

Dissertation Training
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**“Assessment of maternal death reporting system in
Gaya, Bihar”**

by
RUCHI SINGH

PG/20/060

PGDM (Hospital and Health Management)

2020-22



International Institute of Health Management Research
New Delhi

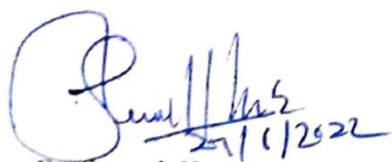
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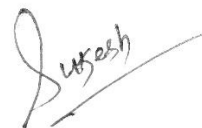
The Candidate has successfully carried out the study designated to him/her during internship training and his/her approach to the study has been sincere, scientific and analytical.

The internship is in fulfilment of the course requirements.

I wish him/her all success in all his/her future endeavours.

A handwritten signature in blue ink, appearing to read 'Sumesh Kumar', with the date '21/1/2022' written below it.

Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

A handwritten signature in blue ink, appearing to read 'Suresh', with a long horizontal stroke extending to the right.

Dr. Suresh Kumar
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This is to certify that the dissertation titled "Assessment of maternal death reporting system in Gaya, Bihar" submitted by RUCHI SINGH Enrollment No. PG/20/60 under the supervision of Dr. Sukesh Kumar for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from January 2022 to May 2022, embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.



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The following dissertation titled “Assessment of maternal death reporting system in Gaya, Bihar” at “UNICEF Bihar” is hereby approved as a certified study in management carried out & presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of PGDM (Hospital & Health Management) for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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Dr. Nitish Dasg

Dr. Manikdasg

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Annexure F

FEEDBACK FORM (Mentor)

Name of the Student: RUCHI SINGH

Name of the Organisation in Which Dissertation Has Been Completed: UNICEF BIHAR

Area of Dissertation: Public health, MDR
Title - Assessment of maternal death reporting system in Gaya, Bihar

Attendance: 100%

Objectives achieved: Yes

Deliverables: Study on MDR, Public health in Bihar

Strengths: Determined, hardworking

Suggestions for Improvement:

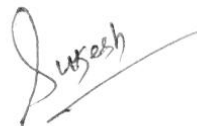
Suggestions for Institute (course curriculum, industry interaction, placement, alumni):

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Date: 28th June 2022

Place: Delhi

Dissertation Writing



Dr. Suresh Kumar
Mentor

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Annexure F

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Date: 28th June 2022

Place: Delhi

Dr. Syed Tarique Ahmad

Dissertation Writing

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**INTERNATIONAL INSTITUTE OF HEALTH
MANAGEMENT RESEARCH (IIHMR)**

Plot No. 3, Sector 18A, Phase-II, Dwarka, New Delhi- 110075
Ph. +91-11-30418900, www.iihmrdelhi.org

CERTIFICATE ON PLAGIARISM CHECK

Name of Student (in block letter)	RUCHI SINGH		
Enrollment/Roll No.	PCN/20/60	Batch Year	2020-22
Course Specialization (Choose one)	Hospital Management	Health Management	Healthcare IT
Name of Guide/Supervisor	Dr./Prof.: SUKESH KUMAR		
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It is my esteemed pleasure to present this dissertation report by thanking everyone who helped me. I would like to express my sincere gratitude towards my nodal person Dr. Syed Tarique Ahmad (UNICEF, BIHAR) & whole UNICEF Team for providing me this great opportunity to work in this ample organization and gain experience.

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CHAPTER I: INTRODUCTION

ABSTRACT

MDR has been explicitly identified in the RCH-II National Program Implementation Plan document as a strategy. Subsequently, according to the “Guidelines for the review of Maternal Deaths”, an interstate/UT maternal death review system was established.

The Indian Government initiated the maternal mortality review process in 2010, aiming to improve the quality of obstetric care and reduce maternal mortality and morbidity by exploring the gaps between the needs of pregnancy and pregnancy in the health system. Therefore, guidelines for monitoring and review of response measures for maternal deaths have been developed, focusing on timely and complete notification of maternal deaths and emphasizing the need for response actions/measures in response to the review results.

Monitoring and responding to maternal deaths is a continuous cycle of identifying, reporting and reviewing maternal deaths and then taking action to improve the quality of care in order to prevent future deaths. The entire MDSR process occurs at the community and facility level.

Community based MDSR is a method of identifying personal, family or community factors that may have contributed to the death by interviewing people such as family members or neighbours who are knowledgeable about the events leading to the death. Facility Based Maternal Death Reviews are undertaken with the objective of improving the quality of services and responsiveness of the facility in the emergency situations by assessing the

details of services provided with the help of format filled from the case sheet and by interviewing the close family members if needed.

BACKGROUND

As per latest report of National Sample Registration System (SRS), maternal mortality ratio of India for period 2016-18 is 113 per 1,00,000 live births which has declined by 17 points from 130 per 1,00,000 live births in 2014-16. ^[1]

The target 3.1 of Sustainable Development Goals (SDG) set by United Nations aims at reducing the global maternal mortality ratio to less than 70 per 100,000 live births. ^[2]

Based on MMR India's current position is 119th globally. ^[3] Levels of maternal mortality vary appreciably across the regions, due to variants in underlying approaches to emergency obstetric care, antenatal care, rate of anemia among women, level of education of women and other factors. Approximately 65%-75% of the whole estimated maternal deaths in India appear in a handful of States-Bihar, Madhya Pradesh and Assam; all these states portray the 18 high center of attention states of NHM. Just Uttar Pradesh contributes greater than 30% of the maternal deaths in India. ^[4]

Current MMR state:

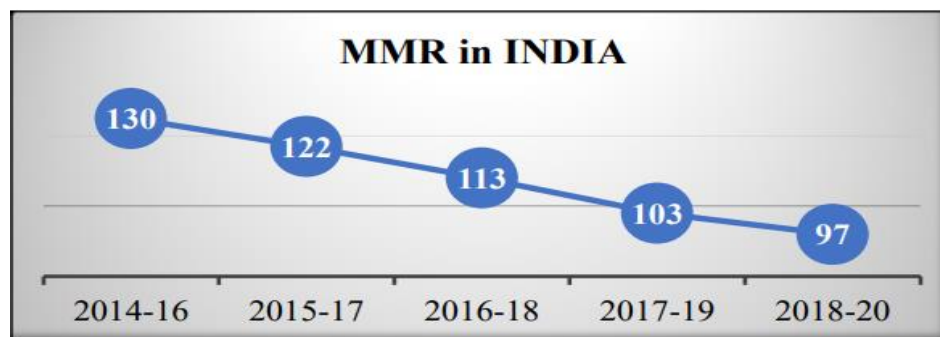


Fig: 1

Two-thirds of all maternal deaths result from severe bleeding following childbirth, infections following childbirth, high blood pressure during pregnancy and complications resulting from delivery and unsafe abortions. ^[5]

In order to improve the quality of obstetric care and reduce maternal mortality and morbidity the maternal death review and reporting process was initiated by Government of India in 2010 by exploring the loopholes in the health system towards the requirements of pregnancy and childbirth. Despite the fact that pregnancy is not a disease and maternal death is not contagious, both positive and negative outcomes have mortality and morbidity consequences, which calls for a public health surveillance system. ^[6]

The MDSR guidelines encompasses simple equipment for supporting States to monitor the processes such as templates for minutes of meeting, template for annual record and also supportive supervision checklists. A need for establishment of National level review mechanism and also National and State level monitoring mechanisms and systems for filling this gap was felt. National and State MDSR monitoring groups are accordingly being added under these guidelines.

Although, majority of countries have policies in place for maternal death notification and review, yet a gap remains when examining the steps beyond this, including reviewing and reporting at an aggregate level involving civil societies and communities. ^[7]

Estimates for maternal deaths do not provide sufficient information for targeted action to end preventable maternal deaths. Without quality information on where, when and why maternal deaths occur, we cannot begin to tackle the real causes of maternal mortality. Better information is an essential requirement for better health. ^[8]

The entire MDSR process occurs at the community and facility level. CB-MDSR (Community based maternal death surveillance and response review) is a method of interviewing family members or neighbors who caused death to determine the personal, family or community factors that may cause death. FB-MDSR (Facility based maternal death surveillance and response review) is done to improve the quality of services and the ability of facility to respond in emergency situations by assessing the details of services using the case sheet format and conducting interview of close family members, when needed.

Below mentioned are various forms to be filled and annexures.

Annexure I:

Form 1: Notification form

Form 2: Block level MDR Register for all women's death (15-49 years)

Form 3: MDR Line Listing Form for All Cases of Maternal Deaths

Form 4: Confidential (Facility Based Maternal Death Review Form)

Form 5: Verbal Autopsy Questionnaire (For Investigation of Maternal Deaths)

MODULE-I, MODULE-II, MODULE-III,

Form 6: MDR Case Summary

Annexure II: The WHO Application of ICD-10 to Deaths During Pregnancy, Childbirth and the Puerperium: ICD-MM

ANNEXURE III: Committees and Nodal Persons for MDR

ANNEXURE IV: Supportive Supervision Checklist for Maternal Death Reviews

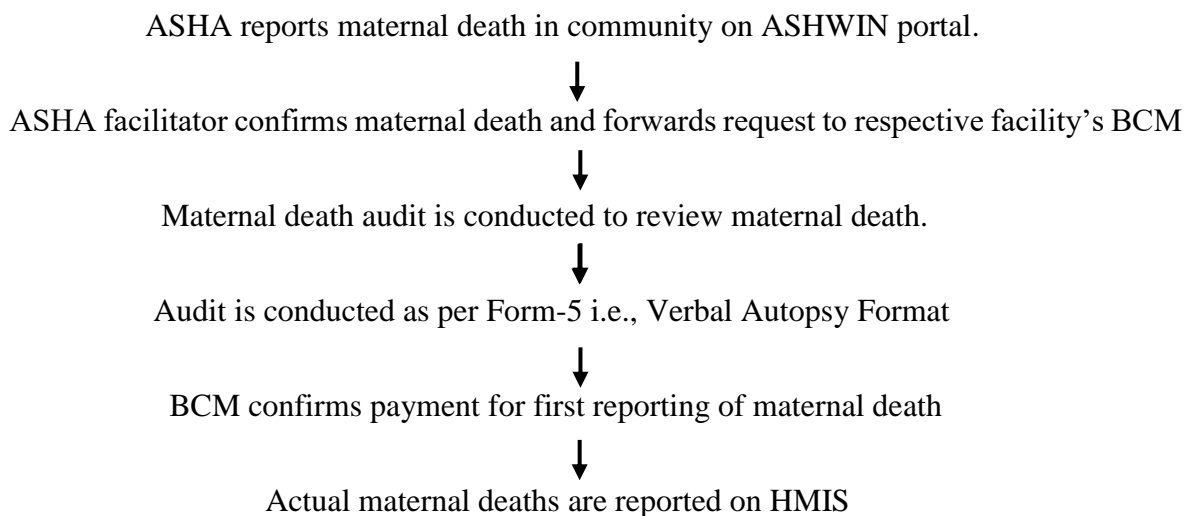
ANNEXURE V:

Template-1: Minutes of the Meeting of Facility Based Maternal Death Review Committee

Template-2: Minutes of the Meeting of District Maternal Death Review Committee

Template-3: Minutes of the Maternal Death Review under District Collector/Magistrate

The actual reporting system following a maternal death in community is mentioned below.



Since the notification form for reporting of maternal death says “*Notification form for death of women of 15-49 age*” which gives rise to confusion as all the deaths occurring in age group 15-49 are reported as per this form, while not all the deaths are due to maternal causes leading to rise in the number of maternal deaths of the State. Hence, to answer this problem audits are conducted in order to establish if the death was due to maternal cause or not.

CHAPTER-II: METHODOLOGY

Methodological Approach

This study aims at conducting maternal death audit of all reported cases from 01st January 2021 till 31st December 2021. The type of data collected was both qualitative and quantitative as both number of deaths and causes are undertaken. Primary data was collected for report making purpose.

All the deaths occurring in transit, at home and at healthcare facility were undertaken and audited.

Study Area and Study Population:

Data of District Gaya was recorded.

Duration of data collection was 1 year starting from 01st January 2021 till 31st December 2022. 29 maternal deaths were reported.

All reported deaths from all 24 blocks of Gaya were audited.

Material and Method:

- Descriptive study is conducted
- Primary data is used
- Verbal autopsy questionnaire and various forms as per mentioned in annexures of MDSR guidelines of NHM Bihar.

- Questions included were age of deceased, parity, cause of death, place of death, block, village and district.
- Data recorded in excel sheets.

Exclusion:

- Only the females falling under age group 15-49 were considered.
- Female deaths caused after 42 days of delivery and termination of pregnancy

Outcome:

- Data was analysed using Excel.
- Number of maternal deaths caused block wise was reported and analyzedx.
- Cause of maternal deaths was reported.
- Effect of parity on maternal deaths was analysed.
- All the causes for maternal deaths were studied.
- Various forms included during data collection as mentioned in MDSR guidelines were also studied.

CHAPTER III: STATISTICAL ANALYSIS AND FINDINGS

Descriptive Result of district Gaya

Table 1: Number of maternal deaths reported on ASHWIN portal v/s the incentive paid.

Month	Maternal Deaths reported on ASHWIN portal (Jan 21-Dec 21)	Number of maternal deaths for which incentive is paid (Jan 21-Dec 21)
January	23	09
February	11	05
March	19	17
April	27	27
May	32	13
June	16	08
July	14	09
August	23	14
September	20	17
October	10	08
November	21	05

December	39	29
Total	255	161

Table 2: Number of maternal deaths reported on ASHWIN portal v/s the number of maternal deaths reported on HMIS for duration January 2021 till December 2021.

Month	Maternal Deaths reported on ASHWIN portal (Jan 21-Dec 21)	Maternal deaths reported on HMIS (Jan 21-Dec 21)
January	23	02
February	11	03
March	19	00
April	27	00
May	32	02
June	16	00
July	14	01
August	23	02
September	20	02
October	10	01
November	21	07
December	39	09
Total	255	29

Fig 2: Cause of death analysis on basis of deaths reported on HMIS

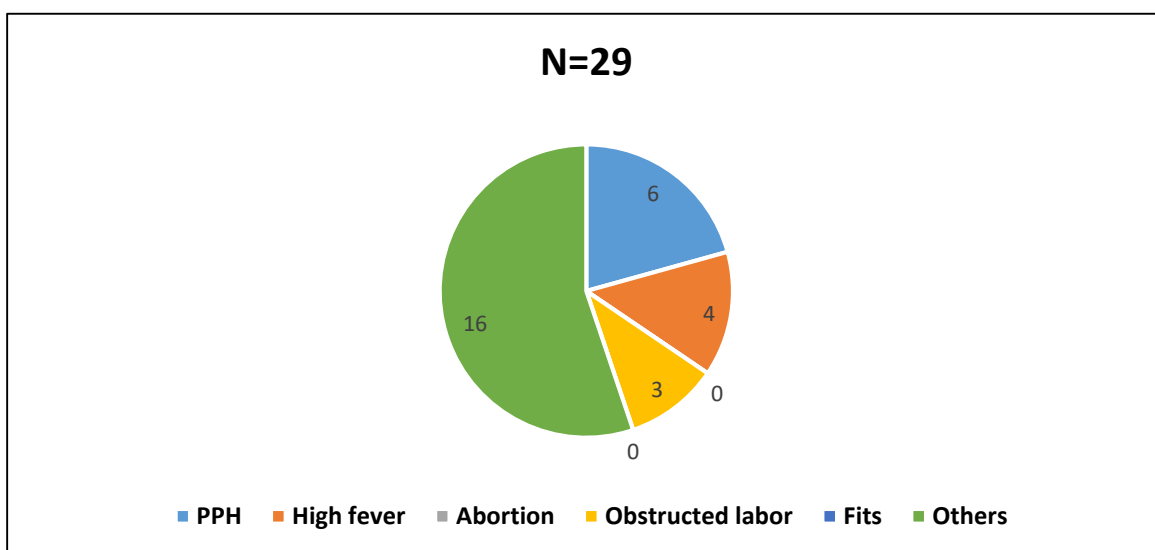
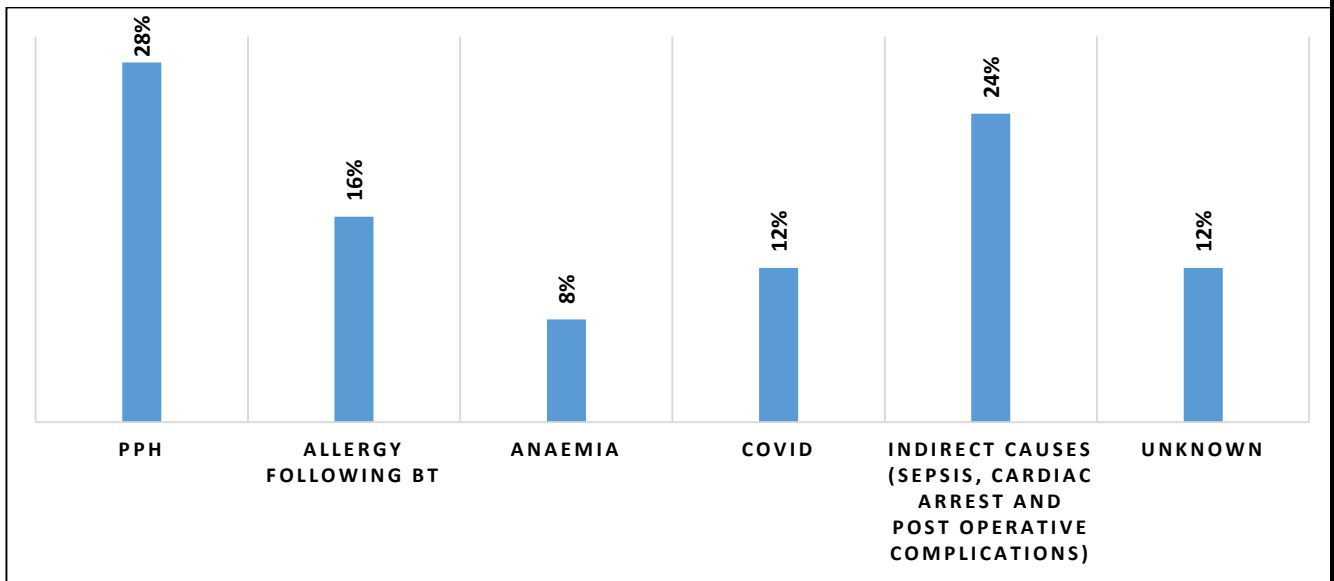


Fig 3: Cause of death analysis on basis of audits conducted



Discussion

- The descriptive results for Gaya clearly state that reporting of maternal deaths on both ASHWIN portal and on HMIS and the payment of incentive done against reported maternal death is not in synchronization. As shown in Table 1, the number of incentives paid is not as similar of the number of maternal deaths reported. One of the possible reason for this could be that payment can be done without any confirmation of audit conducted.
- The number of maternal deaths reported on ASHWIN portal starting from month January till December for year 2021 and the number of deaths reported on HMIS for same duration is again not same. Against 255 reported maternal deaths on ASHWIN

only 29 deaths were reported on HMIS as shown in Table 2. Reason behind this is that the data on portal is entered without even establishing if the death was maternal or not.

- ASHWIN portal was launched to improve the payment process for ASHAs but as shown in Table 1 only 63% of payments were done against all reported deaths. Also ASHWIN portal could be used as a platform to streamline the maternal death reporting system but is only being used as a tool for ASHA payment.
- Community based maternal death reviews are useful to get insights in the causes and contributing factors to maternal death and to identify weaknesses in the maternal health care system from community level up to hospital level. It focusses on maternal care at community and health centre level and therefore goes beyond hospital based audits of maternal death.
- Clearly the ability of verbal autopsy to identify exact cause of death is limited. An unusually high level of maternal deaths was attributed to anemia (26%), which may partly represent deaths related to hemorrhage. Earlier researchers who found that medical causes of many maternal deaths were not reported, even when a variety of community methods were used. We are aware that the distribution of medical causes of death is exact in this data set, but it does provide an idea about the major causes of maternal death (PPH) in the community, for which an appropriate strategy can be formulated. This is consistent with findings in other studies that found that verbal autopsies have limited validity in the attribution of maternal deaths to single specific medical causes and that multiple causes of death should be considered in determining program priorities.

Limitations

- Limited time span to conduct the study.
- No document of evidence of medical history due to Social Stigmas.
- The committee members assigned by the NHM to conduct the maternal audit have not been available in every audit.
- Maternal death is reported in HMIS accurately but not audited properly.
- The MDR can tell us a great deal about the process leading to maternal deaths.
However, it cannot tell us much about the level and medical causes of maternal deaths.

Conclusion

The project contributed to redressing some gaps in MDR. Lack of alertness leading to in-transit deaths too have contributed in maternal deaths signalling towards the need for implementation of referral protocols. Unless completeness and accuracy of information is ensured and capacity of staff enhanced for planning at district level, sustainability and impact of MDR on health systems cannot be ensured. The State government should invest resources in addressing concerns which may hamper effective implementation. There should be strong monitoring and supervision program to monitor ASHA's payment in order to maintain transparency in the mechanism.

Instrumentation

Form 5 Verbal Autopsy Questionnaire

FOR INVESTIGATION OF MATERNAL DEATHS

NAME OF THE STATE	
NAME OF THE DISTRICT	
NAME OF THE BLOCK	
NAME OF THE PHC	
NAME OF THE SHC	
NAME OF THE VILLAGE	
NAME OF THE PREGNANT WOMAN/ MOTHER	
NAME OF THE HUSBAND/OTHER (FATHER/MOTHER)	
DATE OF DEATH	
NAME & DESIGNATION OF THE INVESTIGATOR(S)	

- 8. NEUTRALITY AND IMPARTIALITY:** The interviewer should not be influenced by the information provided by the field health functionaries, doctors or by the information available in the mother care register, case sheets etc.

The format is divided into three modules:

MODULE - I

This form will be used for collection of general information about the deceased woman in case of all maternal deaths

MODULE - II

This form should be used to collect details about maternal death during antenatal period or due to abortion

MODULE - III

This form should be used to collect details about deaths during delivery or postnatal period

VERBAL CONSENT FORM

Instructions to Interviewer: Please ask the respondent to acknowledge her/his consent to be interviewed by checking the response below. The interviewer should sign and put date below. If the respondent does not consent to the interview, thank her/him for their time and terminate the conversation.

My name is [say your name]. I am a ____/____ at the ____ center/hospital, and an interviewer for Maternal Death Review. I have been informed that a woman (name) in your household has died recently. I am very sorry to hear this. Please accept my condolences.

The purpose of our visit is to collect information about causes of death of the woman (name) so that we can work on improving health care services which will help prevent death of other women because of similar reasons/ circumstances.

Your participation will help to improve maternal and newborn care services for women and babies in your area. We would like to talk to the person in your house who took care of [say the woman's name] before death.

We will ask questions about the woman (name) who recently died. We will ask about her background, pregnancy history and events during her most recent pregnancy. We assure you that any information you or your family provide will be kept confidential and your name will not be used in any way.

Your participation in this interview is voluntary and refusal to participate will not affect you in any manner. You may discontinue participation at any time or choose to not answer any question.

The interview will take approximately one hour.

At this time do you want to ask me anything about the interview?

Answer any questions and address respondents concerns

Do you agree to participate in this interview? YES NO

Respondent

Name _____ Signature _____

Interviewer

Name _____ Signature _____

Date _____
Respondent's relationship with the deceased woman

General Information

[Enclose the Primary informant form with this format]

NAME & DESIGNATION OF THE INVESTIGATOR 1	
NAME & DESIGNATION OF THE INVESTIGATOR 2	
NAME & DESIGNATION OF THE INVESTIGATOR 3	
DATE OF INVESTIGATION	

Signature of reporting person:

Designation:

Date:

MODULE I

The form is intended to capture general information and information about previous pregnancy history, wherever applicable. It should be used for all the maternal deaths irrespective whether the death occurred during antenatal, delivery or postnatal period including abortion)

I BACKGROUND INFORMATION			
1.	Name of the respondent		
2.	Name of the deceased woman		
3.	Relationship of the respondent/s with the deceased woman		
4.	Age of the deceased woman at the time of death	_____yrs	
5.	Period of Death	Yes	No (tick)
	a) During pregnancy	<input type="checkbox"/>	<input type="checkbox"/>
	b) During delivery	<input type="checkbox"/>	<input type="checkbox"/>
	c) Within 42 days after delivery	<input type="checkbox"/>	<input type="checkbox"/>
	d) During abortion or within 6 weeks after abortion	<input type="checkbox"/>	<input type="checkbox"/>
6.	Place of Death (tick)		
	a) Home.....1	b) Sub-District Hospital.....2	
	c) Sub-Health Centre.....3	d) District Hospital.....4	
	e) PHC.....5	f) Private Hospital.....6	
	g) CHC.....7	h) In-transit.....8	
	i) Others, (Specify.....)9	
7.	Specify the name and place of the institution or village /urban area where death occurred		
8.	Date & Time of Death	Date: __DD/ __MM/ __YYYY Time: ____: ____ am/ pm	
9.	Did the doctor or nurse at the health facility tell you the cause of death?	Yes.....1 No.....2 Not applicable.....3	
10.	If yes, what was the cause of death?		
II Profile of deceased woman			
	Age at marriage	_____years/ Not married	
	Religion	a) Hindu.....1 b) Muslim.....2 c) Christian.....3 d) Others (Specify.....).....4	

	Caste	a) SC.....	1		
		b) ST.....	2		
		c) OBC.....	3		
		d) General.....	4		
	BPL Status	a) BPL.....	1		
		b) Non-BPL.....	2		
	Education status				
	a) Illiterate.....	1	b) Completed 5 th std.....		2
	c) Completed 8th std.....	3	d) Completed 12th std.....		4
	e) Graduate.....	5	f) Others (Specify.....)		6
III Availability of health facilities, services and transport					
	Name and location of the nearest government / private facility providing Emergency Obstetric Care Services				
	Distance of this facility from the residence				
	Mode of transport available to reach this facility				
IV Write 'GPIA-Gravida, Para, Live Births, Abortions)					
1.	Gravida				
2.	Para				
3.	Live Births				
4.	Abortions				
V Current pregnancy (To be filled from the information given by the respondents and MCP Card)					
1.	Infant Survival				
	a) Alive.....	1	b) New born death.....		2
	c) Still birth.....	3	d) Not applicable.....		4
	Antenatal care received	Yes.....	1	Go to Q6	
		No.....	2		
		Do not know.....	3		
3.	If yes, write number of antenatal checkups received				
4.	Place of antenatal check-ups (Multiple responses possible)				
	a) VHND.....	1	b) Sub Health Centre.....		2
	c) PHC.....	3	d) CHC.....		4
	e) District Hospital.....	5	f) Pvt. Hospital/clinic.....		6
	g) 7		h) Don't know.....		8
	i) Not applicable.....	9	j) Others, (specify.....)		10

5.	Services received during ANC (multiple response possible)	a) Tetanus Toxoid Injection.....1 b) Blood Pressure measurement...2 c) Hemoglobin test.....3 d) Abdominal Examination.....4 e) Iron Folic Acid provided.....5 f) Don't know6	
6.	Did the deceased woman have any problem during the antenatal period?	Yes1 No2 Not known.....3	Go to Module II
7.	What were the symptoms she had?	a) Head ache.....1 b) Edema...2 c) Anemia.....3 d) High blood pressure.....4 e) Bleeding p/v.....5 f) No foetal movements.....6 g) Fits.....7 h) Sudden excruciating pain.....8 i) High fever with rigor9 j) Others (specify.....).....10	
8.	Did she seek care for these symptoms?	Yes.....1 No.....2	Go to Q 10
9.	Where did she seek care?	a) Sub Health Centre.....1 b) PHC.....2 c) CHC.....3 d) District Hospital.....4 e) Pvt. Hospital/clinic.....5 f) Quack.....6 g) Don't know.....7 h) Not applicable.....8 i) Others, (specify.....).....9	Go to Module II
10.	What were the reasons for not seeking care? (Multiple responses possible)	a) Severity of complication not known.....1 b) Health facility was very far.....2 c) Lack of transport.....3 d) Financial reasons.....4 e) Family reasons5 f) Faith in local healers / dai.....6 g) Disrespectful behaviour of the providers.....7 h) Beliefs and customs.....8 i) Others (Specify.....).....9	

Note: Education status categories may be as: a. Illiterate b. up to 5th st c. 5th to 8th st d. 8th to 12th st e. completed 12th st f. Graduate g. Others (Specify.....)

MODULE - II

This module is to be filled for the maternal deaths that occurred during the antenatal period or if the deaths due to abortion related causes.

VI	No. of weeks of pregnancy completed at the time of death? (Help the respondent in estimating weeks of pregnancy)	_____ weeks	If less than 6 weeks go to sub section VIII
VII	Death during Antenatal Period		
1.	What was the problem that the deceased woman had at the time of death?		
2.	What were the symptoms?		
	a) Head ache.....1	b) Edema.....2	
	c) Anemia.....3	d) High blood pressure.....4	
	e) Bleeding p/v.....5	f) No foetal movements.....6	
	g) Fits.....7	h) Sudden excruciating pain.....8	
	i) High fever with rigor9	j) Others (specify.....).....10	
3.	Was she referred at that time?	Yes.....1 No.....2 Not known.....3	Go to Q 6
4.	Did she seek care for these complications?	Yes.....1 No.....2	If yes, fill the table no. 1 for referral transport If no skip to Q 6
5.	If yes, where did she seek care?		
	a) PHC.....1	b) CHC.....2	
	c) District Hospital.....3	d) Pvt. Hospital/clinic.....4	
	e) Quack.....5	f) Don't know.....6	
	g) Others, (specify.....).....7		Go to Sec VIII

6.	In case of not seeking care from the hospital, what were the reasons for not seeking care <i>(Multiple responses possible)</i>		
	a) Severity of complication not known.....1	b) Health facility was very far.....2	
	c) Lack of transport.....3	d) Financial reasons.....4	
	e) Family reasons.....5	f) Faith in local healers / dai.....6	
	g) Beliefs and customs.....7	h) Disrespectful behaviour of the providers.....8	
	i) Others (Specify.....).....9		
VIII	Abortion related Death		
1	Did the deceased woman (name) die while having an abortion or within 6 weeks after having an abortion?	Yes.....1 No.....2 Not known.....3	
2	Type of abortion	a) Spontaneous.....1 b) Induced.....2 c) Don't know.....3	If induced Go to Q. 5
3	Date of spontaneous abortion/ date of termination of pregnancy	DD___/ MM___/ ____YYYY	
4	If the abortion was spontaneous, where was the abortion completed?	Go to Q 9	
	a) Home.....1	b) PHC.....2	
	c) CHC.....3	d) DH.....4	
	e) Private hospital/clinic.....5	f) Don't know.....6	
	g) Others (Specify.....).....7		
5	If the abortion was induced, how was it induced?	a) Oral Medicine.....1 b) Traditional Vaginal Herbal Medication.....2 c) Instrumentation.....3 d) Don't know.....4	
6	If the abortion was induced, where did she have the abortion?		
	a) Home.....1	b) PHC.....2	
	c) CHC.....3	d) DH.....4	
	e) Private hospital/clinic.....5	f) Don't know.....6	
	g) Others (Specify-----).....7		
7	If the abortion was induced, who performed the abortion?		
	a) Allopathic Doctor.....1	b) AYUSH doctor.....2	
	c) Nurse.....3	d) Quack.....4	
	e) Dai.....5	f) Don't know.....6	
	g) Other (Specify.....).....7		

8a	What was the reason for inducing abortion?	a) Medical Condition/Bleeding started spontaneously.....1 b) Wanted to terminate the pregnancy.....2 c) Don't know.....3	
8b	Describe the reasons for inducing the abortion		
9	What were the complications/ symptoms that the woman had after abortion?		
	a) High fever.....1	b) Foul smelling discharge.....2	
	c) Bleeding.....3	d) Shock.....4	
	e) None.....5	f) Don't know.....6	
10	After developing complications following abortion, did she seek care?	Yes.....1 No.....2 Not applicable.....3	Go to Q 12
11	If yes, where did she seek care?		If the answer is <i>any facility</i> , also fill the table 1 below for referral transport
	a) SHC.....1	b) PHC.....2	
	c) CHC.....3	d) DH.....4	
	e) Private hospital/clinic.....5	f) Quack.....6	
	g) Don't know.....7	h) Others (Specify.....).....8	
12	In case of not seeking care from the hospital, what were the reasons for not seeking care		
	j) Severity of complication not known.....1	k) Health facility was very far.....2	
	l) Lack of transport.....3	m) Financial reasons.....4	
	n) Family reasons.....5	o) Faith in local healers / dai.....6	
	p) Beliefs and customs.....7	q) Disrespectful behaviour of the providers.....8	
	r) Others (Specify.....).....9		

Please fill the table below for the details on transport, referral and type of care given				
Table 1				
	Home/ Village	Facility 1	Facility 2	Facility 3
Date (DD/MM/YY)				
Time of onset of complication or onset of labour				
Time of calling/ arrival of transport				
Transport used				
Name of Facility/ Level of referral		Facility 1	Facility 2	Facility 3
Time to reach				
Money spent on transport				
Reason for referral				
Referral slip (given or not)				
Treatment given				
Money spent on treatment/ medicine/ diagnostics				
Time spent in facility				

MODULE - III

This module is to be filled for the maternal deaths that occurred during delivery or if the death occurred during postnatal period (after delivery of placenta)

IX	INTRANATAL SERVICES		
1	Place of delivery		In case of institution delivery also fill table 2 after completion of this form
	a) Home.....1	b) SHC.....2	
	c) PHC.....3	d) CHC.....4	
	e) DH.....5	f) Private hospital.....6	
	g) Transit.....7	h) Don't know.....8	
	i) Others (Specify.....).....9		
2	In case of home delivery, what were the reasons for home delivery?		
	a) Family's preference.....1	b) Village Dai is good.....2	
	c) No transport facilities.....3	d) Cost of transport is high.....4	
	e) No information given about need for institutional delivery.....5	f) Services not available at the nearest health facility.....6	
	g) High expenses.....7	h) Bad experience at institution.....8	
	i) No complication so no need.....9	j) Home is more comfortable.....10	
	k) Others (Specify.....).....11		
3	No. of completed pregnancy weeks at time of delivery	_____ weeks	
4	Date and Time of delivery	Date : Time __:__:__ am/pm	
5	Date and Time of death	Date: Time __:__:__ am/pm	
6	Who conducted the delivery?		
	a) Allopathic doctor.....1	b) AYUSH doctor.....2	
	c) ANM.....3	d) Staff nurse.....4	
	e) Dai.....5	f) Quack.....6	
	g) Relatives.....7	h) Don't know.....8	
	i) Others (specify.....).....9		
7	Type of delivery		
	a) Normal.....1	b) C- section.....2	
	c) Assisted.....3	d) Unattended.....4	
	e) Don't know.....5		

8	Outcome of the delivery (write numbers in each column) Or not applicable if not delivered but died in labour	Live births	Still births	
9	What were the complications that the deceased woman (name) had during labour/ delivery?			
	a) Prolonged labour (Primi>12 hrs / Subsequent deliveries >8 hrs).....1	b) Severe bleeding/ bleeding with clots- (one saree/in skirt soaked =500ml).....2		
	c) Labour pain which disappeared suddenly.....3	d) Inversion of the uterus.....4		
	e) Retained placenta.....5	f) Convulsions.....6		
	g) Severe breathlessness /cyanosis/ edema.....7	h) Unconsciousness.....8		
	i) High fever.....9	j) Not applicable.....10		
	k) Other (specify.....)11		
10a	In case of institutional delivery, what was the treatment provided at the health facility?	a) Received IV drip.....1 b) Blood transfusion.....2 c) Oxygen was given.....3 d) Don't know.....4 e) Others (specify.....).....5		
10b	See the hospital records if available and fill details of treatment received.			
10c	Any information given to the relatives about the nature of complication from the hospital	Yes.....1 No.....2	If no, Go to Q 10e	
10d	If yes, please describe			
10e	Was there any delay in initiating treatment	Yes.....1 No.....2 Not known.....3 Not Applicable.....4	} Go to Q 12	
10f	If yes, please describe	Go to Q 12		
11a	In case of home delivery, did the woman seek care?	Yes.....1 No.....2	If yes, Go to Q11c	

11b	In case of not seeking care, what were the reasons for not seeking care	Go to Sec X	
	a) Severity of complication not known.....1	b) Health facility was very far.....2	
	c) Lack of transport.....3	d) Financial reasons	
	e) Family reasons.....5	f) Faith in local healers / dai.....6	
	g) Beliefs and customs.....7	h) Disrespectful behaviour of the providers.....8	
	i) Others (Specify.....)		9
11c	Where did she seek care?		
	a) SHC.....1	b) PHC.....2	
	c) CHC.....3	d) DH.....4	
	e) Private hospital.....5	f) Quack.....6	
	g) Don't know.....7	h) Others (Specify.....)	8
11d	Any information given to the relatives about the nature of complication by the care provider?	Yes.....1 No.....2	If no, Go to Q 11f
11e	If yes, please describe		
11f	Was there any delay in initiating treatment	Yes.....1 No.....2 Don't know.....3 Not applicable.....4	Go to Q 12
11g	If yes, please describe		
12	Was the deceased woman referred – from the place of delivery in case of institutional delivery	Yes.....1 No.....2 Not known.....3	
13	In case of home delivery, was the deceased woman referred from first point of seeking care for complication?	Yes.....1 No.....2 Not known.....3	
14	Did she attend the referral centre?	Yes.....1 No.....2 Not known.....3	Also fill table 2 given below for information on referrals

15	In case of not seeking care from the hospital, what were the reasons for not seeking care		
	s) Severity of complication not known.....1	t) Health facility was very far.....2	
	u) Lack of transport.....3	v) Financial reasons.....4	
	w) Family reasons.....5	x) Faith in local healers / dai.....6	
	y) Beliefs and customs.....7	z) Disrespectful behaviour of the providers.....8	
	aa) Others (Specify.....).....9		
16	Any information given to the relatives about the nature of complication from the hospital	Yes.....1 No.....2	If no, Go to Q.18
17	If yes, please describe		
18	Was there any delay in initiating treatment	Yes.....1 No.....2 Don't know.....3 Not Applicable.....4	Go to Sec XI
19	If yes, please describe		
X	POST NATAL PERIOD		
1	Did the deceased woman (name) have any problem following delivery	Yes.....1 No.....2 Don't know.....3	Go to Q 10
2a	Date and time of onset of the problem	Date - DD __/MM__ / YYYY__ Time __:____	
2b	Duration of onset of problem after delivery	____hrs ____days	

3	What was the problem during post natal period?		
	a) Severe bleeding.....1	b) High fever and foul smelling discharge.....2	
	c) Unconsciousness/ visual disturbance.....3	d) Bleeding from multiple sites4	
	e) Severe leg pain, swelling5	f) Abnormal behaviour.....6	
	g) Severe anemia.....7	h) Sudden chest pain & collapse.....8	
	i) Don't know.....9	j) Others (Specify.....).....10	
4	Did she seek treatment	Yes.....1 No.....2	If yes, also fill table 2 If no Go to Q No. 7
5	If yes, where did she seek treatment		
	a) SHC.....1	b) PHC.....2	
	c) CHC.....3	d) DH.....4	
	e) Private hospital/clinic.....5	f) Quack.....6	
	g) Don't know.....7	h) Others (Specify.....).....8	
6a	What was the treatment provided at the health facility?	a) Received IV drip.....1 b) Blood transfusion.....2 c) Oxygen was given.....3 d) Don't know.....4 e) Others (specify.....).....5	
6b	See the hospital records if available and fill details of treatment received.		
7	Was she referred?	Yes.....1 No.....2	If no, Go to Q.10
	Did she attend the referral center?	Yes.....1 No.....2	If yes, also fill table 2
9	In case of not seeking care from the hospital, what were the reasons for not seeking care		
	a) Severity of complication not known.....1	b) Health facility was very far.....2	
	c) Lack of transport.....3	d) Financial reasons.....4	
	e) Family reasons.....5	f) Faith in local healers / dai.....6	
	g) Beliefs and customs.....7	h) Disrespectful behaviour of the providers.....8	
	i) Others (Specify.....).....9		

10	Did she receive any postnatal check ups	Yes.....1 No.....2	If no, <i>end of the questionnaire</i>
11	No. of post natal check ups received	_____	
12	Who did the post natal check ups		
	a) Doctor.....1	b) ANM.....2	
	c) ASHA.....3	d) Dai.....4	
	e) Quack.....5	f) Don't know.....6	
	g) Others (Specify).....7		

Please fill the table below for the details on transport, referral and type of care given

Table 2				
	Home/ Village	Facility 1	Facility 2	Facility 3
Date (DD/MM/YY)				
Time of onset of complication or onset of labour				
Time of calling/ arrival of transport				
Transport used				
Name of Facility/ Level of referral		Facility 1	Facility 2	Facility 3
Time to reach				
Money spent on transport				
Reason for referral				
Referral slip (given or not)				
Treatment given				
Money spent on treatment/ medicine/ diagnostics				
Time spent in facility				

This image shows a full page of a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook or legal stationery. There are no margins, text, or other markings present.

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MDR Case Summary

Name of the Block/PHC/District OR/Name of facility					
Particulars of the Deceased Woman	MCTS ID _____	Name _____ Age: _____	Religion: _____	Caste: _____	
Address (when death occurred)	Place of Residence: _____			Native Place: _____	
Place of Death					
Date and Time of death	<div style="display: flex; align-items: center;"> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">DD</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">MM</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">YYYY</div> At <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">H</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">H</div> : <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">M</div> <div style="border: 1px solid black; padding: 2px 5px; margin: 0 2px;">M</div> AM/PM </div>				
Timing of Death	Pregnancy	During or within 6 weeks of abortion	In labour or during Delivery	Within 1 week after delivery	7- 42 days after Delivery
Obstetric History	Gravida	Para	Previous Abortions	Infant outcome	Number of alive children
			Spontaneous	Induced	
Investigation	Date of interview	Date of Interview-2 (if second visit made)	Name and contact details of main respondents:		

1. Delay in seeking care

- ☞ Unawareness of danger signs
- ☞ Illiteracy & Ignorance
- ☞ Delay in decision making
- ☞ No birth preparedness
- ☞ Beliefs and customs
- ☞ Lack of assured services
- ☞ Unawareness about services available in nearby facility
- ☞ Any other, specify_____



2. Delay in reaching health facility

- ☞ Delay in getting transport for first facility
- ☞ Delay in mobilizing funds
- ☞ Not reaching appropriate/ referral facility in time
- ☞ Difficult terrain
- ☞ Any other, specify_____



3. Delay in receiving adequate care in facility

- ☞ Delay in initiating treatment
- ☞ Substandard treatment in hospital
- ☞ Lack of blood, equipments and drugs
- ☞ Lack of adequate funds
- ☞ Any other, specify_____



Probable direct obstetric cause of death: _____

Indirect obstetric cause of death _____ :

Contributory causes of death: _____

Initiatives suggested: _____

Name and designation of investigation team:

1. Name: _____ Designation: _____

2. Name: _____ Designation: _____

3. Name: _____ Designation: _____

Signatures and Name of Block Medical Officer/Facility Nodal Officer (with stamp)

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