retained products, manual vacuum aspiration and perform assisted vaginal delivery.

Comprehensive EmOC

In comprehensive EmOC, the doctors on duty should be able to perform all the functions of basic EmOC and in addition, he should be able to perform emergency caesarean section to save the life of woman. Facilities of safe blood and an anesthetist should also be available in centers having comprehensive EmOC services.

Challenges in addressing emergency obstetric care in low resource settings.

There is lack of standard guidelines in training doctors and their supervision. There is shortage of continuous supply of drugs and repair of equipments in time. Besides, there is lack of technical and clinical decision-making skills. There is no emergency preparedness. Infection prevention practices are poor and not enough training facilities nor trainers are available to train non-skilled MBBS doctors in emergency obstetric care.

Quality EmOC poses unusual challenge because EmOC must be available 24 hrs. a day, seven days a week to be maximally effective. Therefore, a locum doctor must be available and constant efforts must be made to make all the emergency drugs available all the time.

The Federation of Obstetric & Gynaecological Societies of India and EmOC programme.

Emergency obstetric care is an emerging concept of rural obstetrics to reduce maternal mortality and FOGSI is committed to working towards a significant reduction in MMR in the near future by addressing this issue.

The concept of rural obstetrics has developed during the past few years all over the world. The aim is to make basic obstetric lifesaving surgery within limited resources accessible to those who have no access to it under existing socioeconomic circumstances.

Current curricula of most medical colleges are generated towards hospital-oriented medicine and cater to urban population while non-specialized doctors are catering population living in rural areas. Most of skilled obstetricians prefer working in urban areas.

This leads to a situation where action needs to be taken to ensure training enough number of human resources / staffs providing EmOC in rural India. This should be the key strategy to reduce maternal mortality.

FOGSI – ICOG EMOC certification course - Overcoming challenges & difficulties

The Federation of Obstetrics & Gynaecological Societies of India (FOGSI) is a conglomeration of 221 Obstetric & Gynaecological Societies from all over India and comprises of 29060 qualified Obstetricians & Gynaecologists working with the aim to improve the maternal health. Besides fellowship and giving continued medical education to its fellow members, FOGSI carries out various activities to improve maternal health & reduce maternal mortality & morbidity of Indian women.

In the year 2006 for the first time in the history of our country, FOGSI/ICOG in association with Government of India (GOI) launched a 5-year programme of EmOC (EmONC) certification course as a novel public private partnership. The aim of the public private partnership was to train govt. MBBS doctors working in First Referral Units (FRU's) in emergency obstetric care in order to reduce the maternal mortality & morbidity in rural areas.

Being clinicians looking after women, the members of FOGSI always felt the need to contribute towards up-liftment of maternal health and wellbeing.

However, this was the first time that a public health platform was available to address this need. This endeavor would not have taken shape without the tremendous support from Professors, Associate Professors & Lecturers from medical colleges of various states where Indian College of Obstetricians & Gynaecologists (ICOG) started EmOC certification course. It is rightly said, "Nothing great is ever achieved without enthusiasm and dedication". The success of this programme is mainly due to enthusiastic teachers of EmOC.

A mammoth project like this, related to public health requires experience and FOGSI had none. The difficulties and challenges faced while implementing this programme was overcome by the sheer perseverance, ability and dedication of everyone associated with this program.

Dr. Dileep Mavalankar from IIM- Ahmedabad guided FOGSI in drafting the pilot project on EmOC and helped FOGSI obtain funds from Macarthur Foundation as well as from Averting Maternal Death and Disability (AMDD). It was advocacy of Dr. Deborah Maine & Dr. Lynn Freedman of AMDD that brought final approval from GOI for joint partnership with FOGSI to train Government MBBS doctors in rural

India. FOGSI EmOC website was only possible due to availability of generous funds from AMDD. Ms. Poonam Muttreja and Ms. Dipa Nagchoudhury from Mac Arthur Foundation continued financial support not only during implementation of the pilot project but also during the EmOC programme implementation with GOI.

Dr. Harshad Sanghvi from JHPIEGO played a key role by providing a strong technical support to set up nodal centres as well as 5 master training centers of our pilot project for EmOC training. All the teaching videos prepared by master trainers were reviewed and supervised by Dr. Sanghvi.

The Dept. of Obstetrics & Gynecology of Christian Medical College, Vellore very willingly agreed to train master trainers of this programme. JHPIEGO and UNICEF already set up the Vellore centre for implementing EmOC training and our task of training master trainers became easy.

UNICEF provided timely finance support during the financial crisis of the programme & UNFPA has given guidance to FOGSI during the turbulence while implementing the programme.

The whole programme would not have been successful but for the very hard work put in by Mr. Ajey Bhardwaj of Avni Health Foundation. Mr. Bhardwaj is a technical expert on public health who has supervised the programme as FOGSI's national coordinator and has liaised between Govt. of India, State Govt. officers and FOGSI/ICOG very efficiently.

Dr. Himanshu Bhushan, Deputy Commissioner, Maternal Health, Ministry of Health & Family Welfare gave constant support and encouragement. The untiring efforts of Dr. Prakash Bhatt as well as all the members of EmOC national advisory board have contributed to success of FOGSI/ICOG EmOC programme. All the Presidents and office bearers of FOGSI as well as ICOG Chairpersons encouraged and supported in implementing the programme.

EmOC Training Centres set up by 2013



EmOC Program Impact (2006 –2012)

We carried out an interim study to understand the impact of our programme by analyzing baseline and quarterly database of 74 MO's in year 2011. This analysis showed clear benefit in performance of EmOC trained doctors as regards management of emergency treatment of haemorrhage, hypertension, abortions and sepsis of in pregnant women that they handled. Data for one complete year before and after training was compared and key findings were encouraging. Clearly the ability of the MBBS doctors to recognize the signs and symptoms of an emergency improved owing to which the cases were managed within their facilities itself, instead of being referred out to a higher center.

1. An increase in the attendance at the Antenatal clinic when pre and post training data was compared.
2. After the training the percentage of women with;
 - a. Haemorrhage treated increased from 1.1 to 1.4 and out-referral decreased from 0.3 to 0.2.
 - b. Hypertension in pregnancy treated increased from 2.2 to 2.4 and out-referral decreased from 0.5 to 0.3.
 - c. Women treated for Abortions showed a decrease from 2.3 to 2.0 and referral decreased from 0.29 to 0.16 post training. Better management of the cases during ANC phase led to fewer cases of abortions.
 - d. Women treated for miscellaneous causes (Malaria, Hepatitis, Cardiac diseases in pregnancy) showed increase from 0.66 to 1.1 and referral slightly increased from 0.14 to 0.16 owing to timely referral.
 - e. Percentage of women treated for Sepsis showed an increase from 0.4 to 0.5 and referral decreased from 0.15 to 0.12.

Given our positive experience with the program implementation, we in the year 2012, again analyzed the impact of EmOC programme with a larger sample size. A total of 355 Medical Officers (MOs) trained in EmOC submitted their PRE TRAINING and POST TRAINING achievement data sets. Out of which we carefully picked 178 datasets, which were complete in all respects and met the criteria of 1 year PRE/POST training data. 2,50,000 datasets from MOs representing twelve States (Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu, Jharkhand, Karnataka, Madhya Pradesh, Rajasthan, Tamilnadu, Uttar Pradesh, and West Bengal) was analyzed.

Table 1 – ANC coverage at the facility increased

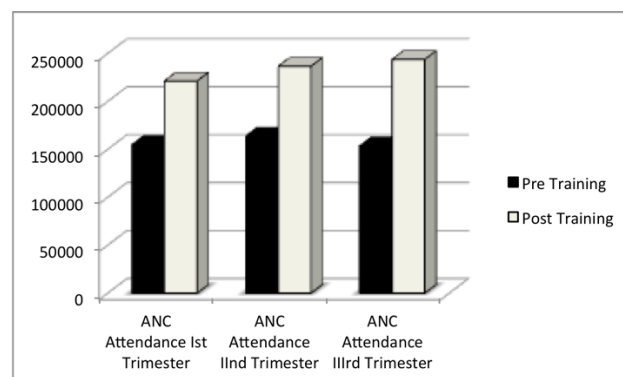


Table 2 – An increase in the number of cases treated for hypertension, hemorrhage, abortions and sepsis and ability to manage complications

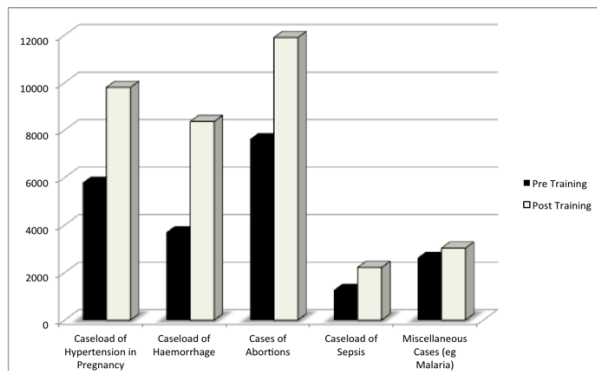
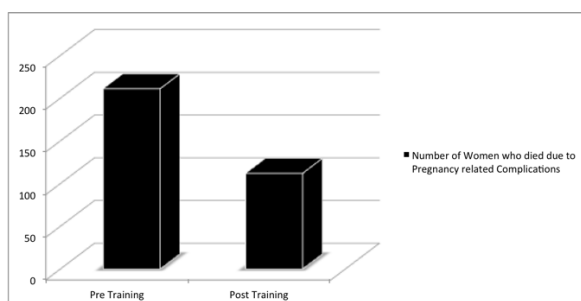


Table 3 – Maternal death owing to pregnancy related complications declined



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