

Looking at progress for newborn survival in Nepal through equity lens

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Trends for Neonatal Deaths in Nepal (2001–2016) to Project Progress Towards the SDG Target in 2030, and Risk Factor Analyses to Focus Action

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Quality of Care for Maternal and Newborn Health in Health Facilities in Nepal

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Out of Pocket Expenditure for Sick Newborn Care in Referral Hospitals of Nepal

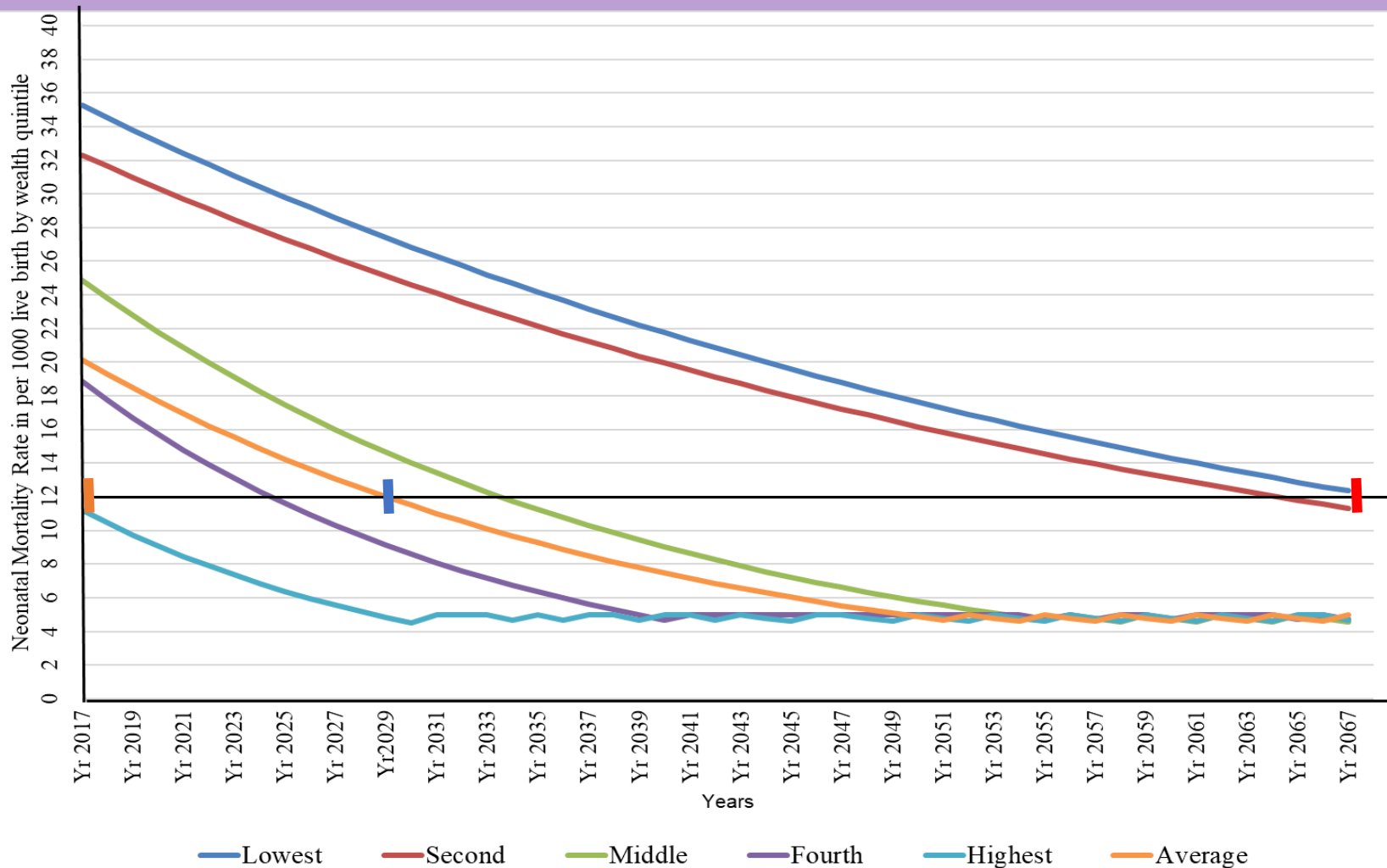
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Results (Annual rate of reduction of neonatal mortality)

	2001–2006	2006–2011	2011–2016	2001–2016
Annual rate of reduction of NMR	3.3	0.0	8.6	4.0
Wealth quintile				
Poorest	2.6	3.0	0.5	2.0
Second poorest	7.5	-1.0	3.8	3.5
Middle	0.8	3.7	7.8	4.1
Second richest	8.0	-3.6	11.6	5.5
Richest	4.1	6.1	8.8	6.3

Projection of neonatal mortality by wealth quintile based on the current annual rate of reduction (ARR) (2017 to 2067 AD)



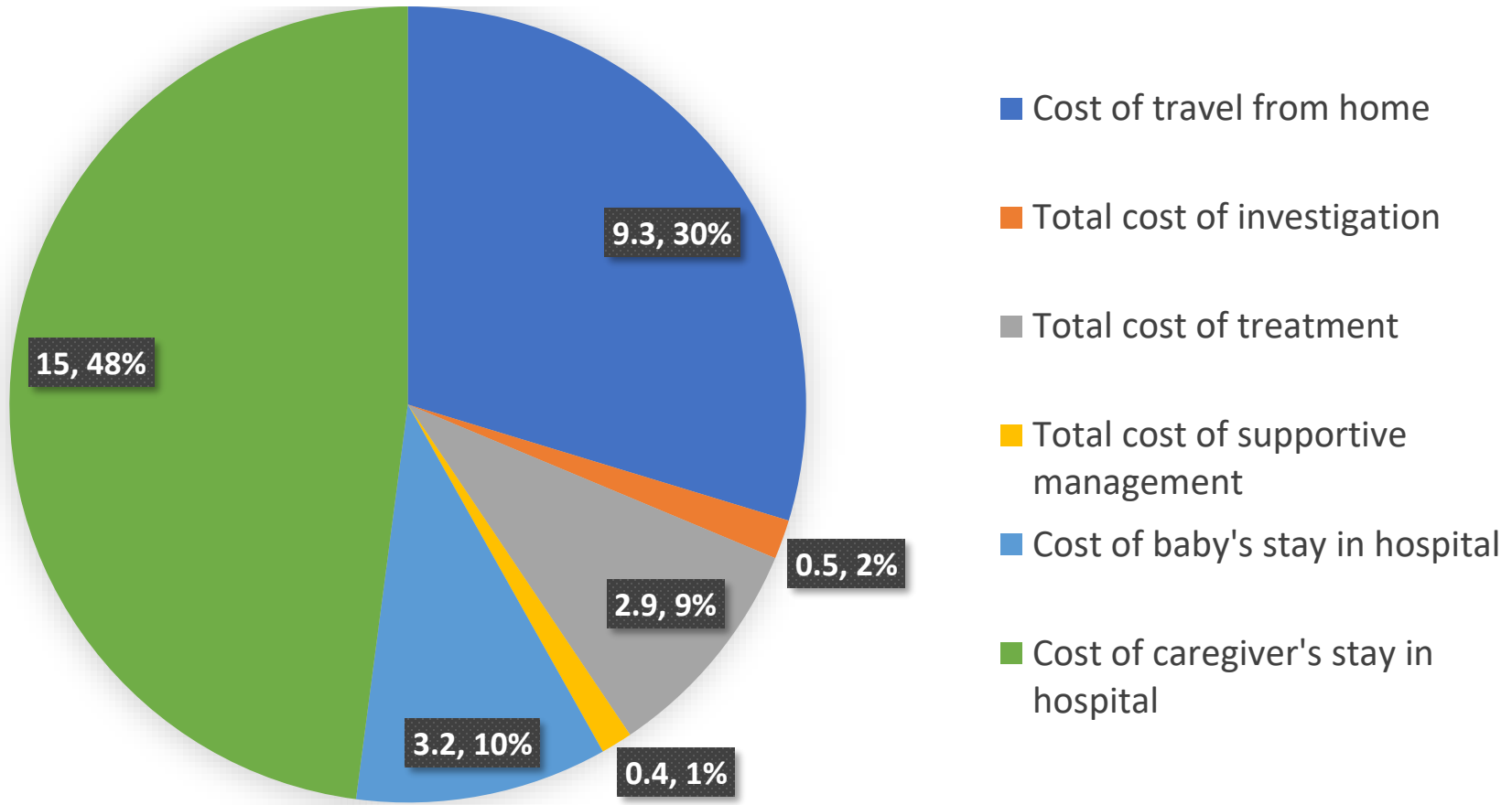


Quality of Care for Maternal and Newborn Health in Health Facilities in Nepal

Newborn care practices	All delivery providers n=623 (%)	Government hospitals n=76 (%)	Private hospitals n=96 (%)	Primary health care centres n=192 (%)	Health posts n=235 (%)
Applied chlorhexidine to umbilical stump	64.5%	71.1%	32.3%	71.4%	69.8%
Applied tetracycline eye ointment to both eyes	12.5%	14.5%	6.3%	13.0%	13.6%
Gave newborn BCG vaccine	16.4%	34.2%	24.0%	11.5%	10.6%
Routine examination (head-to-toe) of newborns	97.0%	98.7%	95.8%	99.5%	94.5%



Out of Pocket Expenditure for Sick Newborn Care in Referral Hospitals of Nepal



Out of pocket expenditure by neonatal morbidity

Out of Pocket Expenditure (USD)	Mean±SD	Median (IQR)	p-value
Neonatal Morbidity			<0.001
Preterm Complication	52.8±46.4	33.2(14.0– 226.1)	
Neonatal Sepsis	30.1±15.6	25.8(13.6– 139.8)	
Hypoxic Ischemic Encephalopathy	31.2±18,2	23.4(13.6– 97.7)	
Respiratory Distress Syndrome	35.9±19.5	26.9(15.3– 121.5)	
Hyperbilirubinemia	31.2±14.6	31.9(14.0– 60.7)	
Meconium Aspiration Syndrome	24.7±16.8	19.6(13.6– 143.2)	
Major congenital malformation	26.2±10.6	21.5(18.7– 38.4)	
Other causes	21.3±10.9	16.0(14.0– 33.8)	

Out of pocket expenditure by duration of stay in US dollars

Out of Pocket Expenditure (USD)	Mean±SD	Median (IQR)	p-value
Duration of stay (days)			<0.001
1-3	22.3±7.8	21.5(13.6– 62.9)	
4-6	42.9±11.9	41.4(23.4– 86.8)	
7-9	61.4±15.6	56.2(42.1– 107.5)	
10 and more	114.0±3.7	105.2(56.1– 226.1)	

What does this indicate for future mothers and newborns health in Nepal

- Nepal is in track to reach the every newborn target of 12 per 1000 live birth by 2030,
- The distribution of death among rich and poor has widened (inequity widened),
- Out of pocket expenditure for sick newborn exist and varies by duration of stay and neonatal morbidity
- The quality of newborn care is poor in private health facility and lower level health facility

Policy implication

Universal Health Coverage

- Improve access to high quality health care for all mothers and newborns
- Reduce out of pocket expenditure for sick newborn care
- Increase attention to mothers and newborns during the COVID-19 pandemic

