Summer Training at
National Health Mission
Haryana, India
(April 3-June 2, 2014)

Study to Find Gaps in the Implementation of IDR Programme: A Case Study of Five Districts of Haryana (Panchkula, Bhiwani, Sonepat, Gurgaon, Faridabad)

By

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MBA- Hospital & Health Management (MBA-HM)
2013-2015

The IIHMR University, Jaipur
2014

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CERTIFICATE

This is to certify that **Dr. Rajesh Pathania**, has completed the summer training At **National Health Mission, Haryana** From 3.04.14 to 3.06.14 and have conducted the following projects under my personal guidance and supervision. All the data related to the study is the secondary data.

- ✓ To assess the gap in implementation of Infant Death Review in five districts of Haryana.

His approach to the projects has been sincere, scientific and analytical. This work is partial fulfillment to the course requirements, recommended for the Post Graduate Diploma in Health and Hospital With specialization in Health Management.
I wish him all the success in future endeavors.

Colonel (Dr.) Ashok Kaushik
Dean (Academic & Students Affairs)
IIHMR, Jaipur

Mentor Name
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No. 2551

Dated: - 04/06/2014

WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Rajesh Pathania has successfully completed his Two Months Summer training in National Health Mission (Child Health Division) from 3rd April, 2014 to 3rd June, 2014.

During his training period he was found to be sincere and efficient.

We wish him all the best for future endeavours.

Deputy Director (CH),
For Mission Director, NHM
Haryana, Panchkula

List of Abbreviations

AHS Annual health survey
ANMAuxillary Nurse Midwife
ASHA Accredited Social Health Activist
AWWAngan Wadi Worker
BMO Block Medical Officer
BPHNBlock Public Health Nurse
BWN Bhiwani
CBIDRCommunity Based Infant Death Review
CHCCommunity Health centre
CMHOChief Medical & Health Officer
CMOChief Medical Officer
DM District Magistrate
DNODistrict Nodal Officer
DQDistrict Quarters
EAGEmpowered Action Group
F.BAD Faridabad
FBIDRFacility based Infant Death Review
FNO Facility Nodal Officer
FRU First Referral Unit
GGN Gurgaon
GoIGovernment of India
HBPNC Home based Post Natal Care
HMIS Health Management Information System
HSC Health Sub Centre
ICDS Integrated Child Development Scheme
IDSPIntegrated Disease Surveillance Project
IECInformation Education Communication
IDR Infant Death Review
IIHMR Indian Institute of Health and Management Research
IMA Indian Medical Association
IMR Infant Mortality Rate
JSSK Janani Shishu Suraksha Karyakram
MDGMillennium Development Goals
MDR Maternal Death Review
MMR Maternal Mortality Ratio
MO Medical Officer
MPW Multi Purpose Worker
NRHMNational Rural Health Mission
PKL Panchkula
PW Preganant Women
SBA Skilled Birth Attendant
SC Sub Centre

SHS State Health Society
SNOState Nodal Officer
SNP Sonepat
SRS Sample Registration System
TFR Total Fertility Rate
UN United Nations
VA Verbal Autopsy

Preface

Summer internship is an integral part of the PGDHM currriculum.As a part of the course;students of the first year are required to undergo summer training at an organization to get in depth exposure of various departments in the organization to get a better understanding of the health care delivery system.
The major objectives of the summer training programs are as follows:

1) To better understand the existing health delivery system including public and private sectors.
2) To observe the implementation of various National Health Programmes at National/State/District levels.
3) To understand various functions of health systems by interactions with key stakeholders, policy makers, programme managers,academicians and researchers
4) To work on the project/task assigned by summer training organizations.

During my training period I had an overview of various programmes undertaken in National Health Mission,Haryana including the current status of the programmes. I also carried out a small study on-

"To assess the gaps in implementation of IDR at district level"

Acknowledgements

This project has been an ambitious one from the start to the end. It has seen some non-compliant days too but thanks to the below mentioned people who made it possible for it to get through. I would like to express my gratitude towards:

- Dr. Ravikant Gupta , Director NRHM
- Dr. Suresh Dalpath,Deputy Director,NHM Haryana
- Dr. Krishan Kumar, Medical Officer(Child Health)
- Dr. Jaidev Khatri, State Consultant (IDR and IMNCI)
- Dr. Kapil Joshi,
- Dr. BarunKanjilal , Prof. IIHMR Jaipur
- Dr. Gaurav Chauhan , District Coordinator
- Dr. Shibani Sharma , Consultant Nutrition
- Dr. ArunJadaun
- DrVishal Dhiman
- Various State, District and Block Level Officials in Haryana,,
- Staff members at NHM Panchkula Office,
- Dr. Rishi Aneja, Summer Trainee NHM Haryana

  And
- My family

Rajesh Pathania

Introduction

National Health Mission ,Haryana

The National Rural Health Mission (NRHM) was launched by the Hon'ble Prime Minister on 12th April 2005, to provide accessible, affordable and quality health care to the rural population, especially the vulnerable groups. The Union Cabinet vide its decision dated 1st May 2013, has approved the launch of National Urban Health Mission (NUHM) as a Sub-mission of an over-arching National Health Mission (NHM), with National Rural Health Mission (NRHM) being the other Sub-mission of National Health Mission.

NRHM seeks to provide equitable, affordable and quality health care to the rural population, especially the vulnerable groups. Under the NRHM, the Empowered Action Group (EAG) States as well as North Eastern States, Jammu and Kashmir and Himachal Pradesh have been given special focus. The thrust of the mission is on establishing a fully functional, community owned, decentralized health delivery system with inter-sectoral convergence at all levels, to ensure simultaneous action on a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality. Institutional integration within the fragmented health sector was expected to provide a focus on outcomes, measured against Indian Public Health Standards for all health facilities.

Section 1: Background

The state of Haryana is bounded by Uttar Pradesh in the east, Punjab in the west, Himachal Pradesh in the north and Rajasthan in the south.

The state of Haryana has an area of 44,212 sq. km. and a population of 21.14 million. There are 21 districts, 119 blocks and 6955 villages. The State has population density of 478 per sq. km. (as against the national average of 312). The decadal growth rate of the state is 28.43% (against 21.54% for the country) and the population of the state continues to grow at a much faster rate than the national rate.

The Total Fertility Rate of the State is 2.3. The Infant Mortality Rate is 48 and Maternal Mortality Ratio is 153 (SRS 2007 - 2009) which are lower than the National average. The Sex Ratio in the State is 877 (as compared to 940 for the country).

Indicator	Haryana	India
Total population (Census 2011) (in crore)	2.53	121.01
Decadal Growth (Census 2011) (%)	19.9	17.64
Infant Mortality Rate (SRS 2011)	44	44
Maternal Mortality Rate (SRS 2007-09)	153	212
Total Fertility Rate (SRS 2011)	2.3	2.4
Crude Birth Rate (SRS 2011)	21.8	21.8
Crude Death Rate (SRS 2011)	6.5	7.1
Natural growth rate (SRS 2011)	15.4	14.7
Sex Ratio (Census 2011)	877	940
Child Sex Ratio (Census 2011)	830	914
Schedule Caste population (in crore) (Census 2001)	0.40	16.6
Schedule Tribe population (in crore) (Census 2001)	Not Notified	8.43
Total Literacy Rate (%) (Census 2011)	76.64	74.04
Male Literacy Rate (%) (Census 2011)	85.38	82.14
Female Literacy Rate (%) (Census 2011)	66.77	65.46

Infant Mortality RateNearly one million newborn deaths occur each year in India, with Infant MortalityRate (IMR) and Neonatal Mortality Rates (NNMR) of 47 and 35 per 1000 live birthsrespectively. So far, IMR decline is more for post-neonatal mortality than for neonatalmortality. Infant mortality declined by 12 points during 1990-2000 and by 18 points during2000-2010. However, Neonatal mortality declined by 9 points in each decade (SRS data).

There is substantial variation in IMR among individual states. For example, IMR for Keralaand Goa is 11 per 1000 live births, whereas, for Madhya Pradesh it is 67

per 1000 live births(SRS-2011). Thus there is need to accelerate the pace of decline of IMR to achieve theNRHM and MDG Goal of less than 30 per 1000 live births.

Infant Death Review (IDR) is an important strategy to improve the quality of child care andreduce infant mortality. Analysis of these deaths not only inform about the medical causes ofdeath, but also identify the gaps in health service delivery and other social factors includingthe delays at various levels that can contribute to infant deaths. The information can be usedto adopt measures to fill the gaps at community and health service level. These reviews are also helpful in building capacity of the health careteam to address the bereavement issues.

Section 2:Executive Summary

High Infant Mortality continues to haunt India and especially few states with one of them being Haryana. Government of India estimates state‟s IMR at 42 per 1000 live births (SRS 2010-11). But the magnitude of the problem still remains unclear to the policy makers because many such deaths remain „invisible‟.

Besides unrecorded data, no one knows how and why the infant died. For understanding the interlinked social phenomenon which is root of the medical cause of death, Government of Haryana has implemented an infant death audit system A format (designed by state officials using Government of India guidelines) which has been given to districts.The strategy has been implemented in the State for the last three years. An Infant death review provides a rare opportunity for a group of health staff and community members to learn from a tragic – and often preventable event.

The purpose of the infant death review is to improve the quality of safe child programming to prevent future infant and neonatal morbidity and mortality.. The importance of IDR lies in the fact that it provides detailed information on various factors at facility district, community, regional and national level that are needed to be addressed to reduce infantdeaths. The guidelines for IDR clearly point out the need of performing a review, the timeline involved in reporting and auditing, the mechanism of relay of information from community to the highest level, roles and responsibilities of the officials at district, facility, block and community level, and

use of the data for taking corrective actions. The present study was undertaken with NRHM with the overall objective of assessing the gaps in the implementation of infant death review system in the state of Haryana and giving evidence based recommendations. The analysis was done in the following domains; reporting, auditing, corrective actions and feedback. Three levels of health personnel were interviewed in five districts of the State- district level, block level, community level. The key voids indentified were:

- On importance of reviewing an infant death, all block level officials emphasized its use for taking future remedial actions. The use of IDR for identifying the personal, familial, socio-cultural, economic and environmental factors of death was not highlighted by anyone suitably.

- There was a lack of clarity regarding the timeline for IDR at the blocks.

- The ANM‟s and the BMO‟s involved did object to lack of training in this regard subjected to which they were not following the prescribed protocol.

- There was a non-uniformity regarding the composition of the investigating team. Further, inappropriateness with respect to the technical expertise of the team members was also noted in some cases.

- There were discrepancies between the MO‟s and the ANM‟s as far as the knowledge of IDR is concerned

- District Nodal Officers (DNO) were not so responsive for the community based IDR and just took Facility based IDR as their responsibility.

- The problems encountered by BMOs were that of being overburdened, lack of motivation of the lower level staff, inability to explain it to lower level staff about the importance of IDR, difficulty in negotiating with police and private hospitals, complicated forms and Language constraints.

- No feedbacks by the district, lack of basic health infrastructure, problems in communicating with the family were the other problems reported
- The reviewed deaths and forms were not being sent on time to the district. And the meeting schedule at the district was found to be irregular.

This working paper looks at the challenges and the gaps in the implementation of IDR in the state and provides evidence based recommendations. In the process of carrying out the research it hopes that it might have sensitized the health officials. It galvanizes the issues, concerns and expectations of healthcare personnel from three levels with a quality check of the existing reviewed deaths.

Section 3: Review of Literature and methodology

Institutionalizing district level infant death review: an experience from southern India

An Infant Death Review (IDR) programme was developed and was implemented in two districts of Karnataka with a view of improving the existing pilot programmeand ensuring its sustainability.
A sequential mixed-methods design was followed in which quantitative data collection
(secondary data) was followed by qualitative data collection (in-depth interviews). As a result of the IDR programme, key actors perceived an improvement in infant death reporting at district level, the development of a rapport with the local community, and elaboration of a feedback system for corrective actions. This has led to improved health care during pregnancy

Infant Mortality in an Urban Slum

A. Vaid, A. Mammen, [...], and G. Kang

This retrospective study was conducted in the urban slum area in vellore for a period of 8 years from 1995 to 2003 with an aim to formulate appropriate local policies for intervention by having complete knowledge of the patterns of morbidity and mortality in children in the local setting.

The results of the study indicated that over half(54%) of the deaths occurred in the neonatal period primarily due to perinatal asphyxia(31.9%),prematurity(16.8%) and aspiration pneumonia(16.8%), while infant deaths occurring after the first month of life were mainly due to diarrheal disease (43%) and respiratory infections (21%). These results emphasize the need to improved antenatal and perinatal care

to improve survival in the neonatal period. The strikingly high death rate due to diarrheal illness highlights the requirements for better sanitation and water quality.

Validation of causes of infant death in the community by verbal autopsy

N. Datta, M. Mand and, Dr. Vijay Kumar

This study was carried out in 35 Villages with a total population of 39,661 selected from two community development blocks in a district of Haryana with the aim to validate the cause of death during infancy by comparing the information gathered by lay reporters with that generated by professionaly trained investigators.

The Results of this study indicated that during Neonatal period, in 156 deaths ,222 underlying or associated causes were identified with 75.7% agreement.In the Post Neonatal Period,266 causes were recorded in 124 deaths with 83.1% agreement.In 97 of 107 stillbirths reported, agreement was found.Neonatal Tetanus and measles as cause of death matched fully; poor agreement was found in conditions like refusal of feeds,jaundice,septicemia and vomiting.

3.1 Objectives of study

Primary Objectives

- To assess the gaps in implementation of IDR at district level

Secondary Objectives

- To assess the adherence of Haryana IDR system to Govt. of Haryana guidelines
- To analyze the causes of the Infant deaths according to Three Delay model.

3.2 Methodology of study

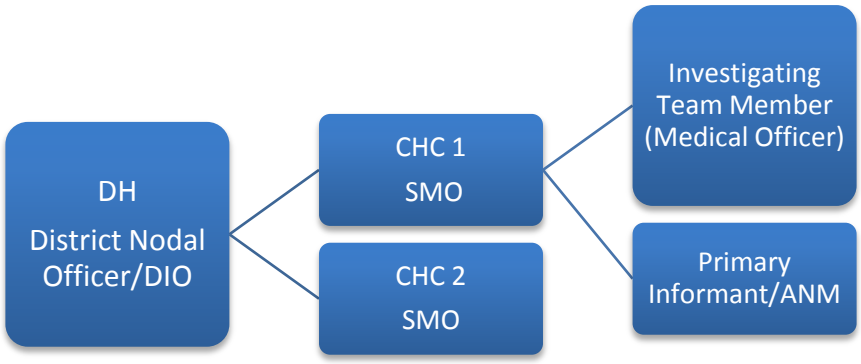
Study Design

A descriptive cross sectional study is planned to assess the gaps in the Infant death audit system of the state of Haryana.

Period of Study: April 2014 to June 2014

Sampling Methodology

Random sampling will be used. From each of four divisions of Haryana District will be selected randomly From each district 2 blocks will be selected randomly.



Number of officials to be interviewed and the tools

Sample	Tools (Annexure)
District Nodal Officer (3)	In depth interview
Investigating Team member(Medical Officer)(6)	In depth interview
ANM/Primary Informant (6)	Semi structured interview
Forms & Registers (from starting-Present)	Check list

The check list has been created with underlying process of the IDR.(Annexure 2) The steps in the

IDR are:

Reporting→Auditing and Compiling→Review & Feedback→Actions→Implementation

The above mentioned steps will be taken as domains for preparing the checklists. The interview

Guidelines have been annexed.

Data Analysis

It is comprised of both quantitative and qualitative data.

Quantitative Data will be analyzed using MS Excel. Frequencies will be calculated for different markings as per the check list.

Qualitative data will be analyzed using quoting verbatim and by thematic analysis of the data obtained after in depth interviews.

Ethical Consideration

Oral informed consent will be obtained from the subjects prior to recruiting them in the study.

Section 4:Infant Death Review System: Government of India Guidelines

4.1 CBIDR (Community based Infant Death Review System)

Community based reviews are undertaken for the deaths that occur in the specified geographical area, irrespective of the place of death; be it at home, facility or in transit.

The Steps for community based IDR are:

1. Notification of all deaths
2. Investigation of selected deaths
3. Infant death review and analysis
4. Feedback for improved planning and corrective measures.

1. Notification: For notification one needs to consider:

- *Who should notify?*

In rural areas primarily ASHA/AWW/ Panchayat members/ panchayat secretary, and in urban areas Link workers/AWW/Others in the municipal wards, will be involved as primary informers. ASHA and AWW should visit the family of the deceased and fill the given First Information Report/IDR-1, information sheet (IDR1/FIR). Information sheet will be given to the family and FIR card would be submitted to MO/ANM. Other community members can act as notifiers.

- *How notification should be done?*

Informant, who reaches the family first, should hand over the information sheet IDR- 1 to the family. Informant, who contacts family thereafter, should first enquire whether someone has already given them the information sheet IDR- 1. If yes, then s/he should address bereavement issues, offer support and leave. Primary informer should SMS the message to the health officials using "Group SMS", Text of the message may be: Baby of…..(name of mother and father), village, date of

death, age of the deceased. Operational Guidelines on Infant Death Review at Community and Facility Level 5 Primary informer should phone &sms to 102 & concerned ANM also. Message will be sent to Medical officer and District Nodal officer (DNO). Districts may opt for an automated system that can ensure that the SMS is transferred into a data base of line-lists, by date and region in a server. Till the time, this system is established, Medical officer will maintain line-listing of all deaths in their respective areas. MO will also inform concerned ANM to further investigate the death on a structured format (FIRST BRIEF INVESTIGATION-IDR-2).

- *What time period for notification?*

FIR should be done as early as possible, preferably within 72 hours of death. Infant death notification should be reported to 102 within 24 hours.

- *What incentives to be offered?*

Informant may be given Rs 100/- per information after the submission of FIR card at PHC/ health facility.

- *What means for verification of notification?*

It will be confirmed by the information sheet IDR- 1 retrievable from the family by the concerned ANM who will do First Brief Investigation (FBI) for the death. Informant should also ensure the availability of the respondents during the visit of the investigation team.

2. Investigation: Investigation starts with First Brief Investigation (FBI- IDR-2) to be followed up by detailed investigation (IDR-3).

a) First Brief Investigation(FBI)

- Who will do?

First brief investigation will be done by the ANM of the area, by interviewing close care taker of the deceased, who were present at the time of death.

- *What format will be used?*

A format to record open ended narrative account of the illness and treatment history will be used (FBI/IDR 2). She will record her decision/ interpretation about the cause of death and any gaps in the health care delivery and health behaviour of the community.

- *What incentives for FBI?*

ANM may be paid incentive uptoRs 100/- per investigation.

- *What time period?*

This FBI should be done after notification within 3 weeks of death and report should be submitted to MO, by 21st day of death. Operational Guidelines on Infant Death Review at Community and Facility Level 6

b) Detailed Investigation

The detailed investigation (IDR-3) is to be carried out in only 1-2 cases of Infant deaths / Still birth per PHC per month (if both still birth & infant death are there in a month, both need to be investigated). The representative sample will be selected by the DNO out of all infant death cases. Also, the numbering of all infant deaths will be allotted at the district in the format (HR-District-PHC-Year/No). The MO incharges of the respective PHCs will also keep complete record of all deaths in his area. It is compulsory for the MO incharge of the area where infant death has occurred to conduct the detailed investigation (IDR- 3) if selected by sampling.

- *Sampling:*

Detailed investigation will be carried out only on selected cases and not for all cases. MO should submit FBI reports to DNO, who will draw a sample based on the sampling criteria given below: Neonatal= 1 Post neonatal= 1 System failure=1 Social failure=2 Previous medical cause=3 Unusual=4 Institutional=1 Transit=1 Home=2 Sampling should ensure to incorporate excluded groups, common & clustered deaths, home/ transit deaths so as to cover a minimum of one death per PHC per month.

- *What formats to be used?*

4.3 FBIDR (Facility Based Infant Death Review System)

IDR Facility Based Infant Deaths Reviews will be taken up for all government teaching hospitals, referral hospitals and other hospitals (District, Sub district, CHCs). Steps of Facility-based IDR

1. Notification and Investigation

Medical Superintendent/ Principal Medical Officer (PMO)/ CHC In-charge should nominate one hospital officer, preferably Pediatrician/ SNCU in charge as Facility Nodal Officer (FNO). In case, pediatrician is not posted at FRU then F-IMNCI trained MO must be designated as Facility Nodal Officer (FNO). All infant deaths occurring in the hospital should be informed immediately by the treating medical officer, who was on duty at the time of death, to the FNO. S/he will also fill the Facility Based Infant Death Review (FBIDR) Form (Form 3) for each death will be filled and will be submit to FNO within 24 hours of death. The FNO of the hospital should inform the infant death to the District Nodal Officer (DNO) and state nodal officer within one week of the occurrence of death. As family of the deceased would be available in the hospital, attempt should be made to capture information pertaining to socio-cultural and systemic factor as mentioned in Form 4, if possible and family consents for the same. Subsequently, FNO should review the case file and update the FBIDR form if required, and should approve it for onward submission to DNO. The form would be submitted only after approval of the FNO. The FBIDR format should be filled in triplicate. One copy would be sent by the FNO to the DNO within one week and the second copy to the Facility Based Infant Death Review (IDR 4) committee of the Hospital. Another copy should be retained by the FNO. District technical committee should also review the infant deaths at the facility level, in a sample of deaths. All medical officers in the facility must be aware about the IDR program and oriented on the use of the FBIDR form. All infants treated, and died, in departments other than the Pediatrics department like emergency, labor room and gynae/ post-natal ward, must also be reported and investigated. The FNO and DNO would line list the infant deaths. All infant deaths in the facility should be reported and investigated .

Section 5: Infant death review system: Basic pronouncements and Summary of the filled forms

- 75% MOs didn‟t receive any training.
- 2 out of 4 DNOs reported no formal training of IDR
- At about 50 % of facilitiesthere was no Facility nodal officer appointed for FBIDR. Close to 8 % FNOs received any training for FBIDR. Out of rest all, nearly 42 % reported no formal training regarding FBIDR**.**
- Documented guidelines for conducting IDR were available at all the district levels**.** But about 75% of blocks reported documented guidelines and nearly 25 % of blocks did not report any documented guidelines and majority of them only had soft copy available with them.

There was a discrepancy in format of the form**.** There were three kinds of forms available; Old format, New format and one different-incomplete format of IDR 1 and 2. And at all the facilities the formats were available online or as soft copy.

5.1 Common observations of the filled forms analyzed through a check list:

- At all the facilities blank formats were available as soft copy**.**
- The Filled forms were found to be largely incomplete or not filled at all.
- Majority of the forms ((ID2, IDR3) were not dated but were signed by personassigned**.**Time of submission was not mentioned in majority as well,

which makes the amount of time taken between death and completing the reporting and investigation difficult.

- Almost all forms (IDR2) had left the columns asking for the **"**cause ofdeath" and "delays" blank.

- Old formats were in use**;** in one of the districts, old formats were still in use**(**last seen was in march).
- ANMswere observed, to be filling all the formats (IDR1, IDR2, IDR3) at community level.
- Almost all the districts had incomplete or not at all filled ID3 forms(more specifically, IDR3 Form3 i.e., social forms**)**.

Main portions left:

- In IDR 1- Receiving of FIR
- In IDR 2- Delays and cause of death
- In IDR 3**-** IDR 3 form 3many columns were leftblank (more specifically, summary analysis,problems faced during treatment, treatment seekinghistory, social history or expenditure history).

Section 6: Infant death review system: Analysis of gaps in reporting and auditing

6.1 Importance of Infant Death Review System

The DNOs and MOs, 90% of ANMs and nearly 70% FNO unanimously answered that IDR is important.

The BMOs who were interviewed, unanimously answered that IDR is important for reaching at the definite roots and study the underlying causes so that corrective

actions can be taken. One of them emphasized on the lack of uniformity in the events leading to death and the use of IDR in making it unambiguous:

"…harjagah se alagalag history nikalkeaatihai, family kuchaur, husband kuchaur, ANM kuchaurbtatehai, to IDR zaroorihaitaaki history eksamaan ho jaye…"

All emphasizedon employing IDR for taking remedial actions and preventing future deaths, especially to reduce IMR for which NRHM started to work from inception

Use of IDR as a link to identify the personal, familial, socio-cultural, economic andenvironmental factors, since medical records give only immediate biological causes, to use it for comparison over a period of time and across different states or to help in capacity health care team to address the bereavement issueswas nothighlighted by anyonesuitably.

6.2 Mechanism of Reporting

The BMOs were aware of the mechanism of information relay for IDR, but superficially. Almost all BMOs were informed about the deaths through ANMs. There were number of discrepancies in the knowledge of the BMOs about the system of reporting.

Firstly the timeline was not clear. Few of them came to know about the occurrence of death in the weekly meetings as opposed to getting information within 24 hours.MOs were informed about the infant deaths through ANMs, And ANMs (100%) were informed by ASHA,informing the MO & the DNO immediately telephonically or through SMS service, as per the guidelines, was undermined by almost all of the ANMs/MO.

ANM"s even told that they have to submit IDR 1, 2, 3 and background details of patient and family in IDR 4 within 15 days of the Death.The usual time taken was

two to three days by the lower level worker to the higher authorities. The filled forms were being sent to the district quarters just before the quarterly meetings thus taking up of corrective actions became difficult.

ANMs were using form B-2 for reporting infant deaths rather than the usual format IDR-1 and IDR-2.Old forms was still persistent and new forms were not available

Few of the responses on the incongruity regarding the chronology were:

"…we have proforma, we take that and tick or round in that whether it is stillbirth or infant death. Then we fill IDR 1, 2, and 3. The after that we fill our IMR booklet (form B2) after which it is submitted to MO(IC), who goes to the meeting and discusses IDR of our areas in meetings, which usually occurs in the very first week of the months as only MO goes to the meeting…"

"… We inform Through personal visits and PHC or wait for the next meeting…"

"…We generally report in 24 hours at 102. And infant death occurs at facility then the medical officer or nurse or facility reports about it at the higher level…"

„„ …We fill all the formats IDR 1, 2, 3, and 4. And in IDR 4 We only fill the initial basic details like background and general information about death. Rest is filled by Doctor Saab…"

6.3 Information on Investigating Team Members

Majority of the MOs (90%), knew about who all are included in the investigation team and reported their investigation team members as per guideline.Majority of the cases, investigation was performed by ANMs.Investigating team mostly consisted of ANMs and ASHA.

The DNOs were not clearly aware of the working mechanism, Their knowledge regarding it was just up to satisfaction.

Majority of the FNOs were not so responsive to ongoing system and took it as an additional burden.

"…hospital mein to hum karletehai death hone par, forms vegarahbharnalekin community wala to aapbatayiekyahotahai…"

Some of the MO"s were confused when asked about what incentives is being given to the person accompanying them for investigation, While some said 100 , others said 200.

Few of the ANM"s even reported non receiving of payment prescribed to them for investigating

" *incentiveske bare to patanahi,basekbaar 100rs mile the pichlesaaluskebaadkuchnahimila par ASHA ko 100rs miltehainhamesh reporting ke…"*

6.4 Problems faced in the operation of IDR

Almost all MOs felt being overburdened and took IDR as an additional task taking up much valued time.

Majority of the BMO"s were taking up the infant review process as a mere formality,Lack of Motivation as far as taking up IDR as an important process is concerned

"… MO johai wo itne motivated nahihai, har case k liyekhud he community par jaanapadtahai jo bahutkaambdadetahai…"

"…ANMs log k pass pehle he bahutkagazikaamhaiaurdenatheeknahi…"

" Humara clinical kaamhai patients dekhna,yehitne programmes eksaathkahan se handle hoyenge, inn sab keliye koi administrative vale banda hire karnachahiye government ko…" quoted one of the BMO

"*…Reporting to hojaatihai 100rs kechakkarmein…*" when asked about any issue during reporting.

Difficulty in negotiations with private hospitalsfor reporting infant death. In case of death taking place in a private nursing home repeated visits have to bemade by ANMs to get case details. Because of the image consciousness these hospitals don‟t cooperate and contribute in the uptake of death reviews. Private Hospitals don‟t take it as their responsibility too and don‟t inform the authorities on time.

Two BMOs pointed out the problems they face in negotiations with private hospitals. In case of death taking place in a private nursing home repeated visits have to be made by ANMs to get case details. Because of the image consciousness these hospitals don‟t cooperate and contribute in the uptake of death reviews. Private Hospitals don‟t take it as their responsibility too and don‟t inform the authorities on time. Another problem in liasoning faced by BMOs was with the police authorities.

"Reporting to police and involving them is required in some Medico-legal cases and they are not very supportive and cooperative…"

Another concern faced by BMOs is that the form of the death review is too complicated to be filled by the ANMs. They are not technically sound and don‟t have the expertise to fill the forms. The result is that most of the columns are left incomplete. Though it‟s the duty of BMOs that they assist and take the responsibility of filling out whole forms themselves but in their mind reporting and making summaries is not their job.

"…ANM k liyewo form bahutmushkilhai, bahutkuch technical poochagayahaiusme… hum thodinabharsaktehai eke k form, bharna to unhikohai…"

Besides this one of the BMO also commented that not many ANMs are actually interested in doing it because of the fear that in the end they would be blamed.

Another important predicament pointed out by one of the BMOs was that though they are regular in sending review reports on time and completed but no corrective action or feedback had been received by them till then. This makes the motivation to go ahead and work lesser

The families of the deceased which are approached for conducting the review as reported by one are so poor, illiterate and innocent that they are not able to converse much. The people are naïve, so they do not understand what is being asked and why. This makes it difficult for the ANM to get the information out. It creates a communication gap.

Thus these are the problems and issues as reported by BMOs who are the nodal persons responsible for taking up IDR in a block.

The DNOs who identified two main deficiencies in the system;

Firstly, BMOs not working as they should, secondly, lack of basic facilities with them. They feel that BMOs still haven‟t taken the responsibility of doing a death review and generally pass on the work to their subordinates.

“…baarbaarbolne par bhi BMOs ye kaamaage de detehaiaurphirtheek se hotanaihai…”

“…BMOs form naibhartehai, unkijagah ANMs bharraihaijokibharnaunke bus kanahihai…”

As mentioned before the other problem is that basic facilities have not been provided at the district level. This leaves the working imbricate. One of them pointed out that they were not even provided with a separate data entry operator at the district level so expecting regular reporting is not justified. Another mentioned too much administrative work and responsibilities because of shortage of staff doesn‟t give enough time to concentrate on any one particular program.

6.5 Expectations and Suggestions

The BMOs and DNOs are the people making the IDR operational. It was imperative to ask them what they think and what they suggest to make the system more efficient.

One of the BMO suggested that trainings should be held for ANMs regularly to accustom them on filling the IDR forms correctly and also aware them of the importance of this death review process.

Nearly 70% of the BMO‟s were dissatisfied with the form length and content and suggested a concise format with only relevant queries to be asked/filled.

90% of the MO‟s suggested the an official having an administrative experience should look after the functioning of programmes such as IDR/MDR for its effective implementation.

A BMO was thoughtful enough to suggest that a person dedicated to doing verbal autopsies should be appointed. This would not only take some burden off the BMOs but also produce a better result. A person from a social background can be employed for death reviews.

“…ye to hamare basskakaamhainahivaise, hum clnical wale hai, koi jo social science background se ho aursirfjiskakaam death review he karna ho to hekaamacche se ho saktahai…”

One of the BMO emphasized on the role IEC in improving the overall awareness of infant mortality among people.

" illiteracy and unawareness of the family of the deceased leads to them not following safe birth practices , consulting QUACKS instead of skilled health professionals"

Another Suggestion highlighted the shortage of skilled manpower, the staff strength should be increased and strengthened. They also suggested that personnel from outside should regularly pay visits in the villages because this can have more impact on sensitizing the community.

Another was truthful in pointing out that just auditing and reporting won‟t serve the purpose. Two mandatory things are the corrective actions for improving the quality of care and improving the basic health infrastructure. The suggested that autonomy be given to the officials for better decision making and implementing actions. This could be by way of handing more funds to them. By that they can improve the infrastructure and give better quality to the patients.

Section 7: Infant death review system: Analysis of gaps in feedback and taking corrective actions

7.1 Summary regarding the status of Feedback and Corrective actions

- Only one of the five districts studied had the complete minutes of the review meetings.
- one district had no records of monthly meetings at all while others had record of few meetings only.
- The monthly meeting schedule at the district was found to be irregular except in two district
- Nearly, 50% of the FNOs and MOsreported no corrective actions ever guided and about 40% ANMs reported no corrective measures ever guided about.

District	PKL	GGN	F.BAD	BWN	SNP
1) No. of Meetings					
2) Availability of minutes of meetings					
3) Are the Corrective actions grouped in three categories					

The minutes of the meetings were found only in one district. Though the corrective actions were present they were not grouped into the categories-at community level, at district level, for which state support is needed.

The Major Corrective actions observed were:

- Strengthening of HBPNC
- Training for Lactating Mothers by ASHA‟s/ANM‟s on good breastfeeding practices
- Proper Follow up of the sick babies once discharged.
- ANM‟s to certify that each PW has taken two Antenatal checkups for High-risk pregnancy by the MO in charge in her area.

- ANM‟s to motivate community members on utilization of 102 referral services.

Section 8: Recommendations and Limitations

8.1 Limitations

- Inadequate sample size due to lack of resources
- More concentrated on community based MDR
- Despite choosing the blocks based on the distance from the district quarters the effect couldn‟t be established because almost all blocks were located on the highway
- In depth interviews have a researcher bias like all other qualitative methods, so the ability to extract the information and to do it without prompting rested solely on the shoulders of the researcher.

8.2 Recommendations:

To make the system (information relay) more efficient:

- Training personnel at all levels- state, district, block & community on IDR
- Sensitization of non-health personnel like ICDS, panchayat for informing the occurrence of the event to the block in certain areas where ANM is unable to do so.
- Use of technology for the passing the information at the earliest rather than increasing the paper work.
- Making the 102 service more efficient.
- Appointing a person at the district level part time/full time specifically for carrying out verbal autopsies preferably from a social science/ public health background.
- Increasing use and availability of Govt. of Haryana‟s new and standardized formats for IDR and availability of newHindi forms and guidelines where ever required.
- Arranging monthly meetings regularly under the described attendee‟s presence as per guidelines.

- Use of substantial level of IEC activities for dealing with all kind of delays both at community or facility level.