

## **Rational antibiotic policy reduces mortality, duration of nicu stay in a sncu of the district hospital**

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**Introduction:** Misuse of antibiotics is one the most common reason for drug resistant HAI and increased mortality in intensive care units, more so in the neonatal units. There is an urgent need to optimize the use of antibiotics across all neonatal settings.

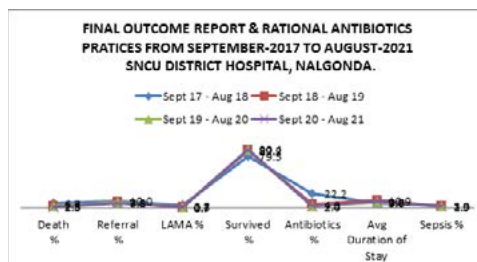
**Aim:** To rationalize antibiotic consumption in our unit

**Methodology:** In this observational study we evaluate the effects of introduction and implementations of an antibiotic prescription form in all admitted neonates in our unit from September 2017 to August 2021. MS Excel and SPSS software were used to tabulate and calculate the data.

**Results:** During the study a total of 5170 neonates were admitted to the SNCU. The figures show the neonatal admissions and relation of antibiotic usage to neonatal mortality. There was a significant decrease in antibiotic consumption (22.2% to 4.9% to 2.2% to 3.6%). There was significant decrease in total antibiotic days (1179 vs 196 vs 158 vs 254). A significant reduction (p-value < 0.001) in antibiotic consumption in pre and post intervention phase and also in the years post intervention phase. Also the death rate in infants with also reduced with the introduction of antibiotic policy (p<0.001). The proportion of infants staying for >24 hours reduced significantly with the introduction of antibiotic policy. There was a significant reduction in the cost to the unit and cost per patient.

**Conclusion:** A simple use of antibiotic prescription and strict adherence to its compliance is likely to reduce antibiotic usage and result in reduction in neonatal mortality and hospital duration.

Year	Death %	Referral %	LAMA %	LAMA %	Survived %	Survived %	Antibiotics %	Antibiotics %	Abs Duration of Stay	Sepsis %	
Sept 17 - Aug 18	6.8	6.7	192	10.0	38	3.7	808	79.5	22.2	7.7	3.3
Sept 18 - Aug 19	2.9	2.5	92	8.0	21	1.8	1014	87.7	4.9	10.0	2.5
Sept 19 - Aug 20	3.7	3.3	125	7.8	11	0.7	1445	89.2	3.0	8.0	1.9
Sept 20 - Aug 21	2.5	1.8	89	7.1	10	0.7	1256	90.4	3.3	2.4	1.9



### **Biography**

Damera Yadaiah Working as a consultant pediatrician at District Head Quarters Hospital, Nalgonda since 25 years. Working in SNCU from 2008 as civil surgeon, hod. Instrumental in establishing 1st NICU at District Hospital, Nalgonda in 2008. He is working to strengthen the FBNC in Telangana State to reduce NMR. Discharged 10,000 babies till date, Discharged 800 babies < 1500gm, smallest baby discharged 650gm, 28wk GA, 1st of its kind in any District Hospital.

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**Received Date:** May 10, 2022; **Accepted date:** May 12, 2022; **Published date:** June 30, 2022