2016

Report on

Trainers' Training on Hospital-based

Maternal and Perinatal Death Surveillance and Response (MPDSR):

Kathmandu

WHO Country Office Nepal

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Abbreviations

CARN	Country Accountability Roadmap Nepal
CDOs	Chief District Officer
CoIA	Commission of Information and Accountability
DoHS	Department of Health Services
FCHVs	Female Community Health Volunteers
FHD	Family Health Division
GON	Government of Nepal
HP	Health Post
LDOs	Local Development Officers
MDR	Maternal Death Review
MDSR	Maternal Death Surveillance and Response
MoH	Ministry of Health
MPDR	Maternal and Perinatal Death Review
MPDSR	Maternal and Perinatal Death Surveillance and Response
PDR	Perinatal Death Review
VA	Verbal Autopsy
WDOs	Women Development Officers

1. Introduction

1.1 Background

Globally there has been a significant reduction in maternal and infant mortality. However, deaths remain unacceptably high and in 2015 there were 3,03,000 maternal deaths and 2.6 million stillbirths and neonatal deaths (WHO 2015). While progress has been made in increasing coverage of several key reproductive, maternal, newborn and child health interventions over the last two decades, there has been limited progress in improving maternal and newborn outcomes because of a major gap between coverage and quality of care provided in health facilities. Improving quality of hospital-based health care services and making quality as integral component of scaling up interventions to improve health outcomes of mothers and newborns is of utmost importance. To achieve this, monitoring and surveillance of maternal and perinatal deaths need to be strengthened, hence cases can be identified and preventable causes of maternal and perinatal death can addressed.

Since the 1990s Nepal has initiated various mechanisms to improve maternal and newborn mortality registration with the support of the World Health Organization (WHO). In 1990 Maternal Death Review (MDR) was first implemented in Paropakar Maternity and Women's Hospital and in 2003 the Perinatal Death Review was introduced as a supplement to MDR. By 2013 a total of 42 hospitals had adopted the MPDR process (MoHP 2014). MPDR is one of the tools used to monitor and improve quality of care at the hospital level, this process in very important to improve the service site. However, the reviews have not achieved satisfactory results as expected and the commitment from the facilities and monitoring from higher authority is still weak.

Following the UN Secretary General's Global Strategy on Women's and Children's Health 2012, Government of Nepal (GoN) has adapted the Commission on Information and Accountability (CoIA) which tracks progress on resources and results. The concept of CoIA in Nepal is named Country Accountability Roadmap Nepal (CARN) and focuses on three processes - monitoring, reviewing and acting - aimed at learning and continuous improvement of life saving interventions. Maternal and Perinatal Death Surveillance and Response (MPDSR) was designed to measure and track all maternal deaths in real time, to understand the underlying factors contributing to mortality and to provide guidance for how to respond to and prevent future deaths. The system builds on experiences from MDR, but also helps understand the events surrounding maternal deaths. The surveillance cycle includes identification of cases, collection of information, analyzing findings, recommendations for action and evaluation and refining of the system. Particular focus is on the response and action part of the surveillance, so that the information obtained can be acted upon to prevent future deaths.

GoN developed MPDSR guidelines and is implementing community level MPDSR in six districts (Banke, Baitadi, Kailali, Kaski, Dhading and Solukhumbu). In these six districts both community maternal deaths, hospital maternal deaths and hospital perinatal deaths are reviewed and responses implemented.

Implementation of MPDR in hospitals has been a challenge to the GoN with constrained resources, turn-over of trained human resources and weak monitoring system. There is need to strengthen the system in the MPDR implementing hospitals and reorient the service providers at these hospitals on MPDSR as well as expand the hospital-based MPDSR to more hospitals as decided by the National MPDSR Committee.

Family Health Division (FHD), Department of Health Services, plans to prepare a pool of trainers for conducting the reorientation and expansion of hospital-based MPDSR.

Objectives:

By the end of this activity, the participants will:

i. Have strengthened capacity to train health care providers on hospital-based MPDSR processes and
ii. Be enabled to develop and monitor the response mechanism based on the review of maternal and perinatal deaths.

1.3 Contents of the trainers' training

All training program consisted of contents targeted for respective participants. The summary of the contents is mentioned below while detailed agenda of the three training programs has been added in the annex section.

Contents of hospital-level training program

Day 1

1. Introduction of MPDSR, its objectives and rationale
2. Video show on 'How did Mrs X die'?
3. Presentation on Process involved in MPDSR
4. Definition of key terms
5. Introduction to web-based hospital MPDR system
6. Introduction of Hospital-level tools

Day 2

1. Discussion on hospital MDR form
2. Group work: Fill up the MDR form based on the received case and discuss about experience
3. Discussion on hospital PDR form
4. Group work: Fill up the PDR form based on the received case and discuss about experience

Day 3

1. Adverse event monitoring approach

2. Group work: adverse event case discussion
3. Understanding death, cause and accountability mechanism (MDR/PDR)
4. Response mechanism linked with quality of care
5. Introduction to web-based MPDR system

2. Implementation strategy

The program was first implemented in Dhading District, followed by Kaski, Kailali Banke, and finally Solukhumbu. The MPDSR pool of trainers attended Dhadhing District to observe, learn, and give feedback on best practices to maximize the effectiveness of the training. The MPDSR implementation team was then split into two teams. Each of the team implemented MPDSR in two different districts following the initial training. The MPDSR implementation team was made up of FHD team supported by Ipas, WHO and NHSSP. Local D(P)HO staff were encouraged to deliver some of the introductory sessions under the guidance of the MPDSR implementation team.

3. Training Proceedings

A. Hospital level training program

Day 1

Session 1 - Opening

The training commenced with a welcome note to all the participants in Maternal and Perinatal Deaths Surveillance and Response program. The first session of the training was given a formal setting where DHO chaired the program and representatives from government were invited. It was followed by brief introduction of all the participants in the program with sharing of objectives and outline of the training.

Session 2 –Introduction and rationale of MPDSR

All the participants were introduced to the basic concepts of MPDSR, the objectives with which the program has been implemented and the purpose of initiating the MPDSR program in Nepal. Global and national scenarios of maternal neonatal deaths and still births including the cause of the deaths, which populations were more at risk, where and when women dying. The components, objectives and principles of MPDSR were also shared with the participants. The Sustainable Development Goals (SDGs) for MMR and PMR including Nepal's commitment to

implement MPDSR and reduce the MMR in the international forum were discussed during the session.

Session 3 – Overview of Nepal MPDSR design and process

The process of MPDSR was explained to all the stakeholders. This included processes that is followed both at the community and hospital levels.

It was explained to the participants that the community level review of maternal death starts with identification and notification of deaths of women of 12-55 years age group by FCHVs, then to rule out if this is a pregnancy related death is carried out by the ANMs at the local health facility. If in case identified as a pregnancy related deaths then it is notified to the DPHO. The VA team at the DPHO conducts VA to collect information on the details of the death. From the information received in the VA form, the district MPDSR committee reviews the death, assigns cause of death and develops action plan to prevent such deaths in future. The district MPDSR committee is also responsible of implementing and monitoring of the action plan developed.

Similarly, for the hospital-based maternal deaths, the on-duty staff notifies and fills up the MDR form within 24 hours. The hospital MPDSR committee is responsible to review the death within 72 hours and develop action plans to prevent such deaths in future. The hospital MPDSR committee may also share the action plan with the respective DPHO in case the actions are to be implemented in the community.

For the perinatal deaths at the hospital, the on-duty staff notifies ad fills up the PDR from within 72 hours. There will be monthly meeting to review the perinatal deaths and develop action plans by the hospital MPDSR committees. As in the maternal deaths, the hospital MPDSR committee may also share the action plan with the respective DPHO in case the actions are to be implemented in the community.

Session 4 – Video show: Why did Mrs. X die?

The session presented a 15 minutes video titled ‘Why did Mrs. X die?’ The video depicted pregnant women from developing countries are dying during their pregnancy or while giving births due to delay in seeking, reaching and receiving health care and to prevent these delays, all sectors should be responsible to save the lives of mothers and children. Therefore, a key message was given that coordination from all sectors is vital and all sectors should be committed to prevent maternal deaths and undertake important actions to protect lives of the mothers.

Session 5 – Definition of Key terms

In this session, the facilitators discussed on the important terms which were related to maternal and perinatal deaths and provided the definitions of the terms such as maternal death, still birth, macerated and fresh still birth, neonatal death, early and late neonatal death, maternal mortality ratio, still birth rate, neonatal death rate, perinatal death rate etc.

Session 6 – Status of implementing hospital level maternal and perinatal death review

Nepal being one of the pioneer countries to implement maternal death review at the hospital levels, the implementation status of the program was shared in the session. The following details were shared during the session:

1990	MDR designed by the Demography Section, FHD with technical support from WHO and implemented the MDR in Paropakar Maternity and Women's Hospital.
1996/97	MDR as part of Nepal MMM study was implemented in Kailali, Okhaldhunga and Rupandehi.
2002/03	Doctors and nurses in public hospitals, supported by the NSMP, UNICEF and NESOG, trained for MDR.
2003	MDR revised, PDR introduced and instruction manual prepared by the Demography Section, FHD with support from WHO.
2006	NMPDRC implemented MPDR in 6 hospitals.
2008/09	MDR tool modified as part of second MMM study with technical support from SSMP.
2011/12	MPDR expanded to 5 more hospitals by FHD, reaching to 21 hospitals.
2013	MPDR process adopted by 42 hospitals; FHD revised the MDR and PDR tools.

Session 7 – Introduction of hospital-level MPDSR tools

In the last session of the first day, participants were briefly introduced to all the 12 tools of MPDSR which are to be used in community and hospitals. The forms and formats used explicitly at the hospital level such as the MDR, MDR summary form, PDR, PDR summary forms were explained briefly in the session.

Day 2

Session 1 – Review of Day 1

The second day started with a brief review of the previous day. All the participants were individually asked to share their learning in turns and any confusion arose were addressed by the facilitators.

Session 2 – Discussion on hospital MDR form

The second session was on MDR form that is used in MPDSR process. The form is comprised of ten sections and each section respectively seeks information on: deceased woman, admission related, pregnancy related, delivery and puerperium, interventions, causes surrounding the death, case summary, review by MPDR committee, critical examination of care in the hospital, and MPDR committee's recommendations and action taken. All the sections were thoroughly explained to familiarize participants on the contents. The sections eight to ten of the MDR tool were specially highlighted as this was the new addition and change from the previous version.

Session 3 – Group work: Fill up MDR form based on the received case and discuss about the experience

The session involved practical exercise completing the Maternal Death Review (MDR) form. Participants were divided into groups of 5-8 participants. The groups were given case studies of maternal deaths, and attempted to complete MDR forms, assigned cause of death and shared their findings with the participants. The groups practiced to fill up the forms from the case files of maternal deaths from respective hospitals. It was seen in the trainings that the case files did not contain all the information required to fill up the MDR forms. So need to develop mock case files were identified for further training. However, the participants were also encouraged to fill up or monitor for all the patient related details in the hospital case files to avoid such problems in future.

Representative from each group presented on the maternal death case and the experience on filling up the MDR form.

Session 4 – Discussion on hospital PDR form

The fourth session briefed on PDR form used in MPDSR process. The form is comprised of six sections and each section respectively seeks information on: Mother of deceased baby, details of the baby, clinical information of deceased baby, cause of death, review of MPDR committee and MPDR committee's recommendations and action taken. All the sections were thoroughly explained to familiarize participants with the content.

Similar to the MDR, section five and six were highlighted to the participants in detail on reviewing the perinatal death and developing action plans.

Session 5 - Group work: Fill up PDR form based on the received case and discuss about the experience

The session involved practical exercise and completion of forms. Participants were divided into groups, each with 5-8 participants. The groups were given case-studies of perinatal deaths. The groups completed the form, assigned cause of death and then shared the findings of their analysis among the groups.

Day 3

Session 1 – Review of Day 2

The third day started with a brief review of the previous day. All the participants were individually asked to share their learning in turns and any confusion arose were addressed by the facilitators.

Session 2 – Adverse event monitoring approach

The session explained about the monitoring of adverse events in the MPDSR program, and their use as an opportunity for learning and improving patient care. The session also focused on two of the principles of MPDSR programs: No name and No blame and explained the utilization approaches to discussing and reporting adverse events that do not blame individuals but evaluate systems.

Session 3 – Understanding death, cause and accountability mechanism

The session explained the identification of causes of death and accountability mechanism involved in MDR and PDR. Group exercises were given to identify the causes of death.

Session 4 – Response mechanism linked with quality of care

The session detailed on response mechanism linked with quality of care on the basis of evidence based actions. Group exercises were given to identify possible actions for the given mock cases.

Session 5 – Introduction to web-based hospital MPDSR system

The participants were briefly introduces to the web-based reporting system for MPDSR which is under the process of development.

Session 6 - Closing

The three days program was closed in a formal way by the chairperson of the program with key notes from distinguished speakers and facilitators of FHD.

4. Findings/Observation

The following section presents the general observations from both the districts combined. This has been done because there were commonalities in the issues encountered in each district.

The training was aimed at doctors, nurses, ANMs and medical recorders working in hospital-level facilities. Both private and public hospitals in Banke and Kaski were invited to participate in the three-day training.

Key issues:

a) **Training methodology:**
In a bid to involve local District Health Office personnel in the delivery of MPDSR training, the duration of sessions were not consistent. Depending on the person delivering the session, the Introduction and Rationale sessions took longer than the allocated time of the program which could have been allocated to the exercise session, the most important aspect of the program. The time for practicing completing the forms using mock case scenarios was not sufficient. Therefore the need to revise the contents of the slides was felt.

b) **Patient charts versus Case studies:** In the planned group work that familiarized participants to the MDR and PDR forms, mock case studies were used for hospitals that were unable to provide patient charts of maternal and perinatal deaths. The case studies however lacked the detail required to comprehensively complete the tools. In addition, Training exercises: Trainees expressed difficulty in carrying out exercises in completing MDR and PDR forms, due to the incompleteness of real-hospital case patient charts.

c) **Attendance: T**here was irregular attendance over the three days program, which affected the understanding of the overall MPDSR program.

Best practices:

a) **Training methods:**
   i. Participants agreed with the aims and objective of the MPDSR program in Nepal, and showed interest and commitment to adopt the tools in their existing reporting mechanisms.
   ii. The video, 'Why did Mrs X die?', was dubbed in Nepali which helped all cadres of health personnel involved in MPDSR understand the key message of MPDSR and its links with quality of care from the video in a better way.

b) **Participant feedback:**
   i. Comprehensive feedback was received on the new MDR and PDR forms from health professionals who have experience completing such forms. The suggestions received will be used to feedback to the MPDSR Technical Working Group (TWG) to ensure the clarity of the forms.

c) **Continuous improvement of training content:**
   i. A quick session carefully assessing 'how' the MDR and PDR forms had been completed during the activity sessions was incorporated in the training after the initial districts. This was found to be very helpful, as trainers were able to show participants common mistakes made during completion of the forms.
   ii. Power point presentations, clarification of slides, and extra case studies were added to the training sessions based on the learning from other districts. This increased effectiveness in the delivery of the contents to the participants.

5. Conclusion

6. Recommendations

Annexure

List of participants

SN	Name	Designation	Organization
1.	Dr. Miluna Bhusal	Medical Officer	Koshi Zonal Hospital
2.	Dr. Hari Kumar Shrestha	Medical Officer	Seti Zonal Hospital
3.	Dr. Kamal Raj Sharma	Chief Consultant Pediatrician	Seti Zonal Hospital
4.	Dr. Dipendra B. Amatya	Pediatrician	Lumbini Zonal Hospital
5.	Dr. Bishnu Gautam	Medical Officer	Lumbini Zonal Hospital
6.	Dr. Keshar Dhakal	Chief Consultant Physician	Mid-Western Regional Hospital
7.	Dr. Nabin K. Shrestha	Medical Officer	Western Regional Hospital
8.	Dr. Meena Jha	Senior Consultant Gynecologist/Obstetrician	Paropakar Maternity and Women's Hospital
9.	Dr. Shailendra Bir Karmacharya	Pediatrician	Paropakar Maternity and Women's Hospital
10.	Dr. Sahishnuta Basnet	Assistant Professor, Pediatrics	Manipal Teaching Hospital
11.	Dr. Ajay Argawal	Associate Professor, Gynecologist/Obstetrician	BP Koirala Institute of Health Sciences
12.	Dr. Shyam Prasad Kafle	Assistant Professor, Pediatrician	BP Koirala Institute of Health Sciences
13.	Dr. Rosina Manandhar	Lecturer, Gynecology/Obstetrics	Kathmandu Medical College Teaching Hospital
14.	Dr. Surya Thapa	Pediatrician	TU Teaching Hospital
15.	Dr. Josie Baral	Gynecologist/Obstetrician	TU Teaching Hospital
16.	Dr. Prerana Kansakar	Pediatrician	Patan Academy of Health Sciences
17.	Dr. Sarada Duwal Shrestha	Gynecologist/Obstetrician	Patan Academy of Health Sciences
18.	Dr. Sujit Kumar Shrestha	Pediatrician	Nepal Medical College
19.	Dr. Manisha Bajracharya	Lecturer	KIST Medical College Teaching Hospital
20.	Meena Sharma	Member	Perinatal Society of Nepal
21.	Dr. Anil Kumar Shrestha	Pediatrician	Nepal Pediatric Society
22.	Dr. Madhu Tumbahangphe	Consultant Gynecologist/Obstetrician	Nepal Society of Obstetricians and Gynecologists
23.	Beki Prasai	Health Officer	UNICEF
24.	Dr. Binamra Rajbhandari	Technical Advisor	GIZ
25.	Shakuntla Prajapati	Senior Nursing Officer	Management Division
26.	Parvati Bista	Public Health Nurse	DPHO, Kathmandu
27.	Dammar Kumari Khand	Public Health Nurse	National Health Training Center
28.	Keshu Kafle	Community Nursing Officer	Family Health Division
29.	Dr. Amrit Pokhrel	Senior Medical Officer	Child Health Division

List of Facilitators

SN	Name	Designation	Organization
1.	Dr. Naresh Pratap KC	Director	Family Health Division
2.	Dr. Shilu Aryal	Chief Consultant Gynecologist/Obstetrician	Paropakar Maternity and Women's Hospital
3.	Dr. Sharad Kumar Sharma	Senior Demographer	Family Health Division
4.	Dr. Heera Tuladhar	Professor, Gynecologist/Obstetrician	KIST Medical College
5.	Dr. Meera Upadhyay	National Professional Officer	WHO
6.	Dr. Pooja Pradhan	MPDSR Coordinator	WHO
7.	Dr. Moureen Dariang	Senior EHCS Coordinator	NHSSP
8.	Dr. Indra Prajapati	CEONCE Mentor	NHSSP

Agenda of the training

Maternal and Perinatal Death Surveillance and Response (MPDSR)

TIME	ACTIVITIES	FACILITATOR
Day1:		
10:00 - 10:30	Registration	
10:30 - 11:00	Opening Remarks Welcome and objectives	
11:00 - 11:30	Introduction and Rationale of MPDSR	
11:30 - 12:15	Overview of MPDSR process	
12:30 - 01:00	Video show: why did Mrs. X die?	
01:00 -02:00	**Refreshment Break**	
02:00 – 02:30	Definition and key terms	
02:30 - 03:00	Status of implementing hospital-level maternal and perinatal death review	
03:00 – 03:30	Introduction to web-based hospital MPDR system	
03:30 – 04:30	Introduction of Hospital-level tools: MDR, MDR summary, PDR, PDR summary, cause of death assignment forms	
Day 2		
10:00 - 10:30	Review of day1	
10:30 - 12:00	Discussion on hospital MDR form	
12:00 - 01:00	Group work: Fill up the MDR form based on the received case and discuss about experience	
01:00 -02:00	**Refreshment Break**	
02:00 – 03:30	Discussion on hospital PDR form	
03:30 - 04:30	Group work: Fill up the PDR form based on the received case and discuss about experience	
Day3		
10:00 - 10:30	Review of day2	
10:30 - 11:00	Adverse event monitoring approach	

TIME	ACTIVITIES	FACILITATOR
11:00 - 11:30	Group work: adverse event case discussion	
11:30 - 01:00	Understanding death, cause and accountability mechanism (MDR/PDR)	
01:00 -02:00	**Refreshment Break**	
02:00 -03:00	Response mechanism linked with quality of care	
03:00 -04:00	Introduction to web-based MPDR system	
04:00 -04:30	Closing	