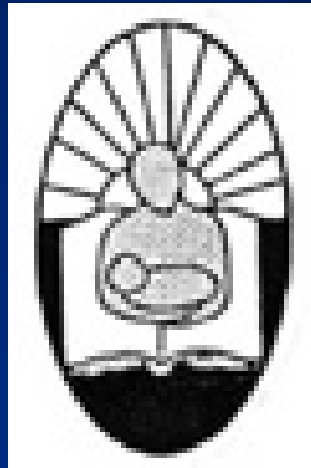


# Implementation of PEP in India



**Dr. Anupama Reddy**  
*Consultant Pediatrician*

**FERNANDEZ**  
HOSPITAL PVT.LTD.

Health Care for Women & the Newborn



# The Challenge

	Burden	Proportion of global burden	Rank in world
Live births	26 million	20%	1
Neonatal deaths	1.2 million	30%	1
Maternal deaths	136,000	25%	1

# The Health System

- The public health system
- Private sector health services
- NGOs and voluntary sector

# Midwifery and Newborn Nursing

Traditional Birth Attendant (TBA)

Auxiliary Nurse Midwife (ANM)

General Nurse Midwife (GNM)

B. Sc Nursing

M. Sc Nursing

# Traditional Birth Attendant (TBA)

Important care providers



40% of deliveries

**Auxiliary Nurse  
Midwife (ANM)**

**General Nurse Midwife  
(GNM)**

**Primary health care  
system**

**Crucial role**

**18 months**

**3 years**

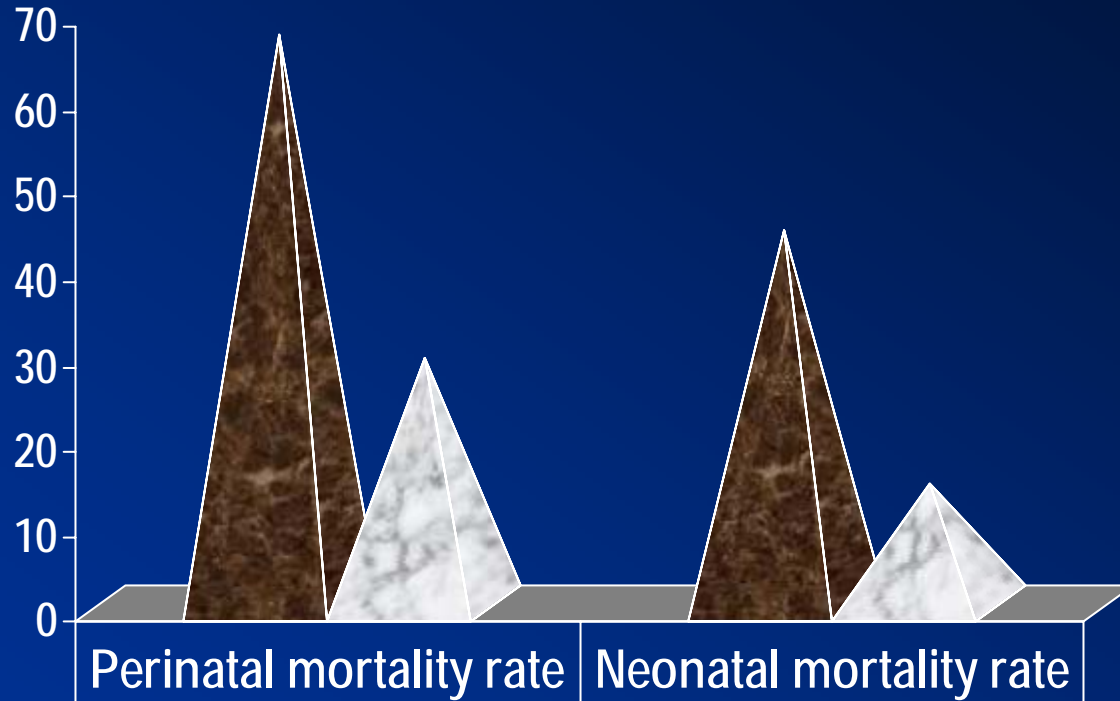
# Fernandez Hospital

- Private Hospital
- Tertiary care perinatal centre
- Training of postgraduate doctors





# India vs Fernandez



India	67	44
Fernandez	29	14

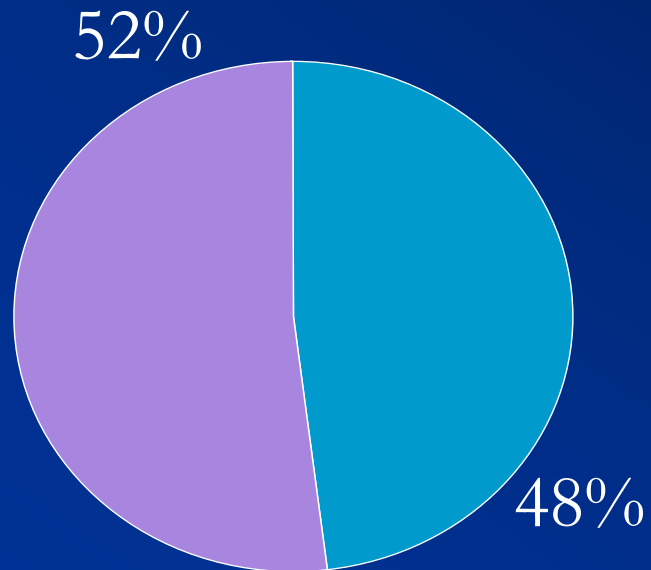
# Fernandez Nursing Staff

- 67 Nurses
- GNMs – 40 nurses
- ANMs – 27 nurses
- Nursing Aids – 2 nos.

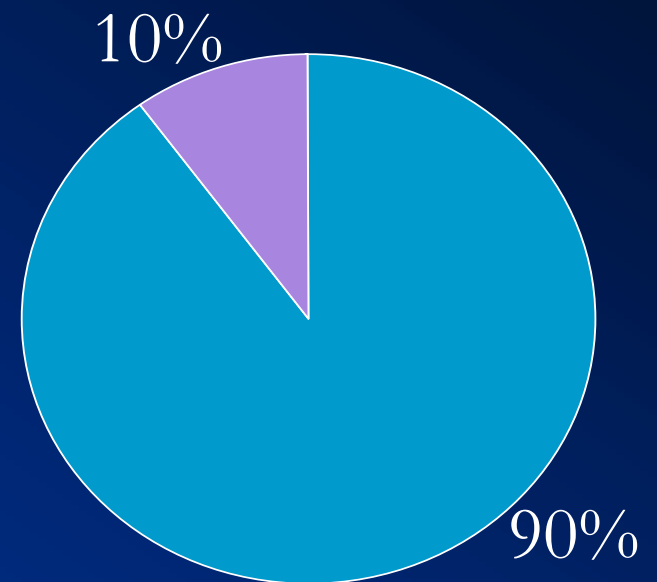
Nurse : Patient ratio is 1:3

# Period of Stay > 3 years

ANMs – 27



GNMs – 40



Left the hospital

Stayed in the hospital

# The Nursing Challenge

- Core of professional , skilled and motivated nurses
- Provision of quality nursing care
- Knowledge of recent advances
- Improving skills

# Education



*Tell me and I forget*

*Show me and I remember*

*Involve me and I understand*

# Perinatal Education Programme

- August 15<sup>th</sup> 2004
- 8 Nurses

6 Auxiliary Nurse Midwife

2 General Nurse Midwife

# Selection Criteria

Dedicated nurses

Served the hospital > 5 years

Neonatal nurses – 4

Obstetric nurses – 2

Ward nurses – 2



# PEP Course

- Maternal Care
- Newborn Care
- Perinatal HIV / AIDS

**2 year course**

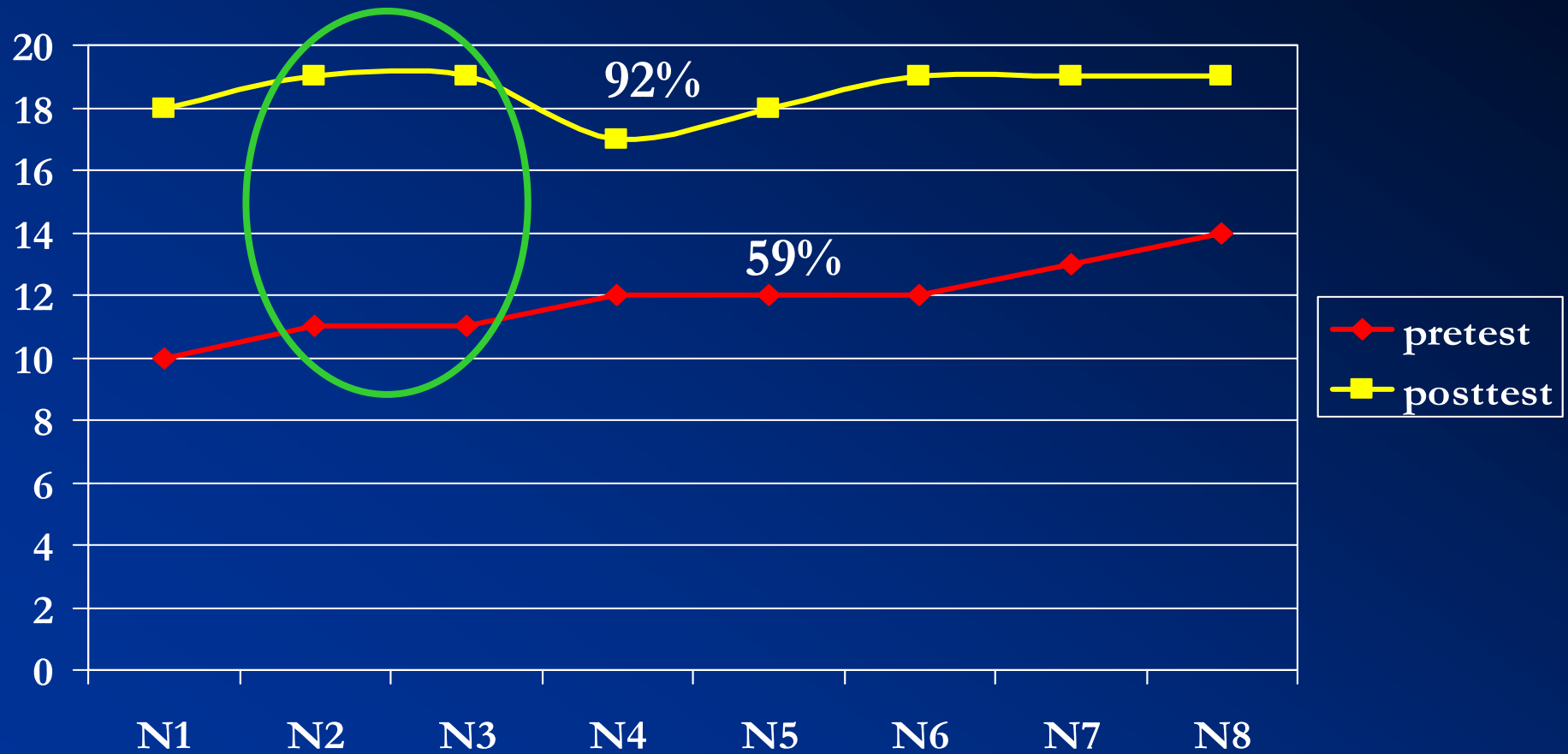
**Alternate sundays**

- Pre-test
- Course material /  
Senior Consultants
- Post-test

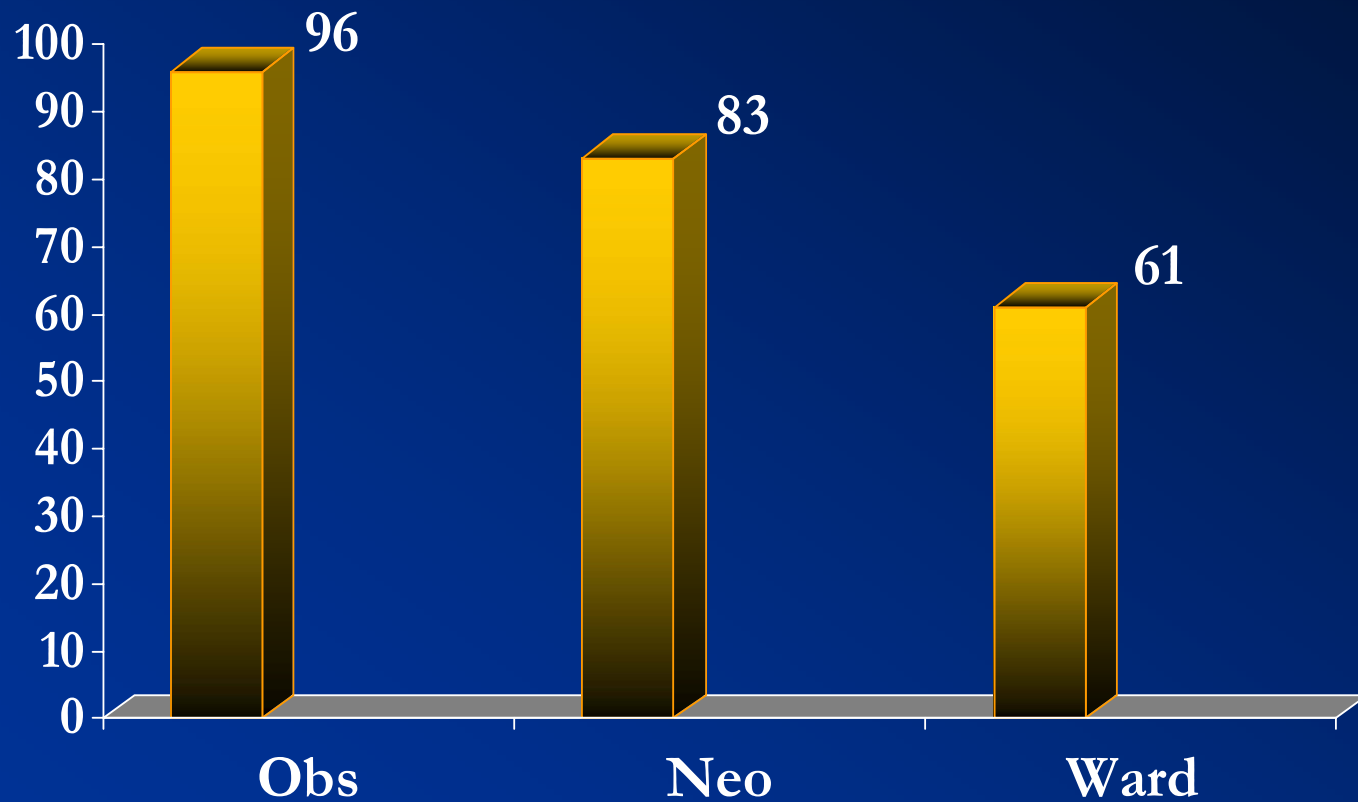
# Interaction



# Pre-test / Post-test



# Final Exam – Results



# Cost

- Total course : Rs. 3,000/-
- Subsidised : Rs. 1,500/-
- Deposit : Rs. 500/- (refundable)
- Paid by nurse : Rs. 1,000/- U.S. \$ 22



## Valedictory Function

## Core group of Nurses



# PEP Course

## Second Batch

8 Nurses – 7 ANMs + 1 GNM

4 Nurses from other hospitals

# Benefits to Hospital

Improved observation skills

Reliability

Loyalty to the hospital





Feeding chart							
Date	Time	Feeding	Amount	urine	motion	R.T.A	sg
8/10/06	8am	EBM feeds	14ml	P	P	NIL	1.1
	10am	"	14ml				
	12noon	"	14ml	P	-	-	
	2pm	"	14ml				
	4pm	"	15ml				
	6pm	EBM feeds	15ml	P	P	NIL	
	8pm	"	15ml				
	10pm	"	15ml	P	P	NIL	
8/10/06	12mn	pre lactogen feeds	16ml				
	2Am	"	16ml				
	4Am	"	18ml	Passed		(pcc clear)	
	6Am	"	16ml				
	8Am	"	16ml	P	P	NIL	
	10Am	EBM feeds	16ml				
	12noon	"	16ml				
	2pm	"	16ml	P	P	NIL	
	4pm	"	16ml				
	6pm	"	16ml				
	8pm	EBM feeds	16ml	P	P	NIL	
	10pm	"	16ml				

FERNANDEZ HOSPITAL

Department of Neonatology

PARENTERAL FLUIDS

M. R. No. 80953 ANC No. \_\_\_\_\_ Date: 23/10/06 Gestational Age: 29wks  
 Name: Inf. Sai pranath Father's Name: W/o Shiva Kumar  
 Day of Life: 8 Birth Weight: 635 grams Previous Day's Weight: 690 grams Today's Weight: 710 grams

**FEEDS**  
 1. 5% BP 104 ml at 4hr ml/hr, from \_\_\_\_\_ am/pm  
 + Calcium 4ml  
 2. \_\_\_\_\_ at \_\_\_\_\_ ml/hr, from \_\_\_\_\_ am/pm  
 3. \_\_\_\_\_ at \_\_\_\_\_ ml/hr, from \_\_\_\_\_ am/pm  
 Fluids requirements 170+10 ml/kg/day Total = 150ml

Mode: Tube  
 Amount: < 3ml x 6 feeds  
4 ml x 6 feeds  
 Type: EBM  
 Total: 42ml

Time	Intake					Total	Output				Total	SHIFT 1 Remarks	
	Mode			Type			Urine	Stool	Vomitus / Aspirate	Total			
	Gavage	Paladay	Breast	EBM	Formula								
												Parenteral <u>27ml</u>	
												EBM <u>9ml</u>	
												Formula	
8 am	✓			2ml								Blood Product	
10 am	✓			3ml			✓					Total Input <u>36ml</u>	
12 N	✓			3ml			✓	✓				Total Output	
2 pm	✓			3ml			✓					Parenteral <u>27ml</u>	SHIFT 2 Remarks
4 pm	✓			3ml								EBM <u>9ml</u>	
6 pm	✓			3ml			✓	✓				Formula	
8 pm	✓			3ml								Blood Product	
10 pm	✓			4ml			✓					Total Input <u>36ml</u>	
12 MN	✓			4ml								Total Output	
2 am	✓			4ml								Parenteral <u>57ml</u>	SHIFT 3 Remarks
4 am	✓			4ml								EBM <u>20ml</u>	
6 am	✓			4ml			✓	✓				Formula	
												Blood Product	
												Total Input <u>72ml</u>	
												Total Output	
24 Hours: Parenteral <u>108ml</u> Enteral Feeds <u>38ml</u> Blood Product											TOTAL INPUT <u>146ml</u>		
Urine Aspirate Others											TOTAL OUTPUT		
COMMENTS:													

# Benefits to Nurse

Improved cognitive skills

Better attitude

Respect from colleagues

# Benefits to Nurse

Improved practical skills



# Benefits to Nurse

Increased confidence



# Benefits to Nurse

## Salaries



# Problems

Language – English

Families / Church

Coordinating

# Future Plans

- Separate Neonatal and Obstetric classes
- Power point presentations
- Public sector / National Neonatal Forum
- Responsibilities – Nurses

**Is PEP Possible ?**



Our Indian model  
Motivated doctors  
Dedicated nurses

PEP

*The only option  
for  
optimum perinatal care*