Report of On-Site Coaching at Maternal and Perinatal Death Surveillance and Response Implementing Sites

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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

Introduction

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. To measure existing and future progress, and to implement appropriate strategies to reduce preventable maternal and newborn deaths, there is need for accurate information on the number of maternal and neonatal deaths. It is very important these data are used for evidence-based planning. Moreover more important is to develop a system of responding to each review and implementing its recommendation.

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 2006 Maternal Perinatal Death Review (MPDR) had been implemented in 6 hospitals and 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.

Nepal has adapted the Commission on Information and Accountability (COIA) which tracks progress on resources and results towards the UN Secretary General's Global Strategy on Women's and Children's Health 2012. 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 us 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.

Government of Nepal (GoN) developed MPDSR guidelines and now implementing community level MPDSR in five districts (Banke, Kailali, Kaski, Dhading and Solukhumbu) with plan to expand to Baitadi in FY 2073/74. In these six districts community maternal deaths, hospital maternal deaths and hospital perinatal deaths are reviewed and responses planned. Besides this there is plan for reorientation to the 42 MPDR implementing hospitals as well as expansion of hospital-based MPDSR to total 65 hospitals.

Implementation of MPDR has been a challenge to the GoN with constrained resources, frequent turn-over of trained human resources and weak monitoring system. With endorsement of the MPDSR Guideline developed by Family Health Division (FHD), Department of Health Services (DoHS), has highlighted the need for continuous monitoring, evaluation and supervision of MPDSR system in order to ensure adequate functionality and improvement.

Goal:

To reduce preventable maternal and perinatal mortality by obtaining and using information on each maternal and perinatal death to further guide public health actions and monitor their impact.

Objectives:

1. To develop a Monitoring and Evaluation (M&E) plan for MPDSR implementation from central to community levels.
2. To observe and support efficiency and effectiveness of processes for implementing MPDSR at all levels.

Activities:

- Develop M&E plan for implementation of MPDSR at community, district, regional and central levels.
- Conduct supportive monitoring and supervision of MPDSR implementation at districts and hospitals.
- Compile MPDSR related data at the central level and share the findings.

Methodology:

- M&E plan and tools will be drafted and finalized through a workshop with experts at national level.
- Supportive supervision of MPDSR implementing districts including health facilities at communities and District Health Offices of the six districts from FHD biannually.
- Supportive supervision of MPDSR implementing hospitals from FHD annually.

- List out pertinent issues came across during monitoring visits, develop action plans to improve the issues, follow up and update on the action plans.
- Monitor and manage data in the web-based reporting system from the center continuously.
- Review, analyze and interpret and share the data at national level annually.
- Provide timely feedback to the districts and hospitals in case of mistakes or incompleteness.

Expected Outputs:

- Plan for MPDSR monitoring developed.
- MPDSR process monitored as per the plan in the districts and hospitals.
- Improved reporting system of MPDSR.

Process of On-site Coaching

Planning and preparation:

The Ministry of Health (MoH) Family Health Division has prioritized implementation of the MPDSR system and has conducted various activities this FY 73/74 for strengthening the program. The activities include expansion of community based MPDSR into one more district (Baitadi) with total six districts implementing community MPDSR, reorientation and expansion of hospital based MPDSR into 65 hospitals, training on cause of maternal death assignment from Verbal Autopsy (VA) for doctors at community based MPDSR implementing districts. Apart from reorientation and expansion, the GoN has also prioritized on-site coaching for the service providers and program managers at the hospitals and districts. The WHO CO Nepal has been providing direct technical and financial support for all these activities.

FHD developed a visit plan including 65 hospitals and six districts. The visit plans were prepared in clusters for providing on-site coaching so that several sites were included in single visit.

For monitoring the functionality of the MPDSR system, checklists were developed. Different checklists were developed to monitor hospitals and districts which are attached in the annexure. The checklist for hospital included information on formation of MPDSR committee, number of deliveries, live births, maternal and perinatal deaths, use of MDR and PDR forms, review of the deaths, development of action plans, reporting in the web-based system and availability of guidelines and tools. The district checklist included formation of MPDSR committee at district and health facility levels, VA team, number of deaths notified, screened, VA conducted, cause of death assigned, review of deaths, action plans developed, reported in web-based system and availability of guidelines and tools.

With the development of checklists and visit plan, FHD, accompanied by technical support from partners including WHO, initiated the on-site coaching.

The visit initiation was postponed initially due to some programmatic issues on title of the budget which was later adjusted under different heading with change in the contract also. This caused some delay in the activity and some sites were not visited within the planned timeframe.

The reorientations at the hospitals were also planned and conducted side by side of the on-site coaching. Total seven trainings have been conducted at regional level for the 65 hospitals. Due to scarcity of expert human resource to conduct all these activities, there was further delay and all sites could not be visited.

The delay was also caused due to the political situation with the country going into the federal system and elections conducted country wide at different phases.

The team which conducted the on-site coaching was expected to fill up the checklist and debrief to the site as well as report to the center and follow-up.

Process of On-site coaching:

Following the plan and preparations, FHD initiated the on-site coaching at the hospitals and districts. The list of hospitals and districts visited is provided in the annexure. The on-site coaching used to be initiated with information to the sites regarding the visit with an official letter. The letter informed on requesting for a meeting with MPDSR Committee of the site, data of the FY on maternal and perinatal deaths and forms filled for the MPDSR process.

On-site coaching at Hospitals:

Once the visiting team reached the sites, they met with the MPDSR committee, reviewed available data, forms and documents. This was followed by discussion on issues experienced by the team there. After the revision of the forms, reorientation and training at the hospitals were planned to be conducted but was not shared at many of the hospitals. Therefore, the visiting team oriented the MPDSR committees on the new forms and web-based system at most of the sites and requested to use the new forms and enter into the web-based system henceforth.

Discussions were mainly prioritized to orient the MPDSR committee on process of MPDSR focusing on identifying avoidable factors which contributed to the maternal and perinatal deaths and developing action plans to prevent the avoidable factors which improved quality of services and ultimately contributed in reducing maternal and perinatal mortalities.

On-site coaching at D(P)HO:

At the D(P)HO, the team met with MPDSR committee including District Health Officer and Public Health Nurse (PHN). The PHN is the focal person for the program and the team was involved in discussing issues and providing guidance to the PHN. The process of MPDSR is slightly different from the hospitals. Here the data was reviewed regarding number of deaths notified, screened, pregnancy related deaths identified, VA conducted, cause of death assigned, review meeting conducted and action plans developed. At the D(P)HO also orientation on web-based entry was prioritized and this system was developed recently.

The visiting team filled respective checklists at each site and documented the findings with issues and advice provided and reported back to the Director of FHD.

Findings and observations:

Findings from on-site coaching at Hospitals:

The monitoring team met with the hospital MPDSR Committees and reviewed the forms and action plans developed. Most of the hospitals have formed MPDSR Committees, fill the Maternal Death Review form and review maternal deaths within 72 hours. The hospitals are developing the action plans which are focused on improving quality of services to reduce preventable maternal deaths. They include:

1. Availability of Hepatitis E test kit in laboratory
2. Oxygen and suction pipeline at ER
3. Back-up laryngoscope at ER
4. Outreach clinic from Hospital
5. Timely screening and referral to higher centers
6. Availability of anti-hypertensives at PHCs
7. Hypertensive patients to be delivered at referral sites
8. Recommend to use disposable ET Tubes
9. To take microbiological culture samples from ET tubes and ambo bags to rule out source of infection
10. Decided to use GoN definition of perinatal deaths.
11. Consider surgical management like hysterectomy when PPH is not controlled and comes to a stage of requiring balloon tamponade.
12. Use balloon tamponade while preparing for hysterectomy so that if tamponade does not help then hysterectomy could be done immediately.
13. Revised history taking form
14. Involve staff from other departments also in case of emergency for support
15. Ensuring availability of emergency medicines
16. Conduct CPR training for clinical staff
17. Feedback from referral site on timely communication to the referring site
18. Timely Identification of medical problems during ANC
19. Establish blood bank
20. Revise ANC cards to include all important counselling required during antenatal and postnatal period

21. Develop flex and display in ANC clinics for awareness on danger signs

Many action plans were also directed towards the community and center. Recommendations were made to focus on identifying avoidable factors within the hospitals and to develop action plans focused to be implemented more within the hospitals.

One of the major gaps seen was review of perinatal deaths. Due to the bulk of the data and confusion in forms and responsibility, many of the hospitals have not filled the PDR forms and reviewed perinatal deaths. Hospitals have been trained this FY on the forms and have been informed to review the perinatal deaths monthly and enter only the PDR summary forms in web-based system. Hopefully with continuous supervision and feedback from the center, there will be improvement on this.

The details of the visits at each site have been provided in the annex. Also the information from the checklist filled during the visit has been provided in the table below.

Findings from On-Site coaching at Districts:

FHD could conduct on-site coaching at Dhading, Kaski and Kailali D(P)HOs during this period. The team met with the District Health Officer, Public Health Nurse, FP Supervisor where present and Statician. They reviewed the maternal death related document for the community in the respective districts. It was seen that the District MPDSR Committees were formed and as guided by the MPDSR, FCHVs are notifying the death of women aged 12-55 years. ANMs at Health Posts are screening the notified deaths and inform the PHN at D(P)HO. The PHN and members of Verbal autopsy team then conduct verbal autopsy. At Dhading and Kaski, total 37 deaths were notified and screened out of which 7 cases were pregnancy related deaths in one year. Total 4 VA were conducted. Cause of death was assigned by the trained doctors at the districts. Some action plans were developed by the District MPDSR are encouraging and include:

1. **Awareness raising:**
    a. Awareness program on Sickle Cell Anemia among Tharu community.
    b. Mobilize local leaders to ensure institutional delivery.
    c. Mobilize mothers' group to create environment where pregnant women are comfortable for antenatal care and share their problems.
    d. Awareness program on indirect causes of maternal deaths
    e. Merge an awareness program on psychosocial counselling for the age group below 25 years. Many of the notified cases of deaths was due to suicide among this age group.

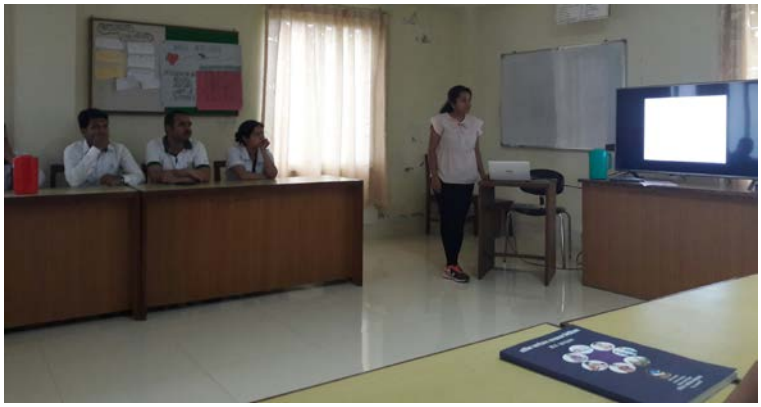
2. **Coordination:**
    a. Advocate on need of road construction with local development offices for raising accessibility to health services.
    b. Advocate of Calcium tablets distribution for pregnant women
3. **Quality of service:**
    a. Blood test for anemia among adolescents and newly married women in Tharu community with necessary referral.
    b. Ensure antenatal services in all primary health care outreach clinics.
    c. Proper recording of all cases in health facilities.
    d. Ensure presence of health workers during service hours at health facilities for antenatal check-up.
    e. Health facilities to take each case sensitively and give equal importance for proper management and referral.
    f. Orient health workers and female community health volunteers on referral mechanism with communication between health facilities.

However, the entry in the web-based system is a challenge for the PHNs and they are supported by FP Supervisors, Staticians and Has. There is need to follow up on the action plans developed. There is also need to conduct the Cause of Death Assignment training as most of the doctors who were trained are transferred.

Reporting in Web-based System:

Web-based system for reporting the forms filled during maternal and perinatal death surveillance and response has been developed by the Family Health Division. Separate log in accounts have been developed of each hospital and district to report and store the information. The central administration at FHD reviews the forms entered and approves for finalization if complete.

With the revised tools, there was need for orientation to the hospitals on the tools and reporting in the web-based system. Ideally the on-duty staff should fill the forms and completed during the MPDSR Committee meeting. The completed forms should be entered in the web by the Medical Recorder. The monitoring team provided orientation on the tools to be used for maternal and perinatal deaths and the process of entering in the web-based system. After the visits, it has been observed that 50% of the hospitals have started to report in



the web-based system. The forms filled are observed to be more complete than before but there are issues regarding cause of death assignment and action plan which still need to be worked on more rigorously and followed upon from center for support.

The Regional level hospital-based MPDSR trainings have also been conducted this FY by FHD. This will further strengthen and support the hospitals for understanding the process and implementing MPDSR.

Conclusion:

The activity for On-site coaching has been conducted by FHD with the technical and financial support from WHO. The process was very useful to observe the implementation and strengthen the process of MPDSR at the sites. As MPDSR is a rigorous and continuous process, the on-site coaching and support from the center is mandatory for effective implementation to improve quality of care for reducing maternal and perinatal deaths. More priority needs to be given for continuous and planned supportive supervision in order to provide support to all the sites implementing MPDSR.

Recommendations:

Following recommendation have been proposed for further support to strengthen the implementation of effective MPDSR:

1. Define roles at different levels of organizations from center to community for implementation of MPDSR considering transition of the country into federal system.
2. Strengthen local government bodies for monitoring MPDSR to provide regular monitoring and follow up at local level.
3. Coordination and support at the center with partners working in the area of maternal and perinatal health to generate more resources including human resource at center and federal states.
4. Strengthen the web-based reporting system to make it more robust and integrate into other Government reporting system for institutionalizing MPDSR.
5. A core team at the center to support and follow up the quality for information generated from the web-based reporting system, regular analysis and dissemination of data to provide direction to program managers.

Annexure:

Checklist for Monitoring Maternal and Perinatal Death Surveillance and Response Activities

Name of the DPHO:

SN	Requirements	Yes	No	Remarks
1.	District MPDSR Committee			
2.	District Verbal Autopsy Team			
3.	MPDSR Committees at Health Facilities			Number:
4.	FCHV orientation on MPDSR			Number:
	Data			
1.	Total deaths notified			Number:
2.	Total deaths screened			Number:
3.	Total pregnancy-related deaths identified			Number:
4.	Total VA conducted			Number:
5.	Cause of death identified from VA			Number:
6.	Cause of deaths			
7.	District MPDSR Committee meeting conducted			Number:
8.	Action plans developed after review meeting			Number:
9.	Action Plans implemented			Number:
	Reporting			
1	Filled VA forms shared with FHD			
2.	All forms are entered in Web-based system			
	Logistics			
1.	MPDSR Guideline			
2.	Notification form			
3.	Screening form			
4.	VA form			
5.	VA summary form			
6.	District MPDSR Committee review form			

Areas of Improvement:

Lessons learned:

Conducted by: **Date:**

Checklist for Monitoring

Maternal and Perinatal Death Surveillance and Response Activities at Hospitals

Name of the Hospital: **District:**

SN	Requirements	Yes	No	Remarks
1.	**MPDSR Committee**			Number of meetings conducted:
2.	**Data**			
	Total deliveries			Number:
	Total live births			Number:
	Total still births			Number:
	Total maternal deaths			Number:
	Total early neonatal deaths			Number:
3.	**Maternal Death Review**			
	MDR Form filled within 24 hours of all maternal deaths			Number:
	MPDSR Review committee meeting within 72 hours of each maternal death			Number:
	Action Plans developed after each maternal death review			Number:
	Action Plans implemented after each maternal death review			Number:
4.	**Perinatal Death Review**			
	PDR Form filled within 24 hours of all stillbirths and early neonatal deaths			Number:
	Monthly MPDSR Review committee meeting to review perinatal deaths			Number:
	Action Plans developed after each monthly perinatal death review			Number:
	Action Plans implemented after monthly perinatal death review			Number:
5.	**Reporting**			
	Copies of all forms are sent to FHD			
	All forms are entered in web-based system			
6.	**Logistics**			
	MPDSR Guideline			
	MDR form			
	PDR Form			
	PDR summary form			

Issues identified:

Actions advised:

Conducted by: **Date:**

Table: Status of On-site coaching in the MPDSR Implementing Hospitals

SN	Hospital Name	Region	District	Status
1	Mechi Zonal Hospital	Eastern	Jhapa	Completed
2	Lifeline Hospital		Jhapa	Completed
3	AMDA Hospital		Jhapa	Completed
4	BPK Institute of Health Sciences		Sunsari	Completed
5	Koshi Zonal Hospital		Morang	Completed
6	Nobel Medical College		Morang	Completed
7	Panchthar Hospital		Panchthar	Completed
8	Ilaam Hospital		Ilam	Completed
9	Okhaldhunga Community Hospital		Okhaldhunga	Not Completed
10	Solukhumbu Hospital		Solukhumbu	Not Completed
11	Sagarmatha Zonal Hospital		Saptari	Not Completed
12	Janakpur Zonal Hospital	Central	Dhanusha	Not Completed
13	Narayani Sub Rigion Hospital		Parsa	Not Completed
14	Mahottari Hospital		Mahottari	Not Completed
15	Rautahat Hospital		Rautahat	Not Completed
16	Bharatpur Hospital		Chitwan	Completed
17	College of Medical Science		Chitwan	Completed
18	Chitwan Medical College		Chitwan	Completed
19	Patan Academy of Health Sciences		Lalitpur	Completed
20	KIST Medical College		Lalitpur	Completed
21	Paropakar Maternity and Women's Hospital		Kathmandu	Completed
22	Kathmandu Medical College		Kathmandu	Not Completed
23	Om Hospital		Kathmandu	Completed
24	Civil Hospital		Kathmandu	Completed
25	Model Hospital		Kathmandu	Completed
26	Nepal Medical College		Kathmandu	Not Completed
27	Kirtipur Hospital		Kathmandu	Completed
28	TU Teaching Hospital		Kathmandu	Completed
29	Dhading Hospital		Dhading	Completed
30	Gorkha Hospital	Western	Gorkha	Completed
31	Palpa Mission Hospital		Palpa	Completed
32	Lumbini Zonal Hospital		Rupandehi	Completed
33	Lumbini Medical College		Palpa	Completed
34	Universal College of Medical Science		Rupandehi	Completed
35	AMDA Hospital		Rupandehi	Completed
36	Dahulagiri Zonal Hospital		Baglung	Completed
37	Lamjung Community Hospital		Lamjung	Completed
38	Western Regional Hospital		Kaski	Completed
38	Manipal Medical College		Kaski	Completed
40	Gandaki Medical College		Kaski	Completed
41	Matri Siishu Miteri Hospital		Kaski	Completed
42	Sisuwa Hospital		Kaski	Completed
43	Rapti Sub Regional Hospital	Midwestern	Dang	Not Completed
44	Mid Western Regional Hospital		Surkhet	Not Completed
45	Bheri Zonal Hospital		Banke	Not Completed
46	Nepalgunj Medical College		Banke	Not Completed
47	Kohalpur Medical College		Banke	Not Completed
48	Nepalgunj Nursing Home		Banke	Not Completed
49	Karnali Institute of Health Science		Jumla	Completed
50	Kalikot Hospital		Kalikot	Not Completed
51	Dolpa Hospital		Dolpa	Completed
52	Mugu Hospital		Mugu	Completed
53	Humla Hospital		Humla	Not Completed

SN	Hospital Name	Region	District	Status
54	Ghodaghodi Hospital	Far Western	Kailali	Not Completed
55	Navajeevan Hospital		Kailali	Not Completed
56	Tikapur Hospital		Kailali	Not Completed
57	Seti Zonal Hospital		Kailali	Not Completed
58	Mahakali Zonal Hospital		Kanchanpur	Not Completed
59	Baitadi Hospital		Baitadi	Completed
60	Bajhang Hospital		Bajhang	Not Completed
61	Dadeldhura Sub Regional Hospital		Dadeldhura	Completed
62	Achham Hospital		Accham	Not Completed
63	Doti Hospital		Doti	Not Completed
64	Bajura Hospital		Bajura	Not Completed

MPDSR On-site coaching updates from individual sites:

1. **Koshi Zonal Hospital:**

   Updates:

   i. Formed MPDSR committee but conducted only 1 review meeting this FY.
   ii. Forms filled for all Maternal and almost all Perinatal deaths
   iii. Action plans not developed
   iv. Cause of death not assigned for perinatal deaths
   v. Forms filled in the web-based system but incomplete due to incompleteness of forms
   vi. Perinatal Death Review summary form not filled
   vii. Older version of maternal death review form used.

   Actions advised:

   i. To assign cause of all perinatal deaths by Pediatric dept.
   ii. Summarize the perinatal deaths from Shrawan to Magh in one PDR summary form, conduct perinatal death review meeting and develop action plan
   iii. To summarize monthly perinatal death after Magh and review monthly developing action plans for every month.
   iv. Fill up MDR in latest version
   v. Review both maternal deaths and develop action plans
   vi. Dr. Meluna (trained in MPDSR during ToT in Kathmandu) to orient staff on MPDSR process and forms for staff at Gynae/Obs and Pediatric department, nursing staff, medical record section

2. **Nobel Medical College:**

   Updates:

   i. MPDSR committee was formed but at present most of the members have already left the hospital
   ii. Previous versions of the maternal and perinatal death review forms are used for filling
   iii. Forms for all the maternal and perinatal deaths are filled
   iv. Review meetings not conducted this year

   Actions advised:

   i. Reform MPDSR committee with present staff

ii. Fill up the forms in latest version of MDR and PDR forms provided by FHD
iii. Conduct review meetings for individual maternal deaths and develop action plans
iv. Conduct review meetings for perinatal deaths monthly with PDR summary forms and develop action plans
v. Enter the complete forms in web-based system (oriented during the visit)

3. **BP Koirala Institute of Health Sciences:**
Updates:
i. MPDSR Committee functional reviewing individual maternal deaths and monthly perinatal deaths
ii. Action plans developed for maternal deaths with responsible person, timeline and support
iii. PDR forms not filled for all early NND
iv. PDR action plans not developed
v. Completion of forms: most of the fields formed correctly except for primary cause of death assigned in PDR (double in some forms), Wiggelsworth classification not checked for early NND, management in the hospital (Section 3) for Early NND not complete, handwriting not clear, last page of MDR for information of form filling left blank
vi. MDR entered in web based system. 146 PDR forms sent to FHD for entry
vii. PPT shared on review and updates from Shrawan to Poush
Actions advised:
i. Actions developed for DPHO and FHD to be communicated timely
ii. Actions developed for the hospital to be followed up in monthly Perinatal death review meetings
iii. PDR for Early NND to be completed, summarized in summary forms, reviewed and develop action plans
iv. To consider the points highlighted in update number 5
v. Live births number to be included while presenting updates
vi. Dr. Ajay and Dr Shyam (taken ToT in KTM) to conduct an orientation for staff on MPDSR process and forms

4. **AMDA, Damak, Jhapa:** Met with Hospital Director, Gyn/Obs, Pediatric Dept heads, MDGP, Metron, Medical Recorder
Updates:
i. Formed MPDSR committee and conducted 2 review meeting this FY.
ii. No maternal death this FY
iii. 15 SB and 1 Early NND out of which 8 forms were found to be filled. Some filled forms were sent to DPHO.
iv. Active coordination with DPHO for conducting MPDSR meetings.
v. PDR not reviewed.
Actions advised:
i. To compile all the PDR forms filled for 073/74 till Magh, summarize in PDR summary form, conduct review meeting and develop action plan.
ii. Conduct monthly PDR meeting from Falgun and develop action plan.
iii. To keep separate register for MPDSR activities

iv. To coordinate with Jhapa DPHO for mobilizing MPDSR budget

Brought available filled PDR forms. Oriented on MDR, PDR and PDR summary forms and web-based entry system.

5. **Lifeline:** Met with Hospital Director, Gyn/Obs, Pediatric Dept heads, MDGP, Metron, Medical Recorder, Nursing staff

   Updates:

   i. Formed MPDSR committee and conducted 2 review meeting this FY.
   ii. 1 maternal death occurred this FY, form was filled and reviewed but action plan was not developed as previous version of the forms were used.
   iii. 5 SB and 14 Early NND this FY till Poush but PDR form not filled for any perinatal deaths

   Actions advised:

   i. To review maternal death and develop action plan and enter in web-based system.
   ii. To fill PDR forms for all SB and Early NND, summarize the deaths till Magh in PDR summary form, review the deaths, develop action, implement action plan and enter in web-based system.
   iii. Conduct monthly PDR meeting from Falgun and develop action plan.
   iv. To keep separate register for MPDSR activities
   v. To coordinate with Jhapa DPHO for mobilizing MPDSR budget

   Brought available filled MDR form. Oriented on MDR, PDR and PDR summary forms and web-based entry system.

6. **Mechi Zonal Hospital:** Met with Hospital Superintendent, Gyn/Obs, Pediatric Dept heads, Medical Officers, Metron, Medical Recorder, Nursing staff

   Updates:

   i. Formed MPDSR committee but no meeting this FY.
   ii. No maternal death this FY.
   iv. 6 perinatal deaths occurred out of which 4 PDR forms filled. But not reviewed and no action plan developed.
   v. Previous version of the forms were used.

   Actions advised:

   i. To fill PDR forms for all SB and Early NND, summarize the deaths till Magh in PDR summary form, review the deaths, develop action, implement action plan and enter in web-based system.
   ii. Conduct monthly PDR meeting from Falgun and develop action plan.
   iii. To keep separate register for MPDSR activities
   iv. To mobilize the budget allocated for MPDSR for the hospital as per FHD Implementation Guideline.

   Oriented on MDR, PDR and PDR summary forms and web-based entry system.

7. **Ilam District Hospital:** Met with Medical Officers, Metron, Medical Recorder, Nursing staff, HA (AA), ANMs

   Updates:

   i. Formed MPDSR committee but no meeting this FY. Budget not allocated for this FY on MPDSR from FHD.
   ii. No maternal death this FY.
   iii. 11 perinatal deaths occurred and PDR forms filled for all deaths but not reviewed.
   iv. Previous version of the forms were used.

   Actions advised:

   v. To discuss on possibility of continuing MPDSR review meetings.
   vi. If possible, Summarize the deaths till Magh in PDR summary form, review the deaths, develop action, implement action plan.
   vii. Conduct monthly PDR meeting from Falgun and develop action plan.
   viii. To keep separate register for MPDSR activities

   Brought available filled PDR forms for entry with us. Oriented on MDR, PDR and PDR summary forms and web-based entry system.

8. **Panchthar District Hospital:** Met with DHO, Medical Officers, FP Supervisor, Matron, Medical Recorder, Nursing staff, HA, ANMs

   Updates:

   i. Formed MPDSR committee and conducted 5 meetings.
   ii. No maternal death this FY.
   iii. 10 perinatal (5 SB and 5 Early NND) deaths occurred and PDR forms filled for all deaths, reviewed but action plan not developed.
   iv. Previous version of the forms were used.

   Actions advised:

   i. Summarize the deaths till Magh in PDR summary form, review the deaths, develop action, implement action plan.
   ii. Conduct monthly PDR meeting from Falgun and develop action plan.
   iii. Enter completed forms in web-based system.
   iv. To keep separate register for MPDSR activities.
   v. To mobilize MPDSR budget allocated by FHD for the activities.

   Brought available filled PDR forms. Oriented on MDR, PDR and PDR summary forms and web-based entry system.

9. **Patan Academy Of Health Sciences:** Met with Hospital Director, Gynea/Obs and Pediatric Department Doctors including HOD, Lecturers, Nursing Staff, Medical Recorder, Lalitpur DPHO PHN, Statician.

   Updates:

   i. MPDSR Committee functional and reviewing individual maternal deaths and monthly perinatal deaths
   ii. Action plans developed for maternal deaths with responsible person
   iii. PDR and PDR Summary forms filled for all early NND and SB.
   iv. PDR action plans not developed

v. Forms entered in web by FHD till now.
vi. Action plans developed include strengthening FP counseling during ANC and PNC, regular CME, Strengthening audit and monitoring system, easy availability of blood and blood products, develop a flex on danger signs to be displayed in ANC and antepartum wards.

Actions advised:

i. Need to revise PDR Summary forms to include Perinatal deaths only instead of all deliveries.
ii. To develop action plans for PDR monthly.
iii. To be more specific while developing action plans.
iv. To enter in web-based system from now onwards.
v. Actions developed for DPHO and FHD to be communicated timely
vi. Actions developed for the hospital to be followed up in monthly Perinatal death review meetings
vii. Oriented the Med. Rec. on web-based online entry.
viii. Dr. Sharda and Dr. Prerana who had participated in MPDSR ToT can conduct orientation on the new forms for the staff.

10. **KIST Medical College:** Met with Deputy Director, Gynea/Obs and Pediatric Department Doctors including HOD, Assoc. Prof, Lecturers, Nursing Staff, Medical Recorder, Lalitpur DPHO PHN, FPS, Statician.

Updates:

i. MPDSR Committee reformed and reviewing individual maternal deaths and perinatal deaths
ii. Action plans developed for maternal deaths with responsible person
iii. PDR forms filled for all early NND and SB except for the month of Shrawan.
iv. PDR action plans not developed
v. Forms entered in web by FHD till now.
vi. Action plans developed include establishment of blood bank and changing ANC card to include counseling on FP and Danger Signs: Blood bank is in the process of establishment and as per the Dep. Dir., it will be established by 1 month.
vii. Dr. Manisha wo had participated in MPDSR ToT conducted orientation on the new forms for the staff previously and is the focal person for MPDSR there.

Actions advised:

i. Actions developed for DPHO and FHD to be communicated timely
ii. Actions developed for the hospital to be followed up in monthly Perinatal death review meetings
iii. PDR for SB of Shrawan to be completed, summarized in summary forms, reviewed and develop action plans
iv. Oriented the Medical Recorder on web-based online entry.

11. **Bharatpur Hospital:** Met with Medical Superintendent, HoDs Gynaecologist/Obstetricians, Pediatricians, Medical Officers, Nursing Incharge, Nursing Staff, Medical Recorder, PHN Chitwan.

Updates:

i. Had formed MPDR committee which was functional till last FY. No formal MPDSR review meeting conducted this FY.
ii. Three maternal deaths this FY. Forms were filled but incomplete. Gaps identified to be last recognition of shock in a case of LSCS with PPH and hemoperitonium, management of shock was delayed with unavailability of functional ventilator and Inj. Adrenaline. Reviewed among the department and identified on need of post-operative ward. Hospital management in the process to establish a post-op ward with monitors, staff are monitoring the post-op cases every 15 minutes but still an issue as sometimes the staff are rotated and not fully oriented on monitoring post-op cases.
iii. 118 cases of SB (23 fresh and 95 macerated) and 20 cases of early NND. PDR forms not filled for any cases and no review conducted.
iv. Previous version of the forms were used.
v. Budget allocated by FHD not used

Actions advised:

i. To fill PDR forms for all SB and Early NND, summarize the deaths, review the deaths, develop action, implement action plan and enter in web-based system.
ii. Conduct monthly PDR meeting and develop action plan. MPDSR Committee decided to conduct monthly review meeting every last Thursday of the month.
iii. To keep separate register for MPDSR activities.
iv. To mobilize the budget allocated for MPDSR for the hospital as per FHD Implementation Guideline.

Oriented on MPDSR process, MDR, PDR and PDR summary forms and web-based entry system.

12. **Chitwan Medical College:** Met with Hospital Director, Gynaecologist/Obstetricians, Pediatricians, Medical Officers, Nursing Incharge, Nursing Staff, Medical Recorder, PHN Chitwan.

Updates:

i. Had formed MPDR committee which conducted a meeting for one maternal death.
ii. One maternal death occurred this FY. Form filled and reviewed. Cause assigned was eclampsia. Post-mortem also conducted and report revealed massive pulmonary embolism. Not action plan was developed after review.
iii. 35 cases of SB (4 fresh and 31 macerated) and 15 cases of early NND. PDR forms filled for the cases but 17 cases remained to be filled. No monthly review meetings conducted.
iv. Previous version of the forms were used.
v. Budget allocated by FHD not used

Actions advised:

i. To fill PDR forms for all SB and Early NND, summarize the deaths, review the deaths, develop action, implement action plan and enter in web-based system.
ii. Conduct monthly PDR meeting and develop action plan.
iii. To keep separate register for MPDSR activities.
iv. To mobilize the budget allocated for MPDSR for the hospital as per FHD Implementation Guideline in coordination with PHN Chitwan DPHO.

Oriented on MPDSR process, MDR, PDR and PDR summary forms and web-based entry system.

13. **College of Medical Sciences:** Met with Chief Operating Officer, Hospital Director, HoDs Gynaecology/Obstetrics, Pediatrics, Nursing Incharge, Medical Recorder, PHN Chitwan.

    Updates:

    i. MPDR committee not functional.
    ii. 5 cases of SB and 5 cases of early NND. PDR forms not filled for the cases. No monthly review meetings conducted.
    iii. Budget allocated by FHD not used

    Actions advised:

    i. To fill PDR forms for all SB and Early NND, summarize the deaths, review the deaths, develop action, implement action plan and enter in web-based system.
    ii. Conduct monthly PDR meeting and develop action plan.
    iii. To keep separate register for MPDSR activities.
    iv. To mobilize the budget allocated for MPDSR for the hospital as per FHD Implementation Guideline in coordination with PHN Chitwan DPHO.

    Oriented on MPDSR process, MDR, PDR and PDR summary forms and web-based entry system.

14. **TU Teaching Hospital:** Met with Gyne/Obs HOD, Pediatrician, Nursing Incharge and Medical Recorder. Two doctors trained during MPDSR ToT by FHD also present in the meeting.

    Updates:

    i. Filling forms for each maternal death and reviewing the deaths.
    ii. Not formed MPDSR Committee and have not developed action plans after reviewing the deaths.
    iii. Not filled perinatal death review forms for still births and early NND.
    iv. Reviewing perinatal deaths monthly but as per hospital protocols.
    v. Not entered in web-based system.

    Actions advised:

    i. Formation of MPDSR Committee as per guidelines.
    ii. Filling PDR and reviewing the Perinatal deaths using PDR Summary forms monthly.
    iii. Developing action plans after MDR and PDR.
    iv. Entering in web-based system.
    v. Orientation for staff on the tools and process.
    vi. Coordinate with Ktm PHN for utilizing the FHD allocated budget.

15. **Om Hospital:** Met with Hospital Director, Nursing Incharge and Medical Recorder.

    Updates:

    i. Not formed MPDSR Committee.
    ii. Not filled maternal and perinatal death review forms.
    iii. Not entered in web-based system.

Actions advised:

i. Formation of MPDSR Committee as per guidelines.
ii. Filling MDR form for each maternal death and review of the deaths by MPDSR Committee within 72 hours.
iii. Filling PDR and reviewing the Perinatal deaths using PDR Summary forms monthly.
iv. Developing action plans after MDR and PDR.
v. Entering in web-based system.
vi. Orientation for staff on the tools and process.
vii. Coordinate with Ktm PHN for utilizing the FHD allocated budget.

16. **Kathmandu Model Hospital:** Met with Gyn/Obs HOD Dr. Aruna Karki, Pediatrician Dr. Rajesh Gurbacharya, Nursing Incharge, MCH Incharge and Medical Recorder. No maternal deaths, 2 still births and 2 Early NND this FY.

Updates:

i. Formed MPDSR Committee as per guidelines. Conducted 3 review meetings.
ii. Have not filled PDR form and PDR summary form for the perinatal deaths.
iii. Have not reviewed the perinatal deaths.
iv. Not entered in web-based system.

Actions advised:

i. Filling PDR and reviewing the Perinatal deaths using PDR Summary forms monthly.
ii. Developing action plans after MDR and PDR.
iii. Entering in web-based system.
iv. Orientation for staff on the tools and process.
v. Coordinate with Ktm PHN for utilizing the FHD allocated budget.

17. **Kirtipur Model Hospital:** Met with Hospital Director, Dr. Rai, Deputy Director and Gyn/Obs HoD Dr. Peru Rajbhandari, Consultant Pediatrician Dr. Deepak Rajbhandari, Nursing Incharge and Communication Officer. No maternal deaths, 2 still births and 2 Early NND this FY.

Updates:

i. Formed MPDSR Committee.
ii. Oriented clinical staff on MPDSR and tools used in hospital.
iii. Filled perinatal death review forms for Early NND but not for Still Births. Not fill PDR summary forms.
iv. Reviewed the ENND, developed and implemented action plans (kept warmer in Post-Natal ward during winter to prevent hypothermia, changed protocol to keep the neonates with hypothermia to be kept in NICU for atleast 24 hours).
v. Not entered in web-based system.

Actions advised:

i. Filling PDR for all still births and early NNDs and reviewing the Perinatal deaths using PDR Summary forms monthly.
ii. Developing action plans after MDR and PDR.
iii. Entering in web-based system.
iv. Coordinate with Ktm PHN for utilizing the FHD allocated budget.

18. **Paropakar Maternity and Women's Hospital:** Visiting team: Dr. Punya Poudel, Mr. Mitra Luitel, Dr. Pooja Pradhan. Met with Director, Deputy Director, Consultant Gynecologists/Obstetricians, Pediatrician, Medical Recorder, Admin Officer, Finance Officer.

    Updates:

    i. Formed MPDSR Committee as per guidelines. Conducted 5 review meetings.
    ii. Have filled PDR forms for Early Neonatal Deaths
    iii. Have not filled PDR form and PDR summary form for the still births.
    iv. Have reviewed the early neonatal deaths monthly for last 3 months but not developed action plans.
    v. Of the 5 maternal deaths, filled form for 4 deaths, reviewed 4 deaths and developed 1 action plan.
    vi. Not entered in web-based system.

    Actions advised:

    i. Orientation for staff on the tools and process.
    ii. Filling PDR for still births also and reviewing the Perinatal deaths using PDR Summary forms monthly.
    iii. Complete MDR for the last maternal death.
    iv. Develop, implement and monitor action plans after MDR and PDR.
    v. Entering in web-based system.

    Oriented on entry in online web-system.

19. **Gandaki Medical College:** Visiting team: Dhana Basnet, Mitra Luitel, Dr. Pooja Pradhan. Met with Medical Superintendent, Consultant Pediatrician, Nursing Director, Nursing Incharges of different wards, Medical Recorder.

    Updates:

    i. Formed MPDSR Committee as per guidelines. Conducted 5 review meetings.
    ii. Have filled PDR forms for perinatal deaths of last 3 months, filled PDR summary forms for Baisakh, reviewed the deaths but action plans not developed
    iii. Reviewed maternal death and developed action plan for one maternal death that occurred in Baisakh 30, 2074. This was a case of elective LSCS for Breech presentation. The case developed sudden SVT during operation and also fall in SPO2 followed by bradycardia. Primary cause of death provided was ARDS. However they also suspected hypersensitivity reaction to Ceftriaxone (given pre-op). They have changed protocol to give Ampicillin-Cloxacillin for surgical cases.
    iv. Not entered in web-based system.

    Actions advised:

    i. Filling PDR Summary forms monthly and review to develop action plans monthly.
    ii. Develop, implement and monitor action plans after MDR and PDR.
    iii. Entering in web-based system.

    Oriented on entry in online web-system.

20. **Western Regional Hospital**
21. **Manipal Medical College**

22. Matri Sishu Miteri Hospital

23. Sisuwa Hospital

24. Dhaulagiri Zonal Hospital

The findings in these hospitals (20-24) are very encouraging. All hospitals have functional MPDSR Committees, conducting regular review meetings and some hospitals have developed and trying to implement action plans. However there were some confusion on developing specific action plans, implementing them and entering in web. We have tried to explain and guide in the gaps identified. We had the opportunity to observe the review meetings conducted at WRH and Manipal. Below are some of the actions developed by the MPDSR Committees at the hospitals:

i. Prompt and adequate supply of emergency medicines
ii. Detail history taking to be ensured for high risk cases
iii. Establishment of MICU
iv. Refresher training for staff on newborn feeding and burping
v. Immediate availability of reagent for ABG machine (which was not functioning)
vi. Change in antibiotics provided during surgeries
vii. Availability of blood and blood products throughout 24 hours

25. Kaski DPHO: 20 cases have been notified by FCHV this FY out of which 2 cases identified as pregnancy related deaths and verbal autopsy and review conducted at district level for 1 case (another was a case of suicide in early pregnancy for which family could not be traced initially and later the husband also committed suicide). They plan to conduct the following action for reducing maternal deaths at community level:

i. Awareness program on indirect causes of maternal deaths
ii. Merge an awareness program on psychosocial counselling for the age group below 25 years. Many of the notified cases of deaths was due to suicide among this age group.

26. Lamjung Community Hospital

27. Palpa Mission Hospital

28. Lumbini Medical College

29. Lumbini Zonal Hospital

30. Devdaha Medical College

31. AMDA Hospital Butwal

32. Universal College of Medical Science

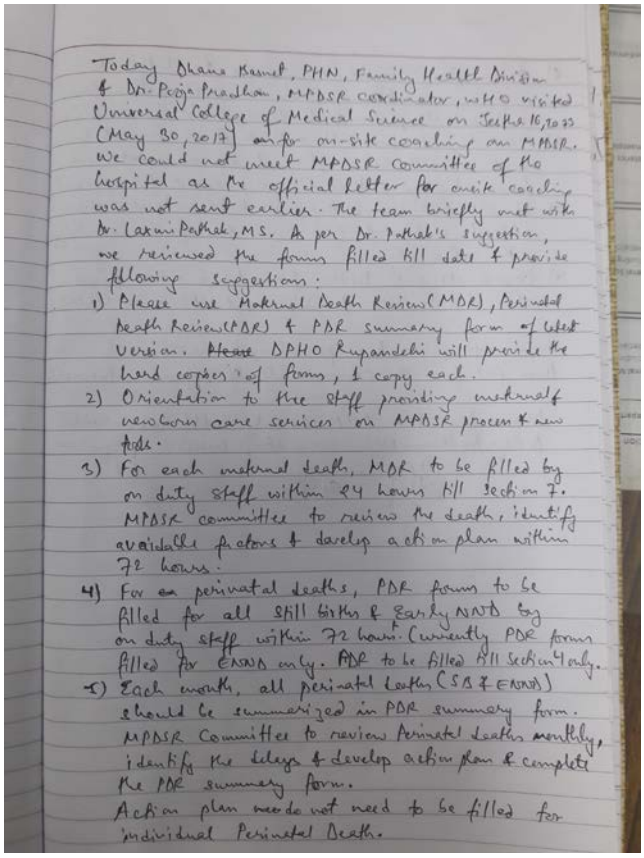
All the hospitals (26-32) have MPDSR committees and conducting review meetings. The participants, who had received training on hospital-based MPDSR we had conducted in Pokhara, have also oriented other hospital staff on new tools in some hospitals. They have also initiated to enter the data in web. But there is still some gap in developing action plans after reviewing the deaths as well as reviewing perinatal deaths. We have provided coaching focusing on identifying delays (prioritizing gaps within the hospital)

and developing and implementing specific action plans. Some of the action plans developed by the hospitals are as follows:

i. Recommend to use disposable ET Tubes
ii. To take microbiological culture samples from ET tubes and ambo bags to rule out source of infection
iii. Decided to use GoN definition of perinatal deaths.
iv. Consider surgical management like hysterectomy when PPH is not controlled and comes to a stage of requiring balloon tamponade.
v. Use balloon tamponade while preparing for hysterectomy so that if tamponade does not help then hysterectomy could be done immediately.
vi. Revised history taking form
vii. Involve staff from other departments also in case of emergency for support
viii. Ensuring availability of emergency medicines
ix. Conduct CPR training for clinical staff

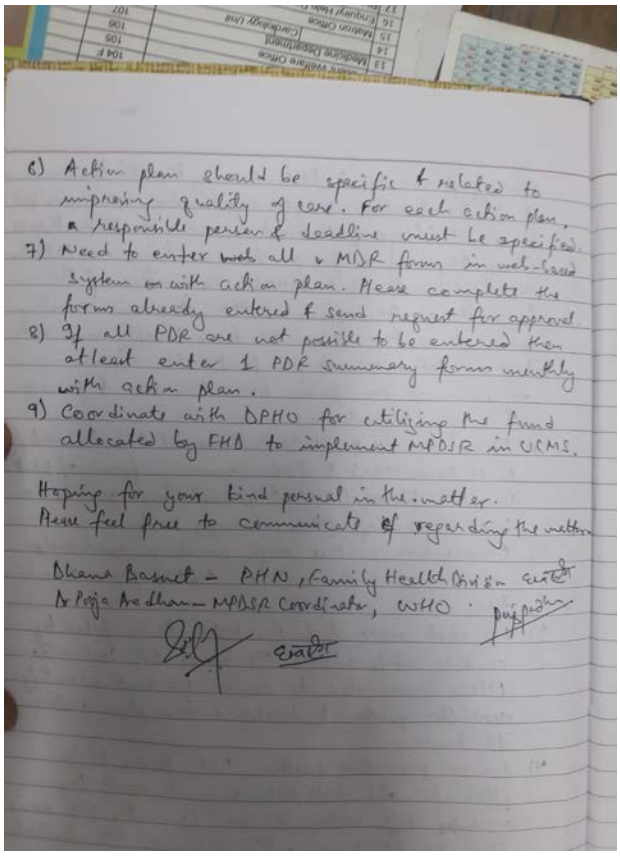
Met with the MPDSR committee in these hospitals and discuss the process. Suggestions we have provided include:

i. Develop specific action plan with responsible person and deadline during review meeting.
ii. Summarize perinatal deaths and conduct review meeting developing action plans monthly.



Today Dhana Basnet, PHN, Family Health Division & Dr. Pooja Pradhan, MPDSR coordinator, WHO visited Universal College of Medical Science on Jestha 16, 2073 (May 30, 2017) for on-site coaching on MPDSR. We could not meet MPDSR committee of the hospital as the official letter for onsite coaching was not sent earlier. The team briefly met with Dr. Laxmi Pathak, MS. As per Dr. Pathak's suggestion, we reviewed the forms filled till date & provide following suggestions:

1) Please use Maternal Death Review (MDR), Perinatal Death Review (PDR) & PDR summary form of latest version. Dhana DPHO Rupandehi will provide the hard copies of forms, 1 copy each.
2) Orientation to the staff providing maternal & newborn care services on MPDSR process & new tools.
3) For each maternal death, MDR to be filled by on duty staff within 24 hours till section 7. MPDSR committee to review the death, identify available factors & develop action plan within 72 hours.
4) For on perinatal deaths, PDR forms to be filled for all Still births & Early NND by on duty staff within 72 hours. Currently PDR forms filled for ENND only. PDR to be filled till section 4 only.
5) Each month, all perinatal deaths (SB & ENND) should be summarized in PDR summary form. MPDSR Committee to review Perinatal deaths monthly, identify the delays & develop action plan & complete the PDR summary form.
Action plan made not need to be filled for individual Perinatal Death.



6) Action plan should be specific & related to improving quality of care. For each action plan, a responsible person & deadline must be specified.
7) Need to enter web all v MDSR forms in web-based system on with action plan. Please complete the forms already entered & send request for approval
8) If all PDR are not possible to be entered then atleast enter 1 PDR summary form monthly with action plan.
9) Coordinate with DPHO for utilizing the fund allocated by FHD to implement MPDSR in UCMS.

Hoping for your kind persual in the matter.
Please feel free to communicate if regarding the matter

Dhana Basnet - PHN, Family Health Division center
Dr Pooja Pradhan - MPDSR Coordinator, WHO.

iii. Enter in web each maternal death review form and at least 1 perinatal death summary form for each month.
iv. For referral hospitals, identify responsible person from Gyne/Obs Department and Pediatrics Department to ensure proper filling of the forms.

The monitoring team could not meet the MPDSR committee at Universal College of Medical Sciences as they did not receive the letter from FHD timely. As suggested by the Medical Superintendent there, we have reviewed the forms they have filled and provided our feedbacks in written at the hospital.

SN	Name of the hospital	District	Duration	MPDSR Committee	DATA				
					Total deliveries	Total LB	Total SB	Total MD	Total early NND
1	Gandaki Medical Col	Kaski	Shrawan073-Chaitra 073	Yes	1034	1030	10	1	2
2	Manipal Teaching	Kaski	Shwaran 073-Baisakh 074	Yes	1658	1683	49	0	32
3	Western Regional	Kaski	Shrawan-Chaitra 073	Yes	6992	6066	81	0	50
4	Matri Sishu Miteri	Kaski	Shrawan 073-Baisakh 074	Yes	135	133	2	0	0
5	Sisuwa	Kaski	Shrawan 073-Baisakh 074	Yes	55	55	0	0	0
6	Dhaulagiri Zonal	Baglung	Shrawan 073-Baisakh 074	Yes	941	928	13	0	0
7	Lamjung Community	Lamjung	Shrawan 073-Baisakh 074	Yes	997	992	5	1	3
8	Palpa Mission	Palpa	Shrawan 073-Baisakh 074	Yes	1914	1905	27	2	13
9	Lumbini Medical Col	Palpa	Baisakh-Chaitra 073	Yes	2364	2380	14	2	5
10	Lumbini Zonal	Rupandehi	Shrawan-Chaitra 2073	Yes	7990	7938	104	5	21
11	Devdaha Medical Col	Rupandehi	Shrawan-Chaitra 2073	Yes	1230	1240	16	0	2
12	AMDA Butwal	Rupandehi	Shrawan 073-Baisakh 074	Yes	1605	1578	40	2	88
13	UCMS	Rupandehi	Shrawan 073-Baisakh 074	Yes	3982	3596	188	12	25
14	PMWH	Kathmandu	Shrawan 073-Baisakh 074	Yes	15999	15,712	287	5	202
15	Kirtipur Hospital	Kathmandu	Shrawan-Chaitra 2073	Yes	532	535	2	0	2
16	Kathmandu Model	Kathmandu	Shrawan-Chaitra 2073	Yes	483	486	2	0	2
17	KIST Hospital	Lalitpur	Shrawan-Falgun 2073	Yes	840	838	8	1	1
18	PAHS	Lalitpur	Shrawan-Magh 2073	Yes	4473	4432	41	2	22
19	Bharatpur	Chitwan	Shrawan-Chaitra 2073	Yes	9777	9437	118	3	20
20	Chitwan Medical College	Chitwan	Shrawan-Falgun 2073	Yes	1170	1155	35	1	15

SN	Name of the hospital	District	Duration	MPDSR Committee	DATA				
					Total deliveries	Total LB	Total SB	Total MD	Total early NND
21	College of Medical Sciences	Chitwan	Shrawan-Falgun 2073	Yes	161		5	0	5
22	Mechi Zonal	Jhapa	Shrawan-Poush 2073	Yes	702	706	3	0	3
23	AMDA Damak	Jhapa	Shrawan-Poush 2073	Yes	3830	3827	15	0	1
24	Lifeline	Jhapa	Shrawan-Poush 2073	Yes	3584	3611	5	1	14
25	Koshi Zonal	Morang	Shrawan-Poush 2073	Yes	3744	3685	62	2	1
26	Nobel Medical Col	Morang		Reform	4180	4170	8	0	2
27	BPKIHS	Sunsari	Shrawan-Poush 2073	Yes	6521	6378	166	9	27
28	Panchthar	Panchthar	Shrawan-Poush 2073	Yes	539		5	0	5
29	Ilam Hospital	Ilam	Shrawan-Magh 2073	No	469	463	10	0	1
30	Dhading	Dhading	Jan-Dec 2016	Yes	674	663	10	0	1
31	Gorkha	Gorkha	Jan-Dec 2016	Yes	1070		8	0	1
32	Mugu	Mugu		Yes	216	208	8	0	
33	Karnali Health Academy	Jumla		Reform	429		2	0	35

SN	Hospital	MATERNAL DEATH REVIEW				PERINATAL DEATH REVIEW				REPORTING		LOGISTICS			
		MDR form filled within 24 hrs	Review within 72 hrs	Action plans developed	Action plans implement	PDR form filled within 72 hrs	Review PD once a month	Action plans developed	Action plans implement	Forms sent to FHD	Entered in web-based system	MPDSR Guideline	MDR form	PDR form	PDR summary form
1	Gandaki	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes
2	Manipal	No maternal deaths				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	WRH	Yes	Yes	Yes		Yes	Yes	No	No			Yes	Yes	Yes	Yes
4	Matri Sishu	No maternal deaths				Yes	Yes			No	No	Yes	Yes	Yes	Yes
5	Sisuwa	No maternal deaths				No Perinatal deaths				No	No	No	Yes	Yes	Yes
6	Dhaulagiri	No maternal deaths				Yes	Yes	No	No		Yes	Yes	Yes	Yes	Yes
7	Lamjung Com	Yes				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes
8	Palpa Mission	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No
9	Lumbini Med	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes
10	LZH	Yes	No	No	No	No	No	No	No	Yes		Yes	Yes	Yes	Yes
11	Devdaha	No maternal deaths				No	No	No	No	No	No	No	No	No	No
12	AMDA (But)	Yes	Yes	Yes	Ongoing	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes
13	UCMS	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No
14	PMWH	Yes	Yes	Yes	No							Yes	Yes	Yes	Yes
15	Kirtipur	No maternal deaths				Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
16	Model	No maternal deaths				No	No	No	No	Yes	No	Yes	Yes	Yes	Yes
17	KIST Hospital	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	PAHS	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
19	Bharatpur	Yes	No	Yes	No	No	No	No	No	No	No	No (Oriented and provided)			
20	CMC	Yes	Yes	No	No	Yes	No	NO	No	No	No	No (Oriented and provided)			
21	CoMS	No maternal deaths				No	No	No	No	No	No	No (Oriented and provided)			
22	Mechi	No maternal deaths				Yes	No	No	No	Yes	No	No	Yes	Yes	Yes

SN	Hospital	MATERNAL DEATH REVIEW				PERINATAL DEATH REVIEW				REPORTING		LOGISTICS			
		MDR form filled within 24 hrs	Review within 72 hrs	Action plans developed	Action plans implement	PDR form filled within 72 hrs	Review PD once a month	Action plans developed	Action plans implement	Forms sent to FHD	Entered in web-based system	MPDSR Guideline	MDR form	PDR form	PDR summary form
23	AMDA (Dam)	No maternal deaths				Yes	No	No	No	DPHO	No	Yes	Yes	Yes	Yes
24	Lifeline	Yes	Yes	No	No	No	No	No	No	DPHO	No	Yes	Yes	Yes	Yes
25	Koshi Zonal	Yes	No	No	No	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes
26	Nobel	Yes	No	No	No	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes
27	BPKIHS	Yes	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
28	Panchthar	No maternal deaths				Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes
29	Ilam Hospital	No maternal deaths				Yes	No	No	No	No	No	Yes	Yes	Yes	Yes
30	Dhading	No maternal deaths				Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
31	Gorkha	No maternal deaths				Yes	Yes	Yes	No	No	No	No	Yes	Yes	No
32	Mugu	No maternal deaths					Yes					Yes	Yes	Yes	Yes
33	Karnali		Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes