

INTRODUCTION

Survival in extreme prematurity has improved dramatically over the years, enabling better outcomes in difficult pregnancies.

OBJECTIVES

To evaluate the outcomes in extreme prematurity (less than 28 weeks) over 12 years (2012-2023) at Surya Hospital and also assess long term morbidity.

MATERIALS AND METHODS

Neonatal outcomes were assessed over 12 years from 2012 to 2023 at Surya Hospital. Long term outcomes were assessed as per BSID scales (Bayley Scales of Infant and Toddler Development)

RESULTS

997 neonates (≤28 weeks) were admitted in NICU from 2012-2023. The overall survival was 72.3%. Of these 337 neonates had a gestational age of 23 to 25 weeks. 2012 – 2023 data for <28 weeks - 12 years: Overall admitted - 997, survival - 721/997 (72.3%) and deaths - 276

Progress over the years: 2012-2017 v/s 2018-2023			How do we fare - Benchmarking					Bayley Scales of Infant Development Complementary assessment 2-3 years BSID Version 3: you can assess upto age 42 months (1 hour per baby) Different domains tested: Objective: Motor, Cognition, and Language Scales Questionnaire to parents: Social-Emotional Scale	
GA	Survival 2012-2017	Survival 2018-2023	GA	Surya Survival (2018-2023)	Canada CNN (2021)	USA (2013-2018) NICHD- NRN	AIIMS New Delhi (2013-2018)		
23 weeks	2/18 (11%)	19/38 (42%)	23 weeks	42%	35%	48%	--	%	Major Development Impairment
24 weeks	20/49 (41%)	46/73 (63%)	24 weeks	63%	68%	68%	9.1%	47	None in any domain
25 weeks	28/56 (50%)	80/102 (78%)	25 weeks	78%	77%	78%	33%	31	In 1 domain
26 weeks	57/83 (69%)	88/108 (81.5%)	26 weeks	81.5%	90%	86%	33%	22	In 2 domains
27 weeks	64/94 (68%)	115/127(90.5%)	27 weeks	90.5%	91%	90%	69.2%	13	In all 3 domains
28 weeks	99/130 (76%)	106/119 (89%)	28 weeks	89%	96%	94%	62.3%		
Overall	270/430 (63%)	451/567 (79.5%)	Total nos.	567 (6-year)	1644 (annual)	10,848 (5-yr)	148 (6 years)		

CONCLUSION

Excellent tertiary care NICU management optimizes outcomes in high risk pregnancies. Counselling families about outcomes guides couples in their decision-making.