Factsheet

FY 2079/2080

(July 2022–June 2023)

Maternal and Perinatal Death Surveillance and Response [MPDSR]

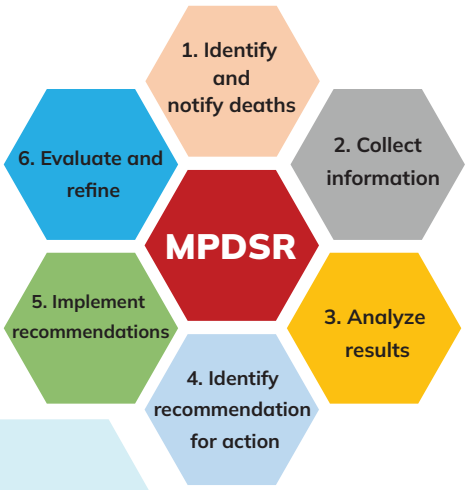
Development of any country is reflected by the health status of mothers and children

Maternal mortality in Nepal has decreased significantly from 539 per 100,000 live births in 1996 (NFHS) to 151 per 100,000 live births (Maternal Mortality Study 2021). Similarly, the neonatal mortality rate reduced from 58 in 1996 to 21 per 1000 live births in 2022 but has remained stagnant at 21 per 1000 live births since 2016. The perinatal mortality rate has decreased from 45 in 2006 to 27 per 1000 births in 2022 and stillbirths account for more than one-third of perinatal mortality (NDHS 2022). Similarly, there has been significant reductions in the infant and child deaths.

What is MPDSR?

Maternal and Perinatal Death Surveillance and Response (MPDSR) is a routine monitoring process of identification, notification, quantification and determination of causes and avoidability of all maternal and perinatal death and using the information to take actions that prevent future deaths.

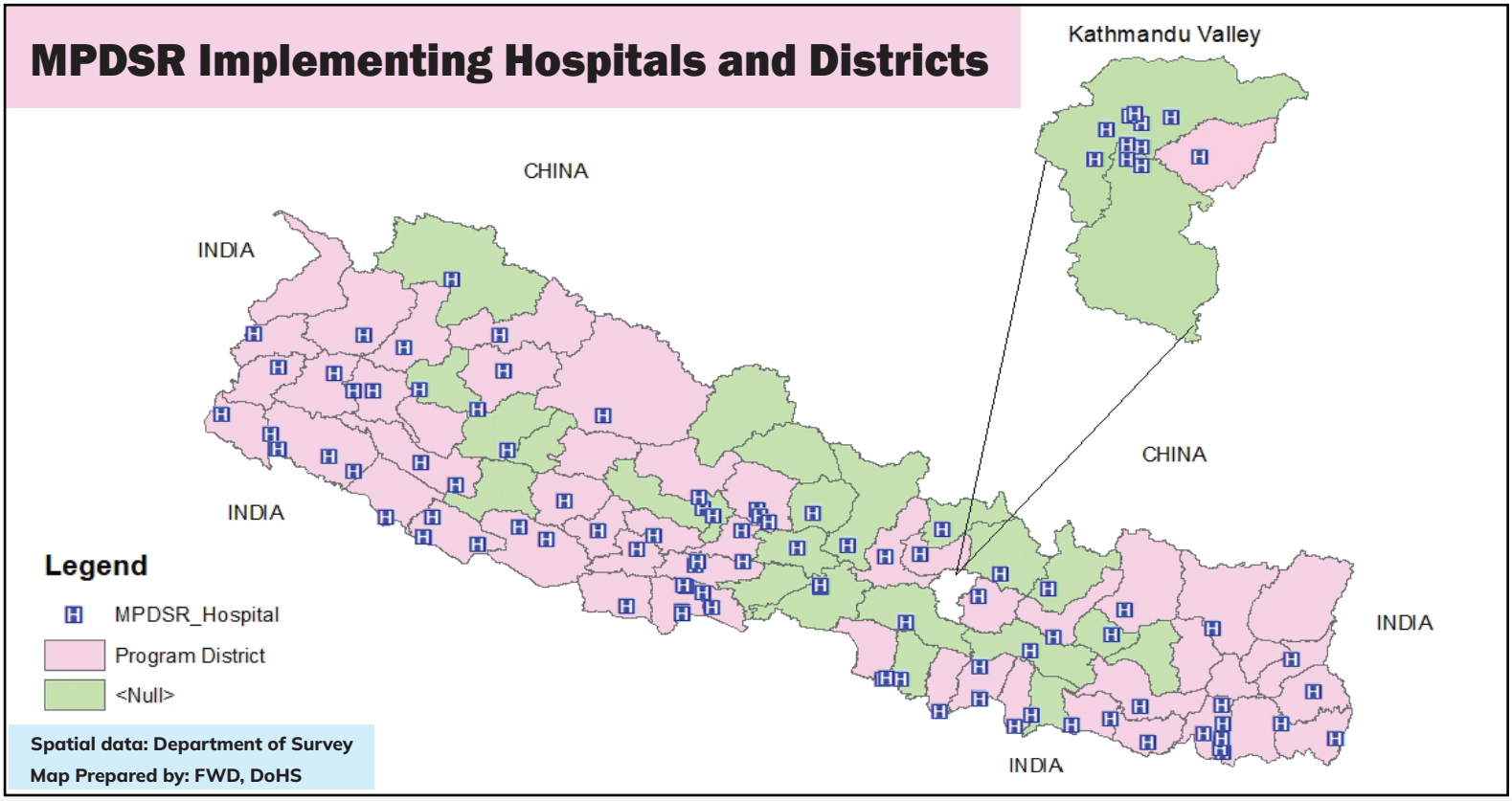
The main goal of MPDSR is to obtain and use information on each maternal and perinatal death to guide public health actions, monitor their impact and hence eliminate preventable maternal and perinatal mortality.



Implementation Status

- Hospitals report both maternal and perinatal deaths, while the local levels report only maternal deaths.
- Facility-based MPDSR has been implemented in 108 hospitals and community-based MPDSR in 52 districts (complete & partial Implementation).
- WHO has been providing technical as well as financial support in implementing and strengthening the MPDSR program.

MPDSR Implementing Hospitals and Districts



World Health Organization Nepal

Government of Nepal
Ministry of Health and Population
Department of Health Services
Family Welfare Division

Maternal Deaths

Figure 1: The figure shows the MPDSR implementing hospitals and districts in each of the seven provinces.

Figure 2: The three-year trend of maternal deaths reported by provinces show that majority of deaths have been reported from Lumbini province consistently in the last three years.

Figure 3: The three-year trend shows that the deliveries, among women who died, occurring in medical colleges are on the incline. Also, home deliveries show an increasing trend while delivery on the way shows a decline.

Figure 4: More than 50% of women had delivered via vaginal delivery and it is alarming to note that 39% had delivered via CS.

Figure 1. Number of MPDSR Implementing hospitals & districts by Province

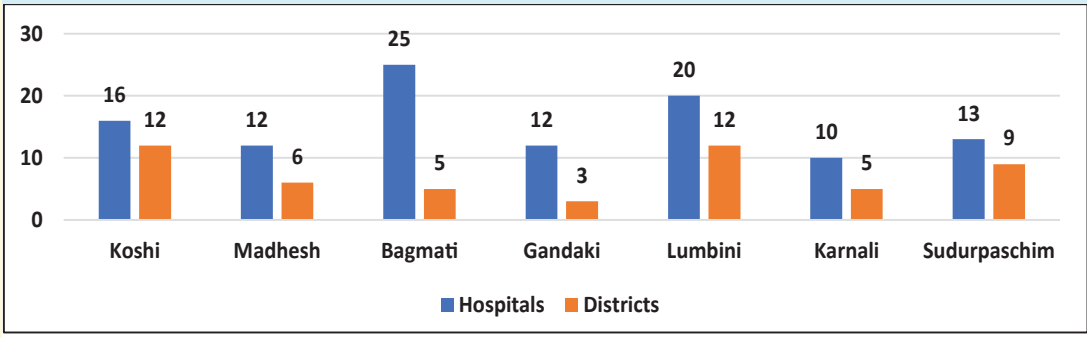


Figure 2. Three-years Trend in Distribution of Maternal Deaths Reported by Province

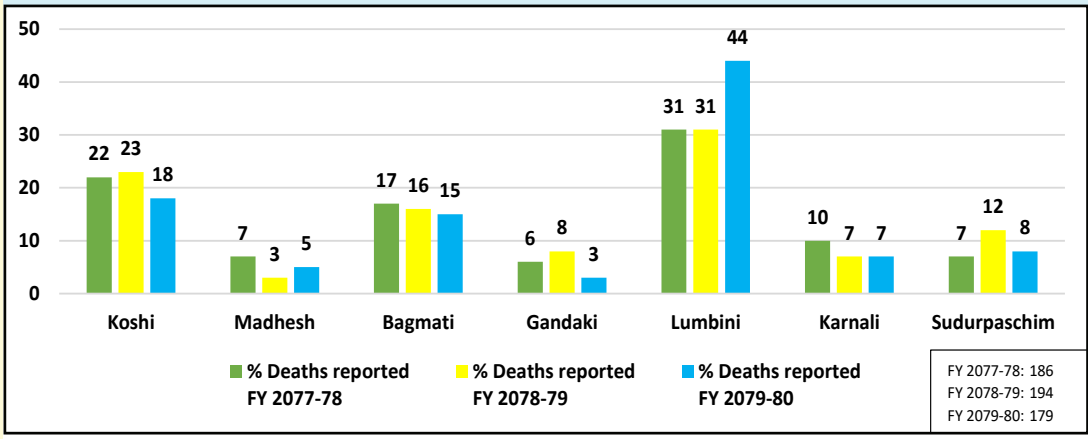


Figure 3. Three-Years Trend in Distribution of Maternal Deaths by Place of Delivery / Pregnancy Termination

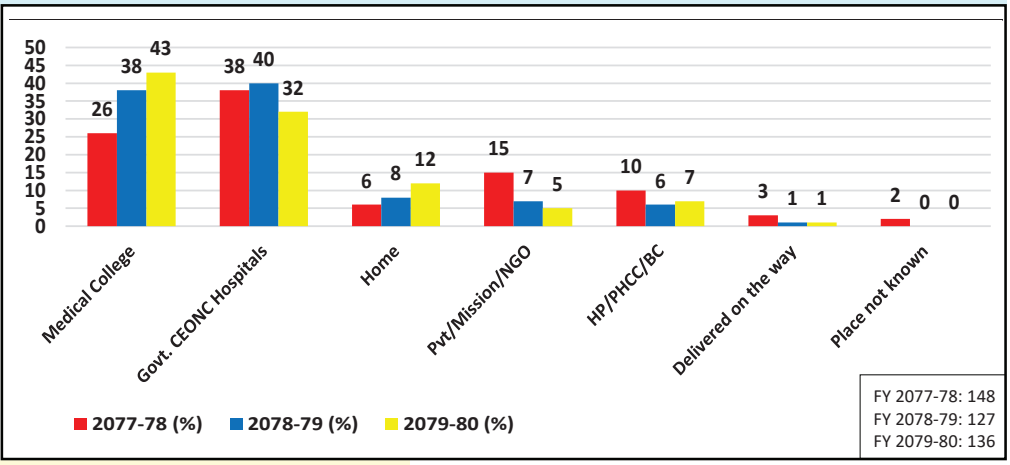


Figure 4. Distribution of Maternal Deaths by Mode of Delivery / Termination (FY 2079-80, N=136)

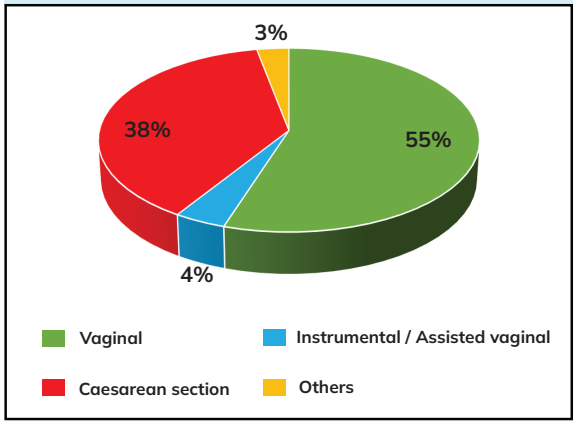


Figure 5: More than half of the deaths have occurred in the postpartum period in the last three years.

Deaths occurring in the intrapartum period show a slight increase in the FY 2079-2080 as compared to previous years.

Figure 5. Three-Years Trend in Distribution of Maternal Deaths by Period of Death

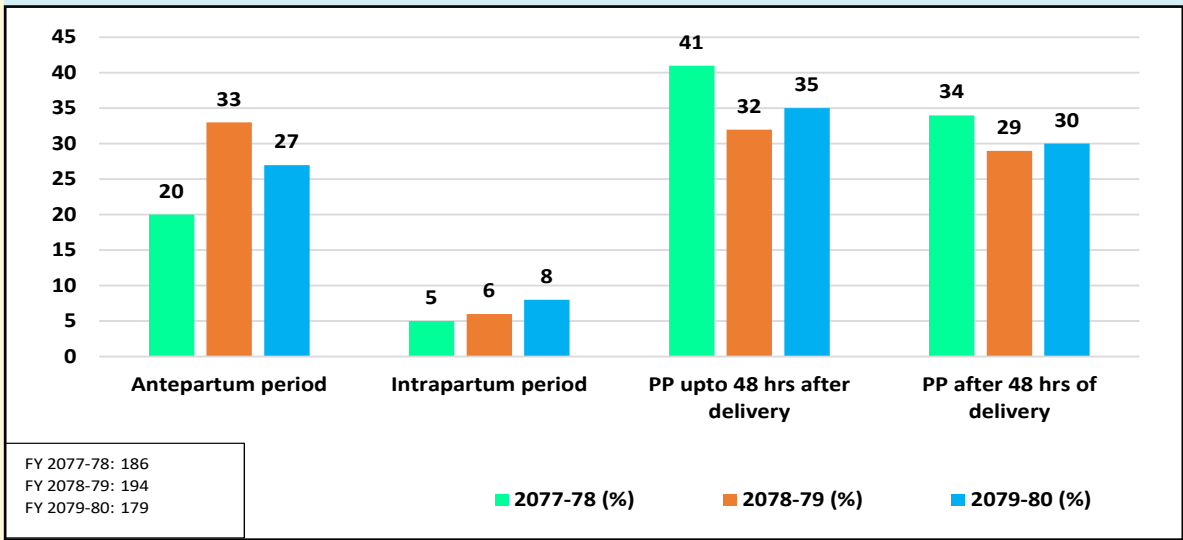


Figure 6: Majority of deaths still occur at medical colleges and deaths at home and on the way shows an increasing trend.

Figure 7: Deaths due to abortive complications, hypertensive disorders of pregnancy and obstetric hemorrhage show an increase. While non-obstetric complications show a declining trend.

Note: Other Obstetric complications (ICD group 5) include; embolism, suicide, acute fatty liver of pregnancy, etc.

Figure 6. Three-Year Trends in Distribution of Maternal Deaths by Place of Death

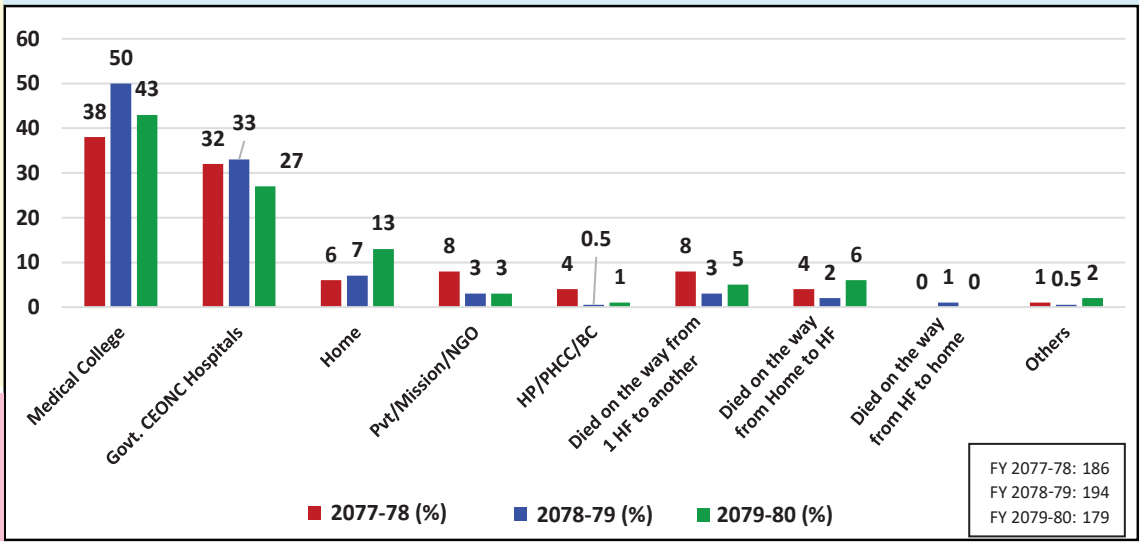
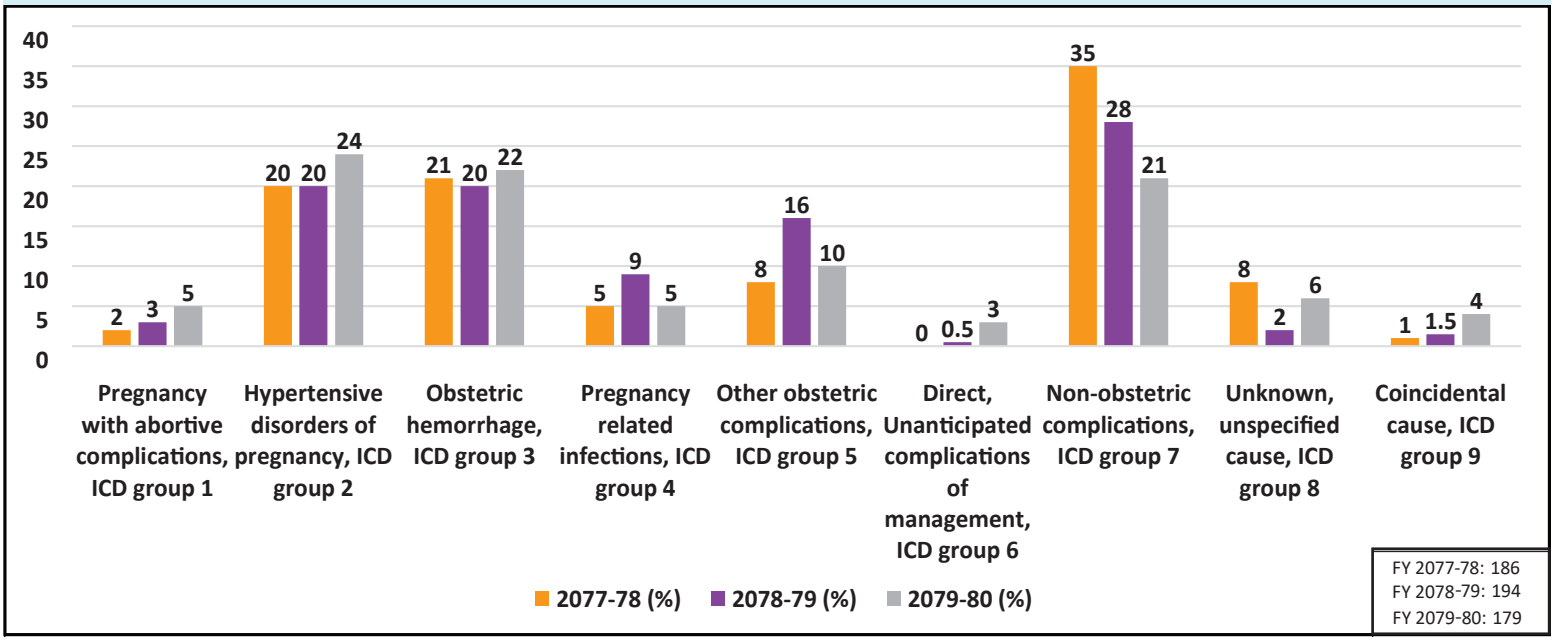


Figure 7. Three-Years Trend in Causes of Maternal Deaths



Perinatal Deaths (FY 2079/80)

Figure 8: Majority of perinatal deaths were reported from Lumbini and Koshi provinces.

Figure 9: More than half of perinatal deaths were antepartum (macerated) stillbirths followed by early neonatal deaths (28%).

Figure 8. Proportion of Perinatal Deaths Reported from Province (N=2379)

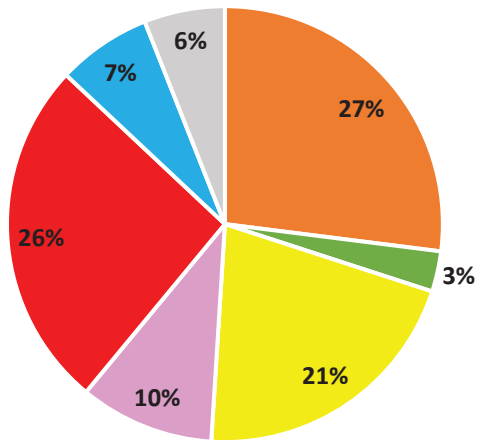


Figure 9. Distribution of Perinatal Deaths by Period of Death (N=2379)

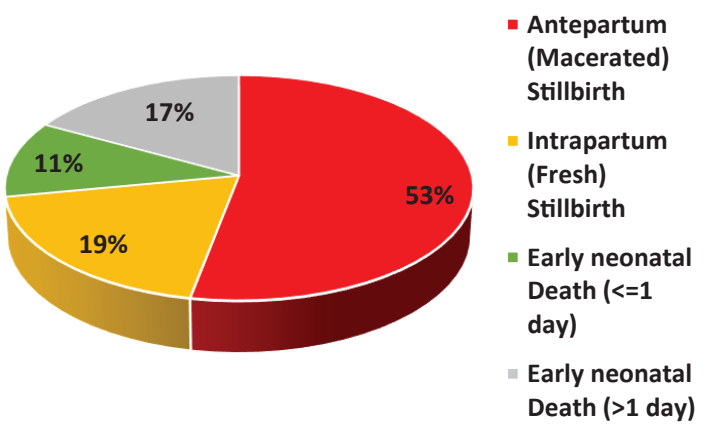


Figure 10: In more than 50% of the cases, the cause of antepartum/ macerated stillbirths was not specified. This was followed by antepartum hypoxia and disorders related to fetal growth.

Figure 11: The most common cause of intrapartum / fresh still birth was not specified, followed by acute intrapartum event.

Figure 12: A third of early neonatal deaths was caused by low birth weight & prematurity, followed by respiratory and cardiovascular disorders (22%), complications of intrapartum event (10%), congenital malformations and unspecified cause 98% each)

Figure 10. Causes of Antepartum (Macerated) Stillbirths (N=1136)

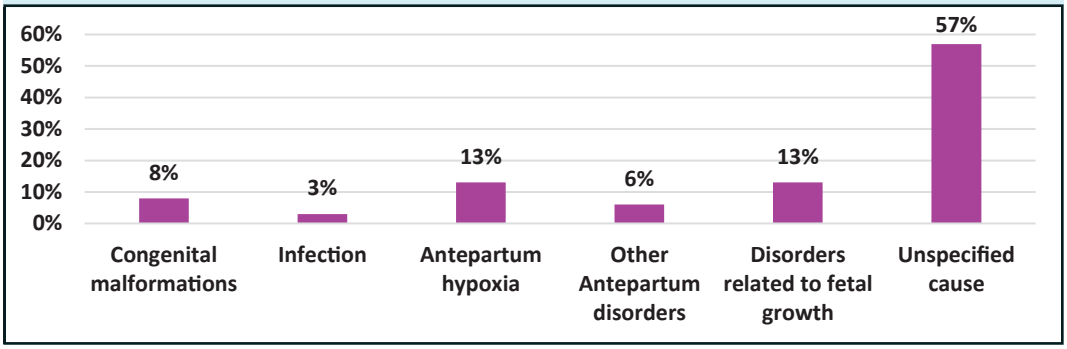


Figure 11. Causes of Intrapartum (Fresh) Stillbirths (N=436)

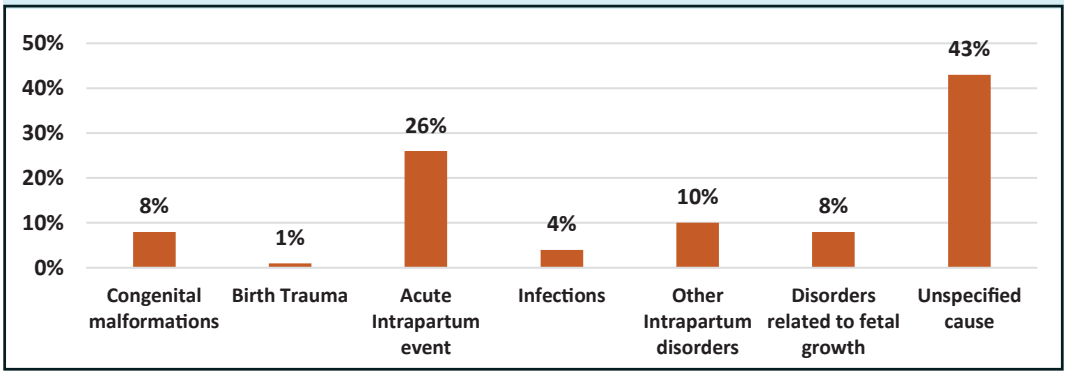
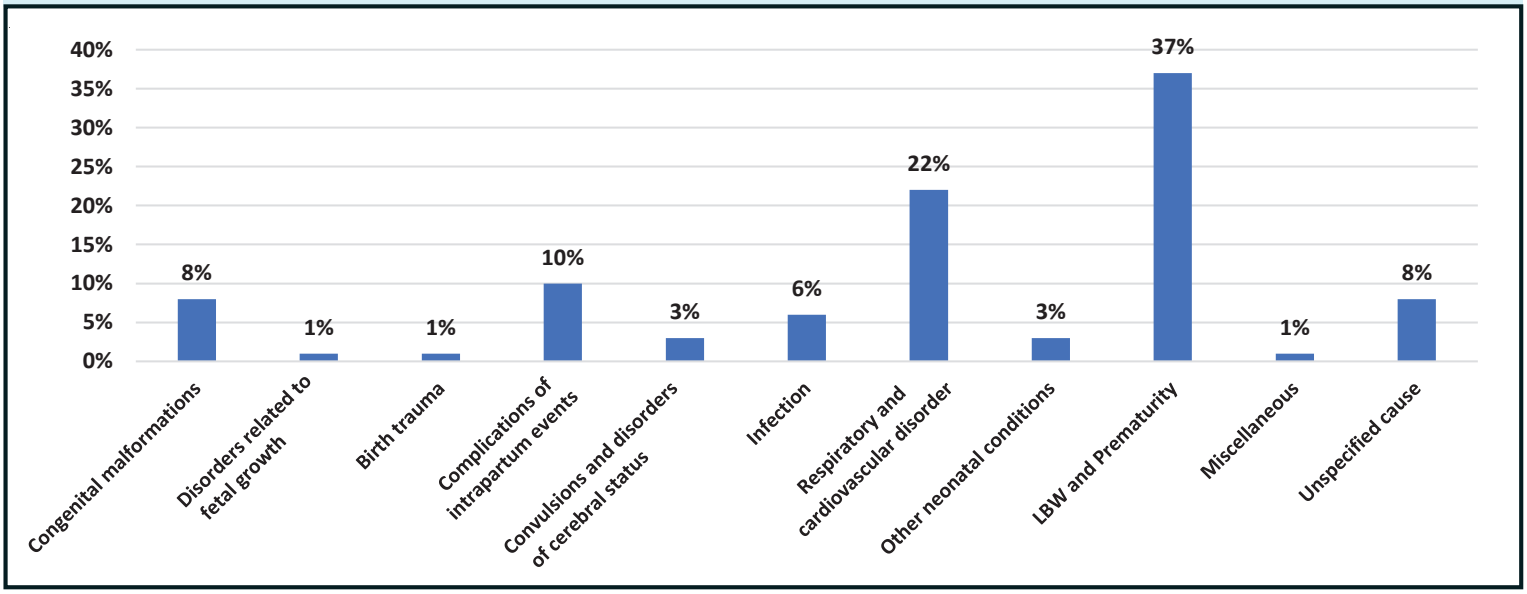


Figure 12. Causes of Early Neonatal Deaths (N=586)



Note: 223 cases of perinatal deaths from the old MPDSR website and could not be classified as given above. The common causes of deaths in these cases are: Unspecified cause, Complications of prematurity, Birth asphyxia and congenital anomalies.

Actions Taken in Response to MPDSR Periodic Review

Hospitals:

- MPDSR Orientation to resident doctors and nurses
- Triaging of all obstetric cases in Gynaecology emergency
- Timely referral of high-risk cases with proper documentation
- Increase in number of Non-Stress Test and portable doppler machines
- Refresher trainings, Inter/Intra department coordination
- Antepartum fetal surveillance in high-risk cases
- Addition of NICU beds
- Non interrupted supply of essential and emergency medicines and supplies and obstetric and neonatal emergencies
- Regular Coordination with district and local authorities

Community:

- MPDSR and Verbal autopsy committee formulation and activation at Province, District and Local levels
- MPDSR onsite coaching and mentoring at health facilities and local levels
- Community awareness on danger signs during pregnancy, childbirth and newborn health through audio visual media
- Involvement of health mother's group in creating awareness regarding maternal health
- Focus on counseling during ANC visits
- Provision of specialized obstetrics and gynaecology services at ward levels
- Free ECG service to pregnant women as per need