Answer Booklet

MDSR Training

August 2013

1. Introduction

This answer booklet accompanies the Workbook provided as part of the MDSR training materials. Not all the activities have set answers provided, and in some cases, answers will need to be developed by the trainers to match the documents they use during the training sessions (such as the correct interpretation of case notes provided in Activity 6 : Facility level review).

The answer booklet should be distributed to all participants *following* their MDSR training so that they can continue to review and learn from the training materials as they contribute to the introduction and implementation of the national MDSR system.

2. Why did Mrs X die?

Q1: What was the direct cause of Mrs Xs death?

Antepartum Haemorrhage

Q2: Were there any indirect causes?

Anaemia

Q3: What evidence did the review committees use to make changes in quality of care at the facility?

Staff MDR Review: Conducted a retrospective audit of files, including Mrs. X's, and also interviewed her family members in the community

International Review (National Enquiry): Reviewed aggregated data from across facilities, including social and cultural issues related to access to family planning and gender roles and responsibilities.

Q4: List 2 actions taken at Hospital level after the first review?

Improved blood supply

Increased availability of emergency services e.g. Caesarean Section

More trained midwives both for ANC and Delivery

3. Identification

Example 1:

- Yes, maternal death,
- direct (haemorrhage),
- should be reported

Example 2:

- Yes, maternal death,
- indirect (HIV/TB are affected physiologically by pregnancy)
- should be reported.

Example 3:

- No, it is not a maternal death
- incidental
- it should be notified but not reported .

Example 4:

- Yes, it is a maternal death
- direct (obstructed labour).
- It should be reported.

Example 5:

- No/ don't know, it is not a maternal death- the most likely cause of death is poisoning.
- It should be notified but not reported

Example 6:

- yes this is a maternal death
- It is direct probably due to septic shock
- should be reported.

Example 7:

- yes, it should be considered a maternal death
- It could be pregnancy related , possibly hyper emesis gravidarum
- and so should be reported.

4. Notification

There are no right or wrong answers in this activity, as the Lead for each scenario may obtain the necessary data by asking a wide range of questions from the other characters. However, some ideas for how to ensure the Notification Form is adequately filled out are listed below.

Scenario 1: This is a tricky notification, as the information comes from a pregnant woman but there is as of yet no indication that the woman who died (AT) was herself pregnant. The Midwife needs to talk to the neighbour herself and any available family members and the first piece of data required is whether AT was pregnant or within 42 days of the end of a pregnancy. If there is no evidence of that, then the death is likely to be a non-maternal death and does not require a verbal autopsy.

Scenario 2: Similar to the situation above, the notification that comes from the priest concerns the death of a woman of reproductive age. While the priest may not be aware whether or not the woman was pregnant of within 42 days of the end of a pregnancy, others in the community should be questioned further. If there is evidence that the death was pregnancy-related, it should be assumed to be a maternal death for the time being and a full VA administered to someone who was present at the time of the woman's death to obtain the required detail.

Scenario 3: The Midwife should probe the husband for more information on the woman's use of injectible contraception. If she was using it regularly and there was evidence (perhaps from a family folder or HEW record?) that the woman had been maintaining the 3-monthly injections, then her death was unlikely to be pregnancy related or maternal. However, it is possible that she experienced a contraceptive failure and then had complications from her pregnancy or tried to terminate it as it was unwanted. These are sensitive data that should be asked about cautiously from the husband or someone the woman was close to (perhaps the neighbour?) to determine whether the death was maternal or not.

Scenario 4: There is no need for the Midwife to collect any additional information. The deaths described are accidental and thus even if the women who suffocated in the fire were pregnant or postpartum, their deaths would not be reported as maternal deaths.

5. Terms of Reference for review committees

Roles and responsibilities are detailed in the National MDSR Guidelines, and will be made locally specific at each appropriate level. There are thus no prepared answers to the TOR activity.

6. Facility level review

The handwritten notes serve as the basis for data extraction to the Facility Based Summary Form. These will be discussed during the session. For the simulation of the Review Committee, the following factors could come up as contributing to the woman's death:

- There were clearly family and social factors related to this death. As the woman appears to have died as a result of sepsis from an attempted abortion, she did not have adequate access to contraception and her pregnancy was unwanted.
- Given the involvement of abortion, it is possible there was a delay in taking the woman to the first facility, particularly if family members were concerned about liaibility
- Following the blood transfusion at first health facility (to which she appears to have had a poor reaction) it is *not clear* whether there were delays in referral to next level of health service
- However, once at the second facility, the woman received appropriate care and there is no evidence of any delays in treating her.

7. Understanding the determinants of Maternal Death

Brainstorming Exercise

Possible main causes of death	Contributing social factors
Haemorrhage	Poor nutritional status
Ruptured Uterus/ Obstructed Labour	Insufficient access to family planning; too many closely spaced pregnancies
Sepsis	Lack of clean delivery Lack of clean water in health facilities Unwanted pregnancy (if followed by induced abortion)

3 delay exercise

DELAY	Contributing factors	Strategies to Address
Delay in Seeking Care	Poor awareness	HEW campaign on emergency signs
	Insufficient funds	Community transport schemes
	Distrust of facilities	Public awareness of quality improvements
		Adapting facilities to cultural preferences
Delay in Reaching Care	Distance to facilities	Promoting birth preparedness (moving closer to facilities at time of birth)
	Poor referral systems	Designated staff to liaise between facilities

	Inability to pay related fees	Voucher or waiver schemes
Delay in Obtaining Care	No staff on duty eves/weekends	Improved staff roster
	Inadequate supplies	Streamlined stock taking & ordering system
	Poor follow-up (eg after C/S)	Establishing recovery room and monitoring

8.Community level data completion

(1) What are some of the challenges faced by the investigation team in conducting this community-based review?
   a. Interference from other community members that may make the household feel blamed or negatively targeted
   b. Resistance within the household to cooperate with the review
   c. Emotional distress in the family, particularly the husband
   d. The principle of *informed consent* seems to have been neglected.
   e. Review process dominated by one family member, making it impossible to collect information from others who may be able to provide relevant details

(2) How could the midwife or HEW act differently to try to prevent some of the problems?
   a. HEW could have visited the family in advance, to prepare them for the arrival of the midwife. Both midwife and HEW could also have made clear to the local women that the visit to the family needs to be private. If required, the HEW could have remained outside, listening to the perspectives of the other women, thus "distracting" them while the midwife conducted the review.
   b. More of an effort should have been made to enter the household in a neutral and sympathetic way, and to ensure the purpose of the visit was understood as fact-finding and not apportioning blame.
   c. Emphasising that the interview would not take long and that the review team wanted to hear their opinions would have been better than making it sound like a long and formal process.
   d. Interviews should have been requested in private, and the midwife should have made clear that she wanted to speak to *all* family members present during the woman's labour and/or death, and that interviews are private and confidential.

(3) Specifically, how could the HEW and midwife *build better trust and rapport* with household members? Did any of their actions contribute to creating a difficult relationship with the family?
   a. On entering the household, the review team could have expressed their sympathy and offered condolences, and provided the household members with a chance to express their grief. Acknowledging distress during the interview also improves rapport
   b. Demanding participation as a "requirement" is unethical, and also can damage the relationship with family members at a sensitive time. The midwife should have requested an interview in a way that showed appreciation for the information that would be provided. The *voluntary* nature of participation should have been explained.

(4) What methods could the review team use to get more detailed information from the household?
    a. Starting the process with a narrative interview before asking specific questions
    b. Ensuring that each family member is interviewed in private, emphasising anonymity

(5) Is there anything that can be done at this stage to improve the situation and capture more information about the pregnant woman's death?
    a. The HEW may be able to go back at another time to get follow-up information, or schedule a second visit by the midwife, perhaps asking to talk to other family members who were away on this occasion (such as the father-in-law).

ASSIGNING AN ID CODE: Answers will depend on the location of each participant's home, but in regional trainings, the REGIONAL component of the code is likely to be the same for most correct answers, and the DATE should be the same of everyone.

9. Action: Identifying response

Exercise 1 (Q1):

Possible actions include

1. Ensure iron is available for pregnant women in that Health Centre
5. Commend the SBA for her actions
6. Ensure family planning is available in that community
7. Make sure National guidelines re ANC are available in that health centre
8. Check local EMONC training has been delivered and repeat if necessary
9. Increase community awareness of need for SBA at delivery by supporting delivery of an educational campaign

But **should not** include;

2. Increase the number of SBAs in that area
3. Punish the husband
4. Make sure blood transfusion is accessible in that community

NB: Remember that selection and prioritisation of responses is subjective and best done in multidisciplinary teams including lay members!

Exercise 2: Prioritisation

Q2 Actions which address the most prevalent problems are;

- Increasing Community awareness re skilled birth attendance
- Lack of available National Guidleines
- Iron provision
- Commending SBA

Q3 Actions that are most feasible are:

- Iron provision
- Commending SBA
- Making National Guidelines readily available

Q4 Actions that deliver the most impact are;

- Education campaign to increase community awareness of SBA at delivery
- Family planning – globally shown to reduce maternal deaths by 30%
- Provision of iron – anaemia makes women more susceptible to PPH
- Commending the SBA- healthcare staff are the most valuable resource in a healthcare system, motivated staff are less likely to leave the profession

SAMPLE ACTION TOOL:

Action plan following committee meeting

- **Facility/woreda level**

- Case ID; X Date of meeting;
- Death preventable **yes** no
- What actions will you take as a result of this case? Complete the following Action Plan form

Avoidable Factor	**Action**	**Person responsible**	**Timescale**	**Comment and challenges to completeness of action**	**Action complete date**
Unplanned pregnancy	Ensure Family Planning is available in that community	Woreda Maternal Health lead	Upto 6 months	-Needs trained staff -Community sensitisation and education -Contraceptives	
Inadequate ANC -No iron -No delivery plan	Training of midwives Provision of National Guidelines at health centre Provision of iron	Lead midwife/health centre head Lead midwife/health centre head Health centre pharmacist/ midwife	3 months 1 week 1 week	No programme of CPD/CME for midwives- discuss at higher level	

No SBA at delivery	Increase community awareness of need for SBA at delivery by supporting delivery of an educational campaign	Health centre head and local midwives, HEW with community leaders, Development Army	3 Months	Dependent of attitudes of community leaders and relationship with healthcare providers	
Failure to seek help when problem arose	Increase community awareness of healthcare provision by supporting delivery of an educational campaign In the face of family poverty access to free transport to be arranged before labour starts ie at 34 weeks of pregnancy	Health centre head and local midwives, HEW with community leaders, Development Army Midwives	3 months 3 months	Dependent of attitudes of community leaders and relationship with healthcare providers Needs to be discussed at higher level and consider inclusion in a revised National Guidelines	
Examples of good care in this case	**Actions**	**Person responsible**			
SBA	Commended	Health centre head	1 week		

10. Analysis of aggregated data

NB. These are sample answers, other answers may be as valid

Exercise 1: Analysis of Woreda data at Regional level

1. Woreda A has considerable delay at all 3 levels but the **facility is poorly performing** with delayed management and lack of drugs causing a big problem.
   Woreda A also has 2 teenagers and 3 others with high parity suggesting either a problem accessing **Family Planning** or low uptake of the service
   The main issues for Woreda A are
   a. The functionality of the hospital
   b. Access/usage of family planning

   Woreda B has a major problem with **Transport** and access to facilities. There are also 2 women with **HIV** which suggests there may be a high incidence of HIV
   The main issues for Woreda B are
   a. transport for pregnant women
   b. lack of available facility
   c. specialised antenatal care for HIV population

2. Woreda A

Appears to have a poorly functioning facility

- More information is needed – discuss with MD,CEO,Head of O&G dept, lead midwife
- Find out the type of support needed
- Establish why the drugs were not available
- Are there human resource issues?
- Support establishment of MDSR at the facility

There is a problem with access to / use of Family Planning services

- Establish what is the key problem
- Extend/facilitate family planning coverage to this area - training of staff and community sensitisation
- Work with partners eg Marie Stopes

Woreda B

There is a problem **accessing facilities**

- There is no available facility – is there a plan to develop one? If not why not?
- There are a lack of roads – is there a plan to build roads ?
- Are waiting homes needed?
- Support communities to establish traditional ambulances- community ownership

There is a problem with **HIV** services

- Are there problems with coverage of this area- if so discuss solutions and support implementation
- Problems with community engagement – discuss solutions and support implementation
- Discuss with partners
- Ensure increased antenatal support for affected women

Exercise 2: Analysis of Regional data at National level

Annex 7: Reporting format from Region to National

Example Remarks

Parameter	Quantity/Number	Remark
Age (number) ≤19 years 20-29 years 30-39 years ≥40 years	 45 22% 82 41% 53 26% 20 10%	1. ? high % of teenagers , compare with other regions 2. If teenage rate high, suggests need for extension of family planning services . Review and present up to date data re family planning coverage in this region at next National meeting.
Marital status Single Married Others	 36 118 46	1. Majority married 2. No action required
Address Rural urban	 190 10	1. Majority rural 2. Focus efforts on improving services in rural communities
Educational status Illiterate Primary school Secondary school University/college	 102 84 13 1	1. Majority illiterate 2. Continue to support extension of Health Development Army and HEWs with particular emphasis on supporting illiterate families.

Parity I II-IV ≥V	 60 115 25	1. Significant minority in first pregnancy 2. Continue to support HEWs to engage women in Maternity care – especially around delivery- regardless of parity. 3. Initiate national poster campaign
Location of Death (tick ONE) Home Health post Health Centre Hospital In Transit	 ____116_____ _____4___ _____25____ _____39____ _____16____	1. 1. Significant majority at home 2. 2. focus efforts on improving services in the community 3. Improve access to functional health facilities
Timing of death in relation to pregnancy, delivery or puerperium Antepartum, Intrapartum, Postpartum	50 antepartum 7 intrapartum 105 postpartum 38 post abortion	1. Majority Postpartum but high number post abortion 2. Start national campaign to ensure public awareness of the high number of post partum care and therefore the need for SBA at delivery and post partum care.
Cause of maternal death Direct obstetric causes (specify) Indirect obstetric causes (specify)	 140 • Haemorrhage 44 • Eclampsia 26 • Sepsis 24 • Obs.labour 18 • Unsafe abortion 17 • Anaesthetic 11 37 • Respiratory 21 • Cardiac 8 • Infections 4 • Others 4	1. Haemorrhage is the leading cause , high no. of anaesthetic deaths noted. Abortion deaths must be included in sepsis /haemorrhage. 2. Obtain case summaries of the last 10 cases of PPH deaths from each region to identify common patterns and therefore identify National solutions. National Focal person /ESOG to summarise findings of this audit and present at next National Technical meeting.

others	23	
Contributory factors Delay I Delay II Delay III	100% cases had some delay in seeking care, Family poverty was a feature of 80% of cases. 85% of cases had delay in reaching the right facility. 80% of cases had some delay at facility level, the commonest component was delay in treatment.	1. Major problems at all levels 2. In first wave of actions, focus attention on facilities access – including health centres to ensure improved functionality and therefore incentivise use of facilities . Disseminate examples of good practice eg. monthly meeting between hospital facilities and health centres to improve referrals and expedite transport arrangements between facilities.
Preventable death: Yes No	 192 8	Monitor these figures and review six monthly. Initially expect an increase as reporting increases.
Number deaths reviewed by regional SMTWG/RH task force in last one month	20	Ask regions to provide written summaries to include as case histories in the annual report