

**Maternal and newborn health status in Dhanusha:
Increased dependency on private health facilities and high
cesarean delivery**

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Introduction

- Nepal continues to experience significant challenges in maternal and neonatal health, despite notable progress in recent decades
- Routine health information system data do not provide the real service utilization status of the district since many private health facilities' data are not reported.
- The community level data on MNH service utilization status is necessary to make evidence based planning to improve MNH status.



Study Objectives

- To estimate the maternal mortality rate and neonatal mortality rate.
- To assess MNH service utilization status like antenatal care, place of delivery, postnatal care at district level and municipality level
- To assess the knowledge on danger signs during pregnancy and practices regarding birth preparedness.



Methodology

All 18 palikas of Dhanusha district covered

Objectives	Methodology
Mortality survey	<ul style="list-style-type: none"> • Capture-recapture approach • Listing of maternal and neonatal deaths through meeting with all FCHVs and health workers of all health facilities • Verbal autopsy and cause assignment
RDW survey	<ul style="list-style-type: none"> • Descriptive cross sectional design • Interview recently delivered women who had delivered baby in last 12 months • Followed WHO 30 by 7 cluster sampling method; two staged • Stage 1: FCHVs listed → each cluster was catchment area of one FCHV → 30 clusters randomly selected from each local level • Stage2: Seven RDW randomly selected from each cluster • Total 3780 RDW interviewed from 18 local levels (210 from each palika)



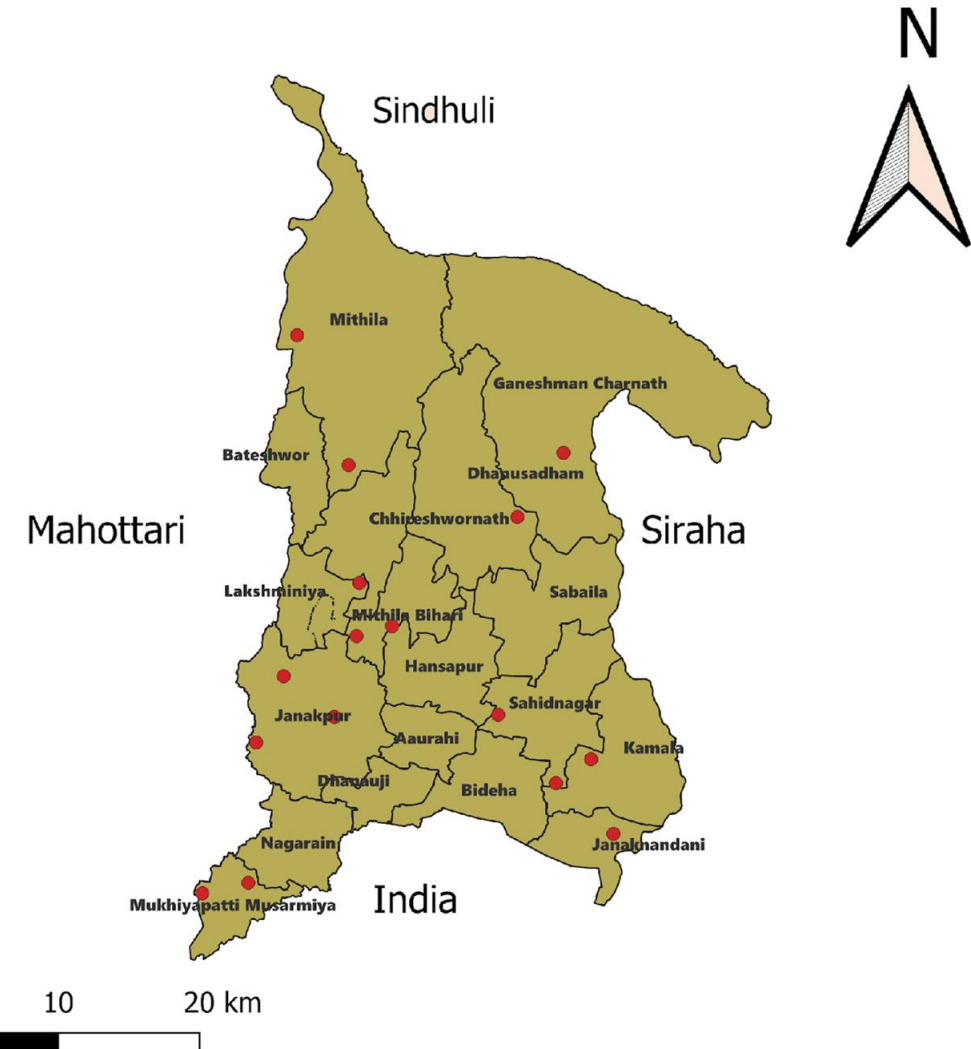
FINDINGS



Maternal Mortality

164 per 100,000 Live Births

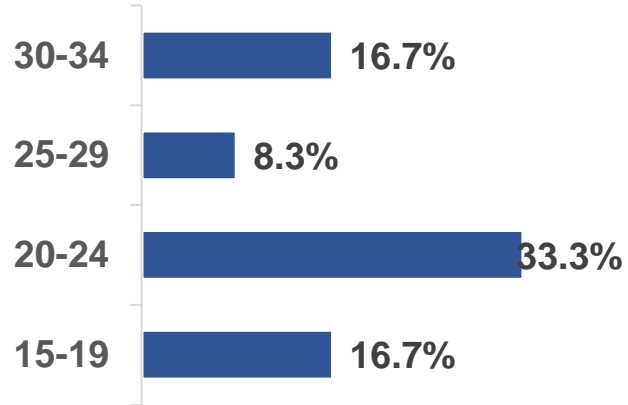
Local Level	Maternal Deaths (16)
Janakpur SMC	3
Kamala M	2
Mithila Bihari M	2
Mithila M	2
Mukhiyapatti Musharniya RM	2
Dhanushadham UM	1
Ganeshman Charanath M	1
Janak Nandini RM	1
Lakhsminiya RM	1
Shahidnagar UM	1



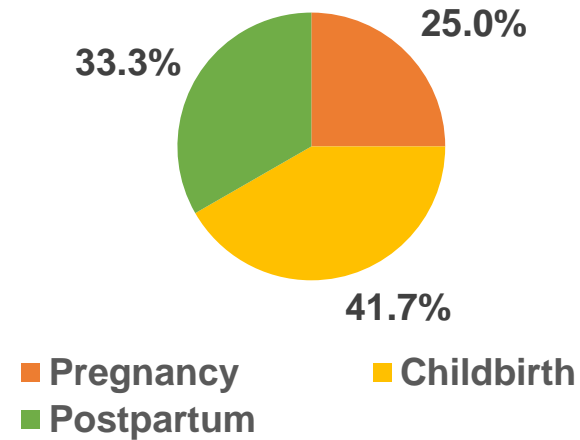
Maternal Mortality

164 per 100,000 Live Births

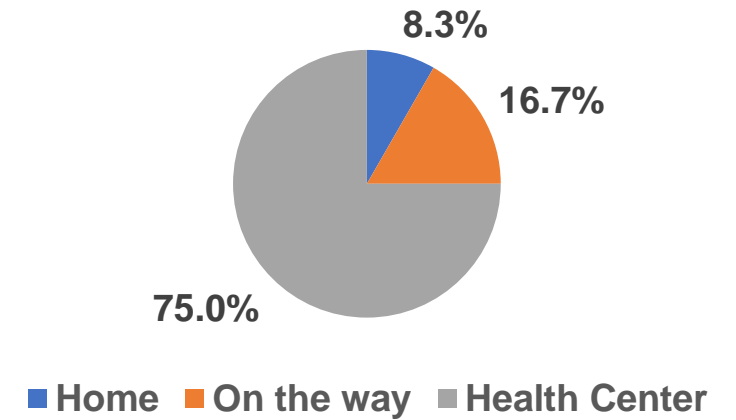
Age of Mothers



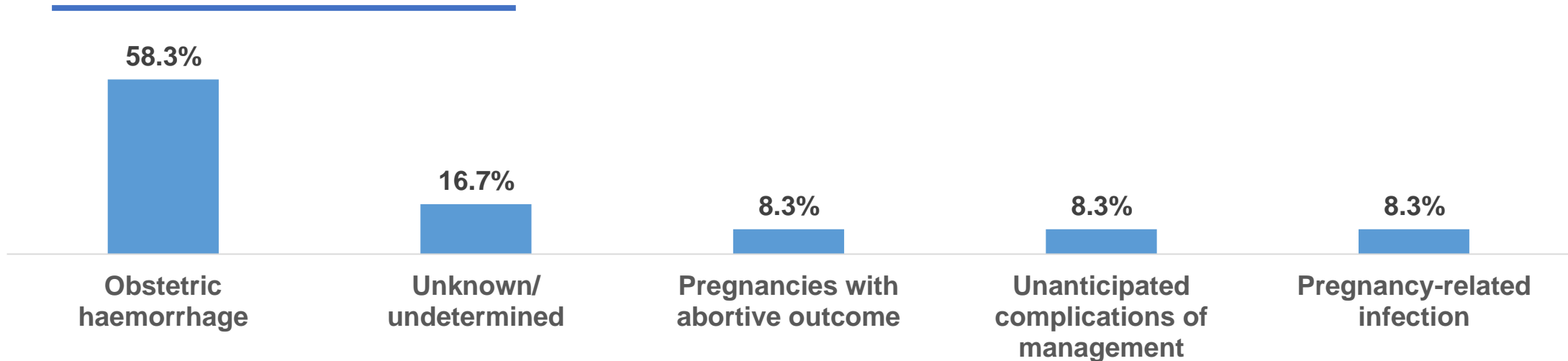
Stage of Death



Place of Death



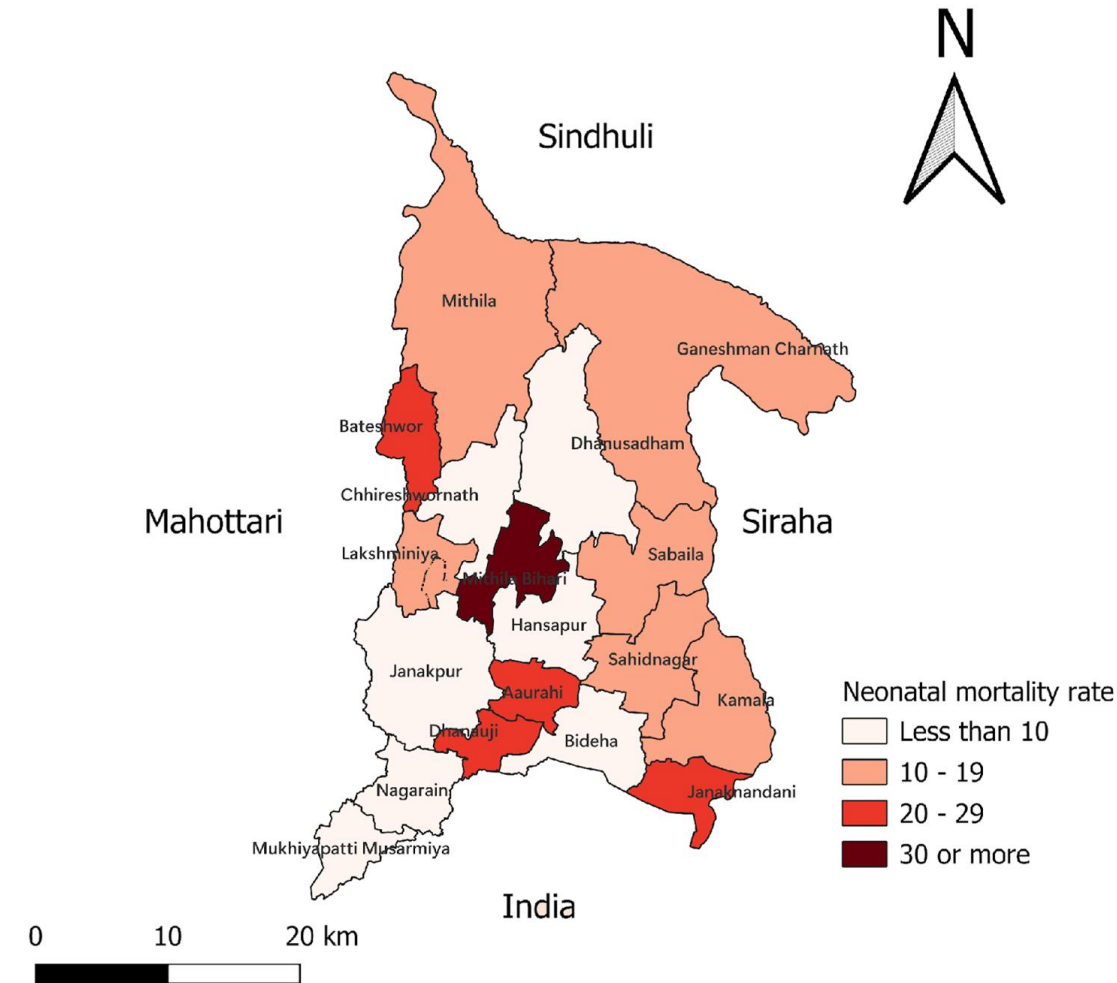
Cause of Death



Neonatal Mortality

19 per 1000 Live Births

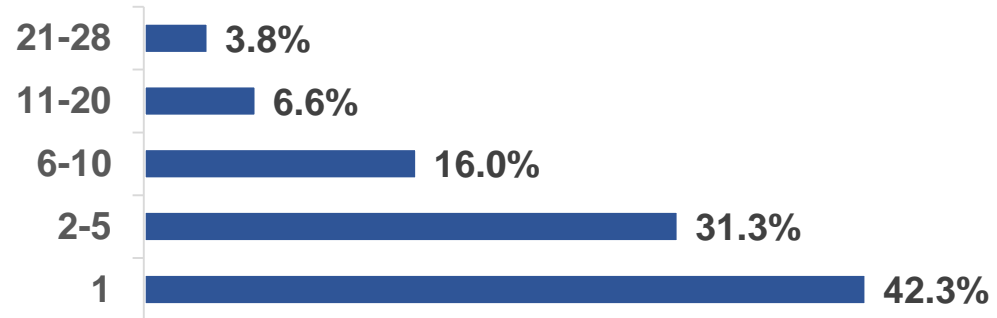
Local Level	Deaths (182)
Sabaila UM	22
Janakpur SMC	20
Janaknandini RM	16
Mithila Bihari UM	16
Shahidnagar UM	14
Bateshwor RM	11
Kamala UM	11
Dhanushadham UM	9
Ganeshman Charanath UM	9
Dhanauji RM	8
Hansapur UM	7
Mukhiyapatti Musharniya RM	7
Aurahi RM	6
Chhireswarnath UM	6
Lakshminiya RM	6
Mithila UM	6
Bideha UM	4
Nagarain UM	4



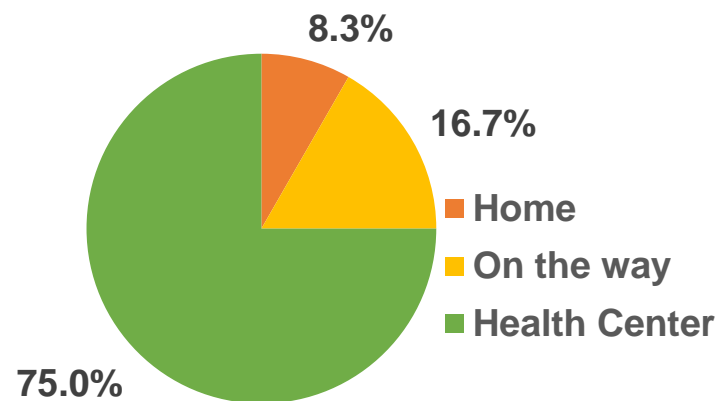
Neonatal Mortality

19 per 1000 Live Births

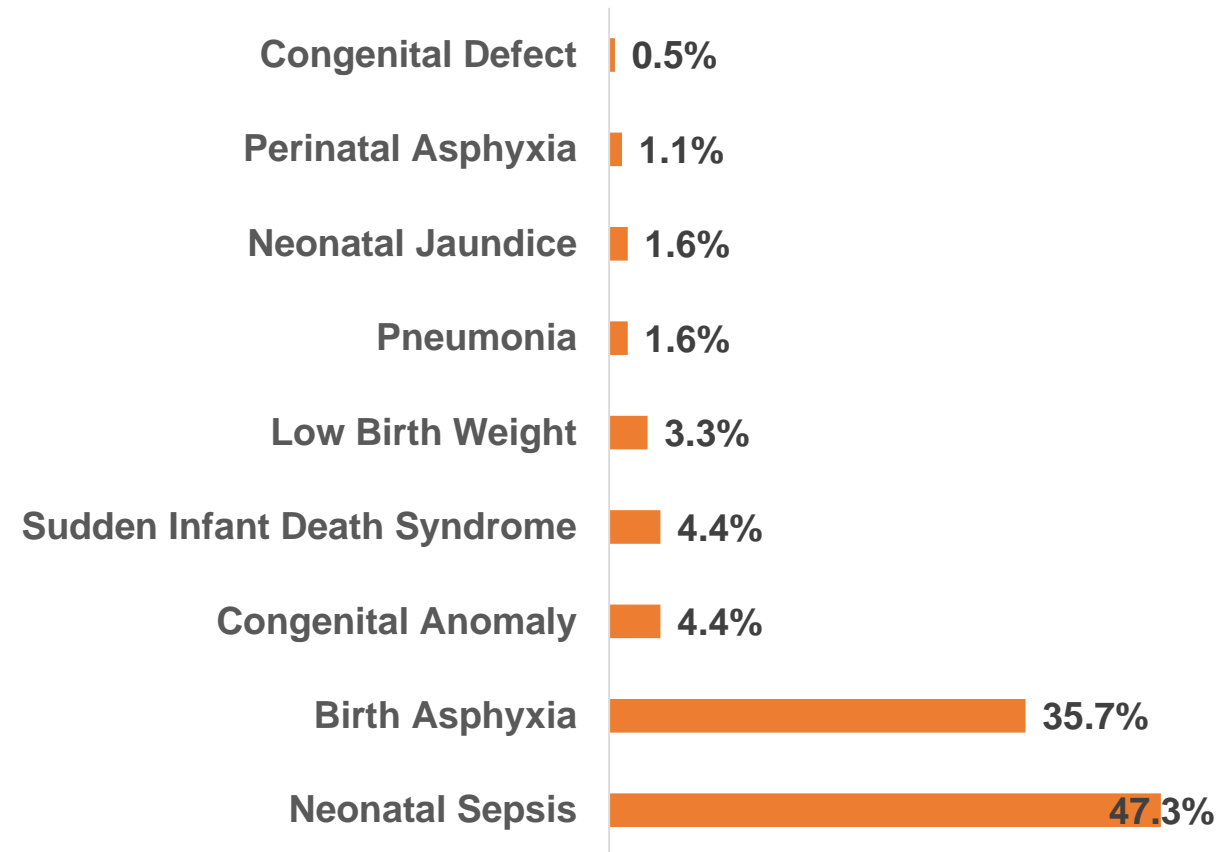
Age in Days



Place of Death

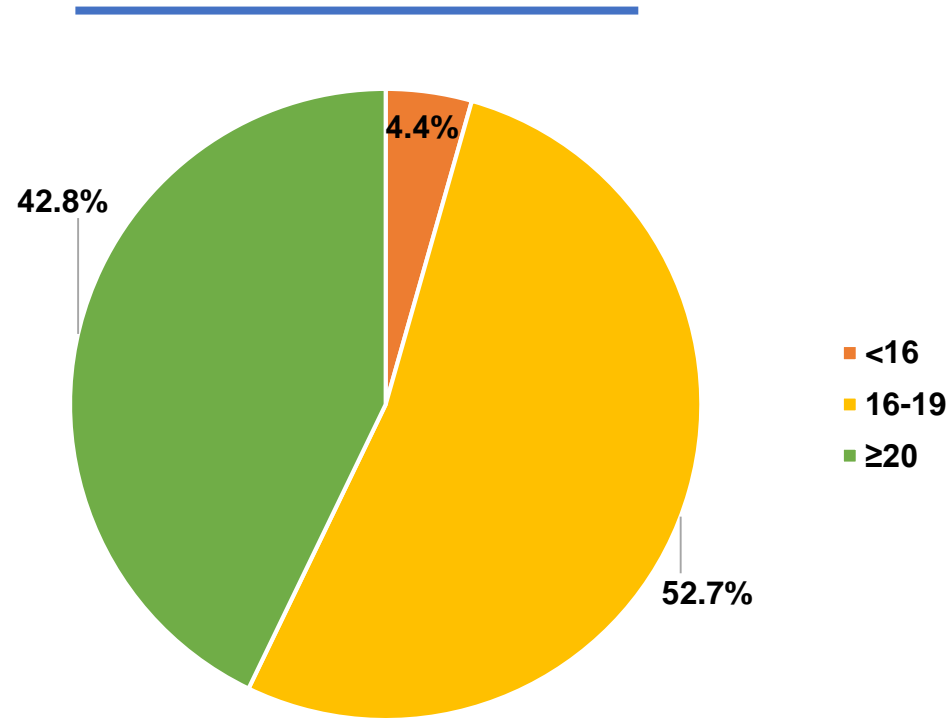


Cause of Death

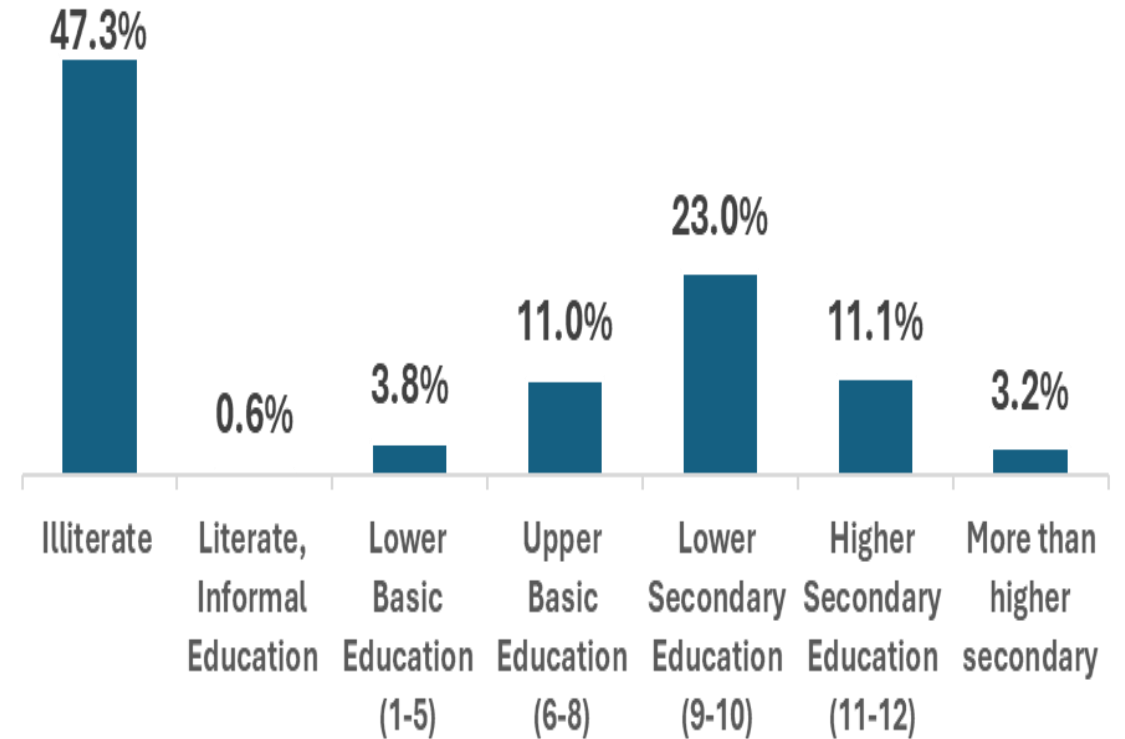


Socio-demographic characteristics of RDW (n=3780)

Age at First Pregnancy

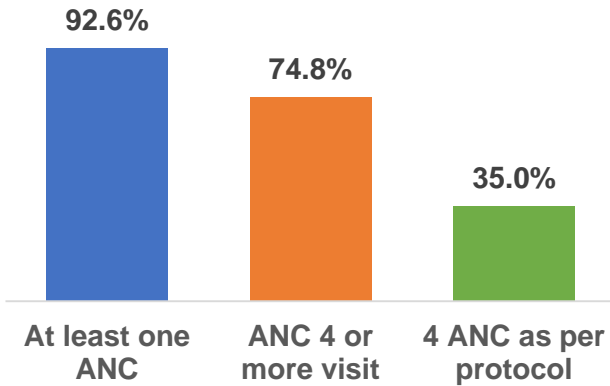


Education

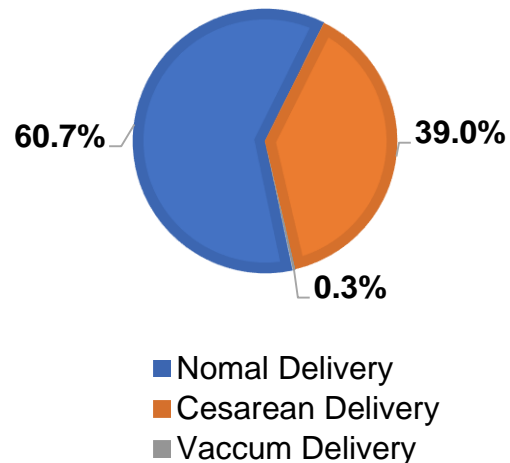


Maternal Health Service Utilization

ANC visits (n=3502)



Type of delivery



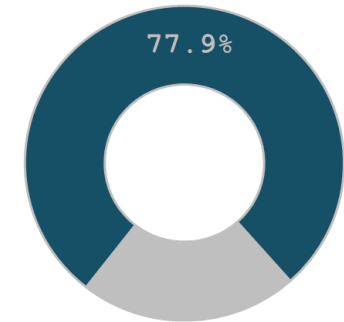
Place of first ANC visit (n=3502)

Private hospital/ clinic/ nursing home	70.7%
PHCC/ HP	12.7%
Janakpur Provincial Hospital	11.7%
Other government hospitals	2.7%
Others	2.2%

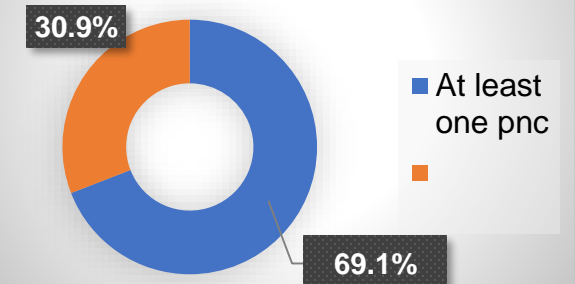
Place of delivery (n=3780)

Private hospital/ clinic/ nursing home	37.7%
Janakpur Provincial Hospital	28.6%
Home or others' home	20.9%
Other government hospitals	5.8%
PHCC/HP	5.8%
On the way to the health facility	0.9%
On the way from one HF to another	0.3%

Institutional Delivery



At least one PNC visit



Danger Signs (n=3780)

Knowledge of pregnancy related danger signs	Percentage
At least one sign	29.7%
At least three signs	5.9%

Experience of pregnancy related danger signs (n=612)	Percentage
At least one sign	9.0%
At least three signs	0.6%

Knowledge of newborn related danger signs	Percentage
At least one sign	34.8%
At least three signs	5.5%

Reported danger signs of newborn (n= 636)	Percentage
At least one sign	14.2%
At least three signs	2.6%



Conclusion

Heavy reliance on private facilities and lower utilization of public health facilities despite provision of free health services raises concern on trust and quality of public health facilities.

Nearly 40% of cesarean delivery is concerning and demands further investigations.

High maternal and neonatal deaths from preventable causes highlight the urgent need for quality health services and community-based interventions.

Knowledge in danger signs during pregnancy and danger signs in newborn is very poor, showing lack of proper counselling during antenatal and postnatal visits demanding need of interventions to improve counselling and health education.





One Heart
WORLDWIDE

