



# Dr Sonia Sunny

## India

*Management of menopausal problems  
in a primary health care setting*



# Introduction



Increased life span- A New Phenomenon



Average Lifespan-69.9 years



Life Events- Menarche, Childbirth & Menopause



Average age at menopause – 45 years



Entry into health risk zone



Lack of knowledge regarding menopause and related aspects



Need empowerment to live healthy

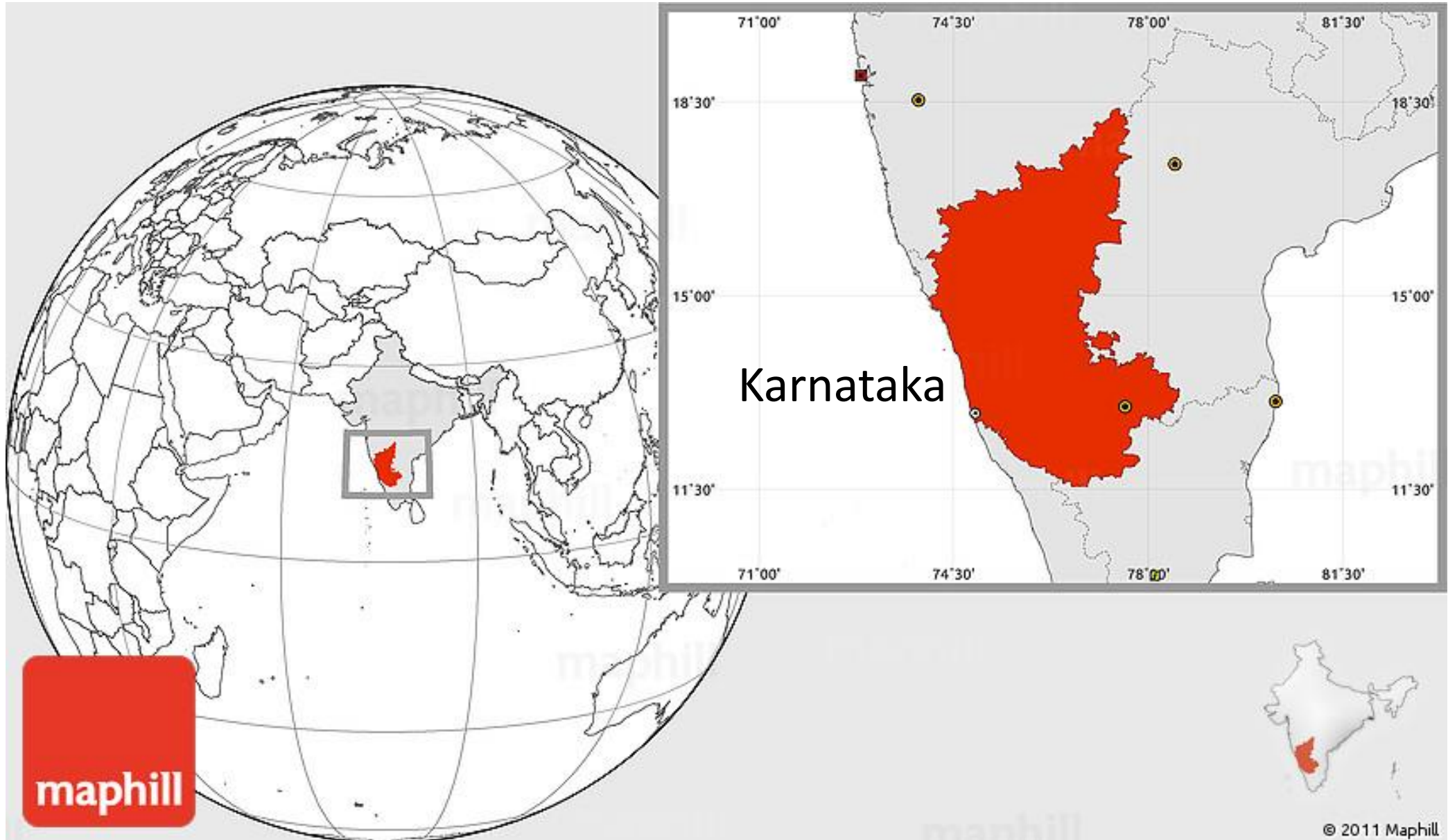


Better quality life



43 Million out of 1 Billion

# Background



# Nurse Led Education Program in Management of Menopausal Problems in a Primary Health Care Setting.

Sonia Sunny



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# Background



Primary Health Centre

Women of Devanahalli





# Women of Karnataka



- Occupation: Agriculture
- Literacy:69%



# Research Question

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What is the effect of a Nurse Led Educational Program on knowledge and reported practice regarding management of menopausal problems among women residing in Devanahalli Primary health care setting, South India?

# Research Methodology based on Ernestine Wiedenbach's Helping Art of Clinical Nursing Theory

**Central Purpose**  
**Management of Menopausal Problems**

- ➔ Identification of Need For Help	
<b>Population:</b> All women, residing in Devanahalli Primary Health Care	
<b>Sample Size:</b> 414 using power analysis.	
<b>Sampling Technique:</b> Multi-Stage cluster sampling with Simple Random Sampling.	
<b>Tool:</b> Structured Questionnaire Structured Checklist	
<b>Administrative Permission:</b> From Directorate Woman identified at residence with help of PHC staff.	
<b>IERB</b>	<ul style="list-style-type: none"> <li>✓ Obtained Written consent</li> <li>✓ Information Sheet</li> </ul>
<b>Pre-Test</b>	Interview in private at residence 35-45 mins
<b>Analysis</b>	Need for Knowledge Healthy practice

**Ministering the Needed Help.**  
Development and delivery of NLEP

Prescription	Realities
<b>3 Componentets</b> <ul style="list-style-type: none"> <li>Lifestyle Modification</li> <li>Diet Modification</li> <li>Demonstration of 4 Yoga postures, Breathing &amp; Relaxation Tech</li> </ul>	<b>Agent:</b> Underwent 6 months. YICourse <b>Recipient:</b> 414 women aged 45-55 Yrs. <b>Goal:</b> ↑ Knowledge Repo. Practice
<b>NLEP Fidelity:</b> Adherence Competence	<b>Means:</b> PHC Nurse Community Health Worker RCH Worker Home Practice Log Sheet Booster NLEP – 2 Weeks
<b>Delivery</b> In 1 hour In Local language By Investigator On Prefixed dates In groups of 10-12	<b>Framework:</b> Pre-School in each village

**Validation of Provided Help**

**Post-Test: After 4 Wks: Among 394**

**Analysis & Interpretation**

<b>Descriptive Statistics</b>	Frequency, Percentage, Mean and Standard Deviation
<b>Inferential Statistics</b>	Comparison-Wilcoxon Signed Rank Test, Correlation-Spearman's Rho. Association - Chi Square Test

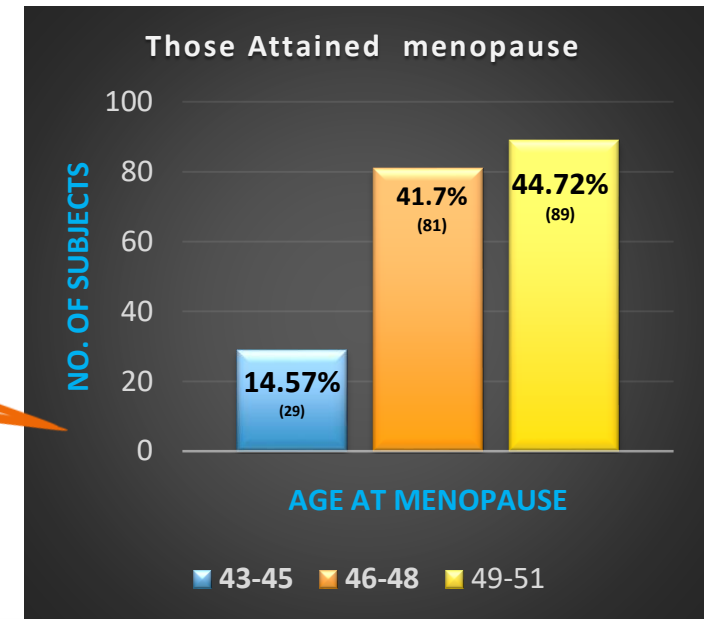
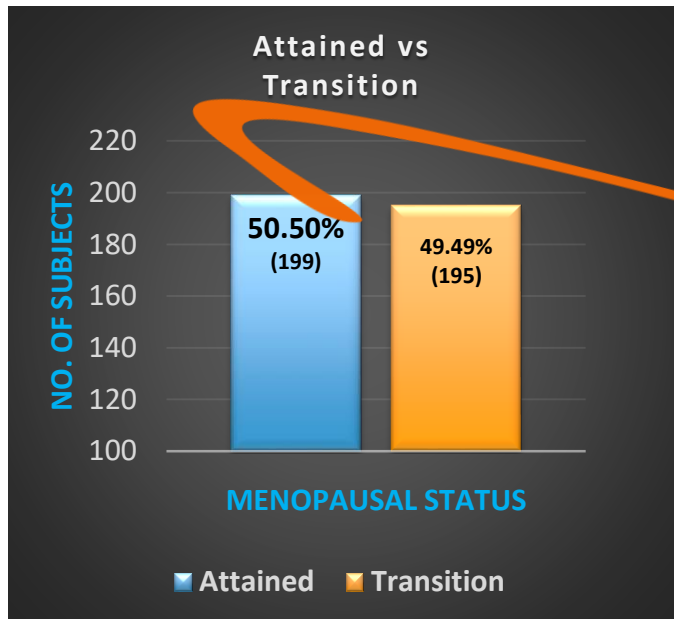
Adequate Knowledge

Inadequate Knowledge

- - - Feedback - - -

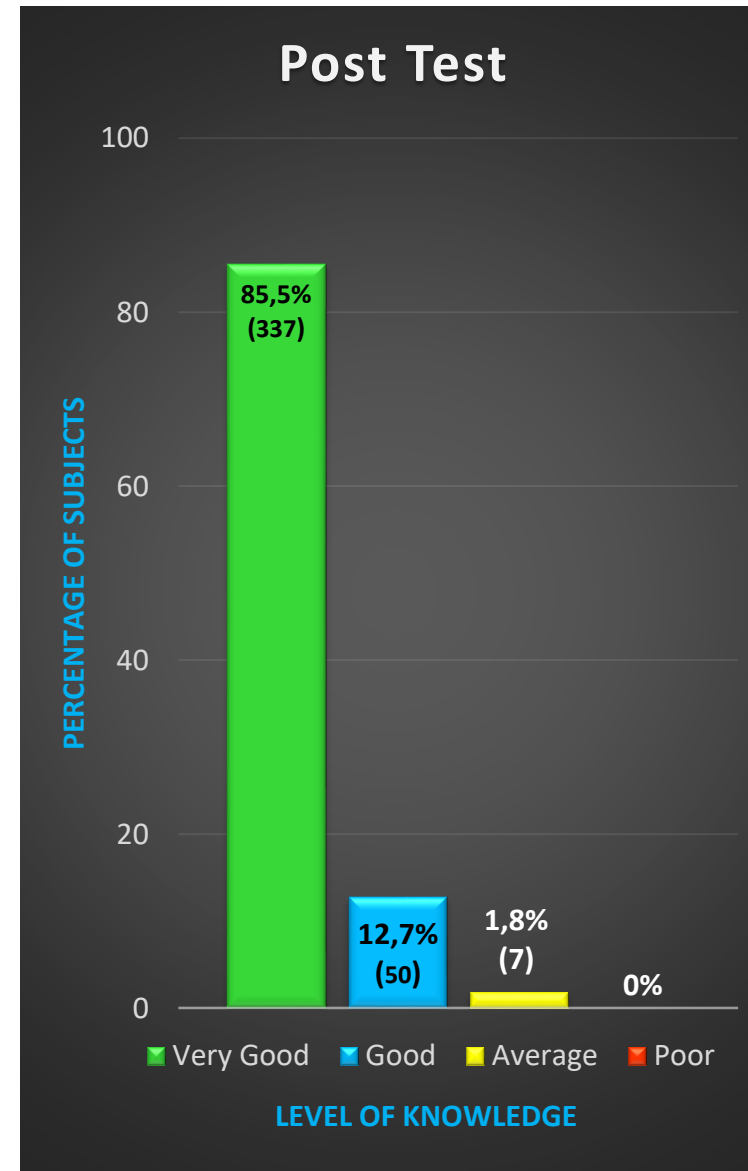
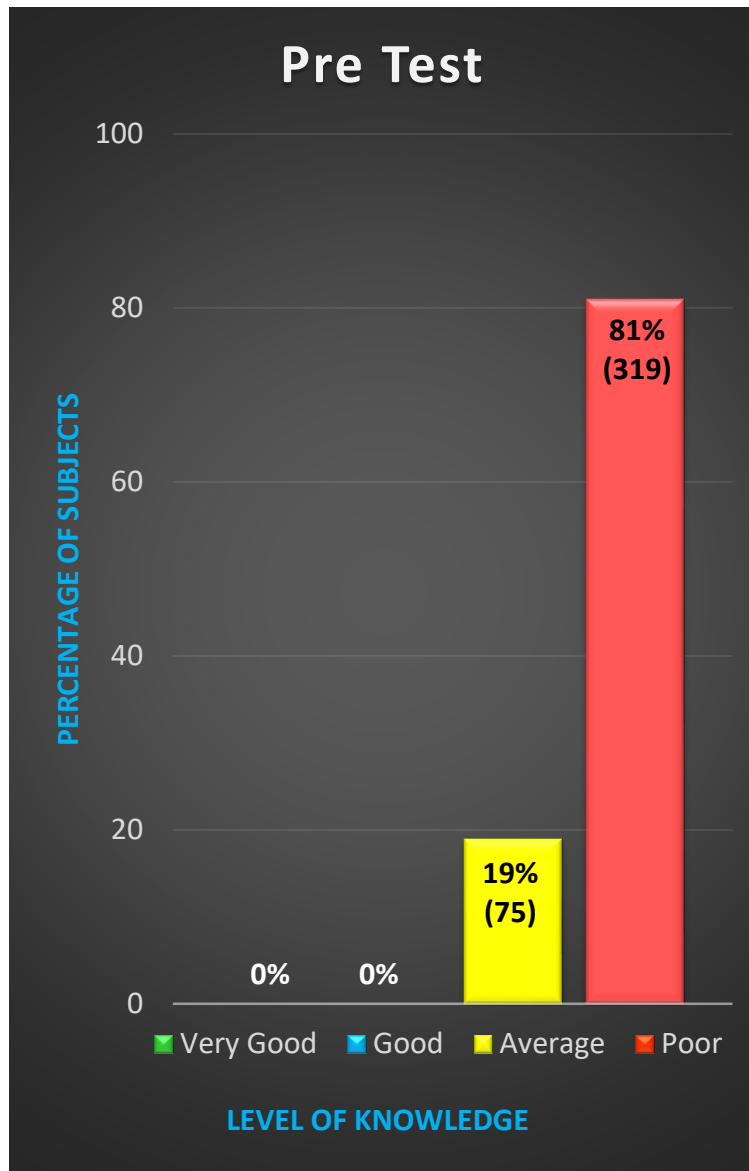


# Results: Baseline variables, n=394

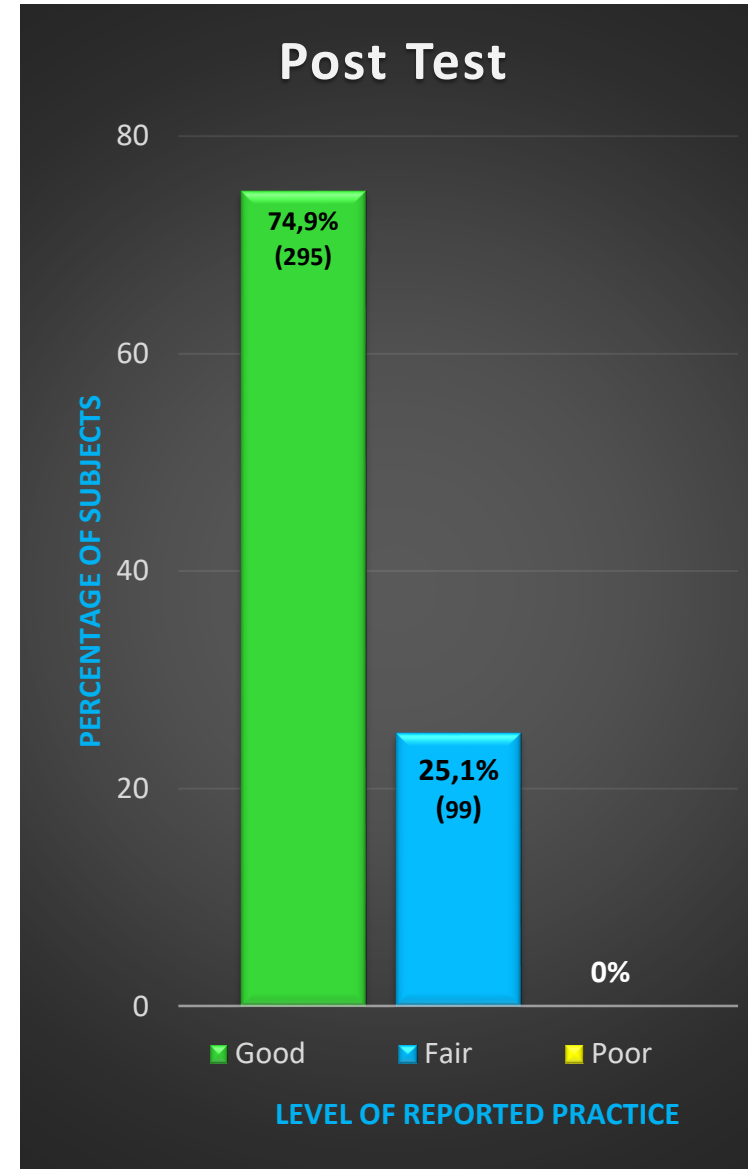
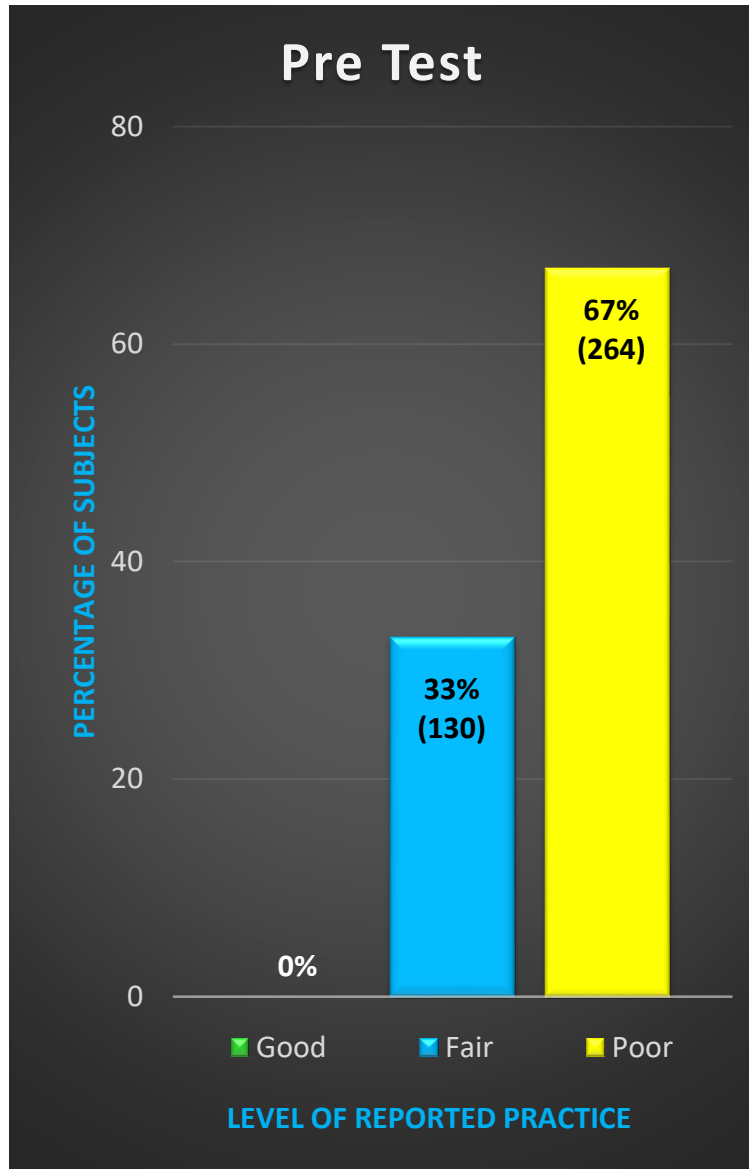


<b>Average Age at menopause</b>	<b>47.59</b> ( $\pm 1.99$ )
Currently non-menstruating	<b>73.90%</b> (291)
Menstruating	<b>26.10%</b> (103)
Spontaneous menopause	<b>68.52%</b> (270)
Surgical menopause	<b>5.32%</b> (21)
Illiterates	<b>70.30%</b> (277)
Laborers	<b>71.60%</b> (282)
Tobacco chewing	<b>54.10%</b> (213)

# Assessment of pre and post-test knowledge scores n=394



# Assessment of pre and post-test reported practice scores, n=394



# Dimension wise comparison of pre and post-test knowledge scores, n=394

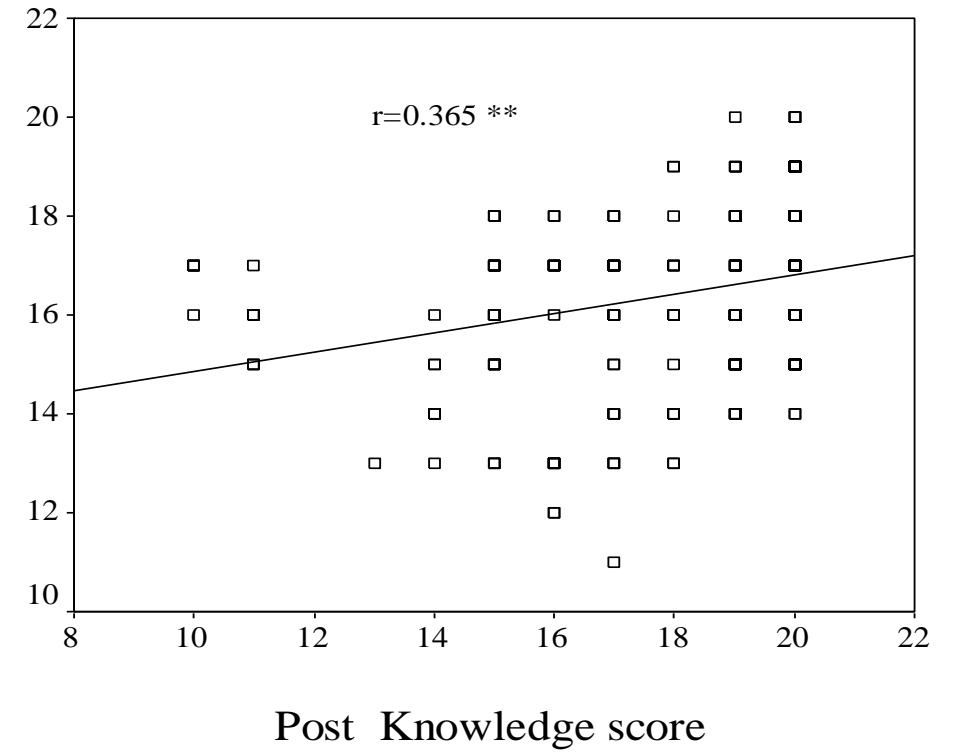
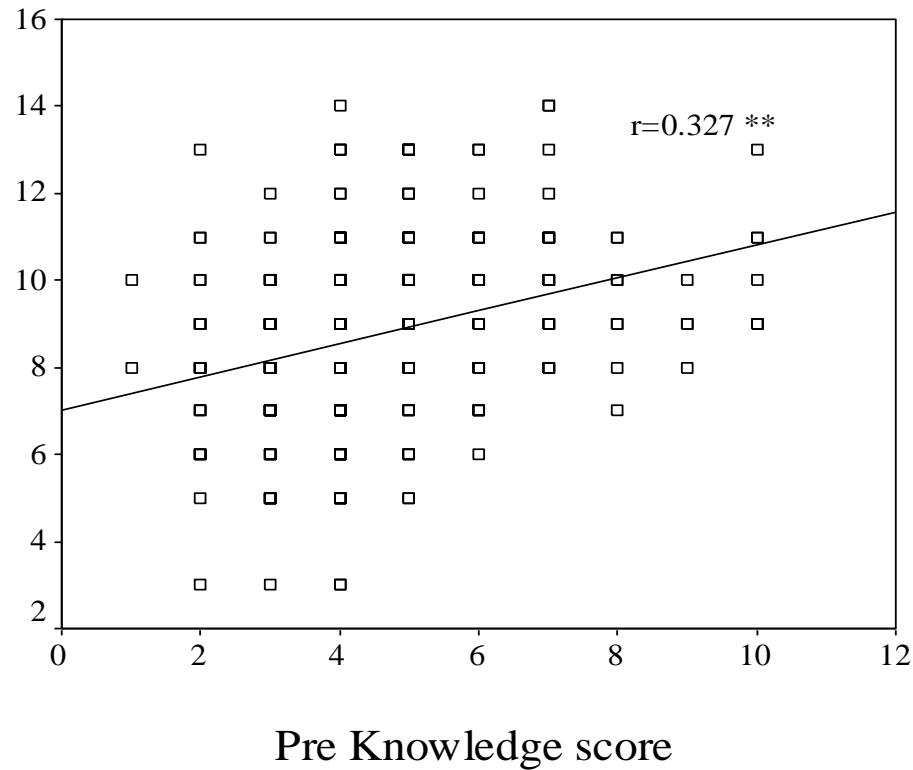
Knowledge Dimension	Pre Test		Post Test		Mean D	Z Value
	Mean	SD	Mean	SD		
General concepts	1.07	0.77	4.32	1.19	3.25	17.07***£
Signs and symptoms	1.03	0.86	3.76	0.66	2.73	17.32***£
Management by lifestyle modification	1.19	0.90	5.68	0.63	4.49	16.61***£
Management by diet modification	0.72	0.84	2.75	0.65	2.03	17.37***£
Management by Yoga, breathing and relaxation Technique	0.48	0.52	1.84	0.45	1.36	16.87***£
<b>Overall Knowledge</b>	<b>4.49</b>	<b>1.59</b>	<b>18.35</b>	<b>2.3</b>	<b>13.86</b>	<b>t=97.594***</b>



# Dimension wise comparison of pre and post-test reported practice scores, n=394

Reported practice Dimension	Pre Test		Post Test		Mean D	Z-Value
	Mean	SD	Mean	SD		
Practice of lifestyle modification	2.88	0.87	4.99	0.72	2.11	17.27***£
Practice of diet modification	3.38	1.12	6.34	1.12	2.96	17.14***£
Practice of Yoga, breathing and relaxation technique	2.46	0.94	5.14	0.68	2.68	17.24***£
<b>Overall Reported Practice</b>	<b>8.72</b>	<b>2.93</b>	<b>16.47</b>	<b>2.52</b>	<b>7.75</b>	<b>t=75.07***</b>

# Correlation, n=394



- ✓ Scores dense between 2 and 6 in the pre-test & in post-test cluster towards 14 and 20.
- ✓ Pre-test 'r' = 0.327 and Post-test 'r'=0.365 showing a positive correlation.

# Association, n=394

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Chi square test revealed **no significant association** of post-test knowledge and reported practice scores with following baseline variables.

- ✓ Age,
- ✓ Religion,
- ✓ Type of family,
- ✓ Number of children,
- ✓ Educational status,
- ✓ Occupational status,
- ✓ Menstrual status,
- ✓ Menstrual cycle pattern and
- ✓ Menopausal status.

# Discussion & Conclusions

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- ✓ There was a highly significant difference observed in knowledge and reported practice between pre and post-test.
- ✓ A positive correlation was observed which implies as knowledge increased the reported practice also improved.
- ✓ NLEP was found to be very effective in improving the knowledge and reported practice
- ✓ No significant association observed between post-test knowledge and reported practice scores with selected baseline variables.
- ✓ Basis for Policy Makers : Health promotion and illness prevention Strategies and techniques
- ✓ Currently: No health program for specific health needs of women in midlife.



# Nursing Implications

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- Provides Evidence for Nurses practicing at Primary Health care setting.
- Study indicates need to strengthen health promotional activities such as Information Education and Communication.
- Foundation for Menopause Education among nurses in India.

# Future Directions

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- ✓ Women involved in the study at Neraluru village formed a 'Women's Health Club' locally by their own motivation in 2013.
- ✓ Making this NLEP popular among nurses so that they can utilize it for an overall health promotion of midlife women.
- ✓ To inspire Nurse administrators in organizing Women's Health Clinics addressing specific health needs and problems of menopausal transition.

# References

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- Unni J. Third consensus meeting of Indian Menopause Society (2008): A Summary. *Journal of Midlife Health*. 1:43-7.
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# Acknowledgement

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*Thank You!*

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**Slides for QA**

# Objectives

Assess

- Pre and post interventional knowledge and reported practice regarding management of menopausal problems among rural women

Compare

- Pre and post interventional knowledge and reported practice regarding management of menopausal problems among rural women

Correlate

- Knowledge with reported practice regarding management of menopausal problems

Associate

- Pre and post interventional knowledge and reported practice regarding management of menopausal problems with selected baseline variables

# Hypotheses

**H1**

- There is a significant difference between pre and post test knowledge score regarding management of menopausal problems among rural women

**H2**

- There is a significant difference between pre and post interventional reported practice score regarding management of menopausal problems among rural women.

**H3**

- There is a positive correlation of knowledge and reported practice score regarding management of menopausal problems among rural women

**H4**

- There is a significant association of post test knowledge score regarding management of menopausal problems with selected base line variables among rural women.

**H5**

- There is a significant association of post interventional reported practice score regarding management of menopausal problems with selected base line variables among rural women

# Research Methodology

## Target Population

- All women, residing at Devanahalli Tehsil, Bengaluru rural district, of Karnataka.
- As per the census data obtained, there were 4754 women in the age group of 45 -55 years

## Accessible Population

- 1635 women who were in pre menopause and menopause phase who fulfilled inclusive criteria

## Research Design

- Quasi experimental one group pretest – post test design

## Sampling Technique and Sample size

- Multistage cluster sampling technique
- Sample size calculated through power analysis, 100 women from 3 large clusters and 114 from remaining clusters selected. Total sample size 414 women aged 45-55 years

## Intervention

- Interventional package included health education on life style and dietary modification. Demonstration of yoga, breathing and relaxation technique

## Instruments

- 1. Questionnaire to collect demographic data 2. Structured questionnaire to assess knowledge on menopausal problems 3. Structured check list to assess the reported practice on managing menopausal problem 4. Menopause Rating Scale to assess menopausal problems

## Analysis and Interpretation

- 1. Descriptive statistics-frequency, Percentage, Mean and Standard Deviation
- 2. Inferential statistics-Paired t' test for comparison, 'r' for correlation-test for assessing relationship and  $\chi^2$  test for determining association

# Sampling Criteria

**Sample:** Women residing at rural areas of Devanahalli Tehsil aged 45 and 55 years were the sample for the study.

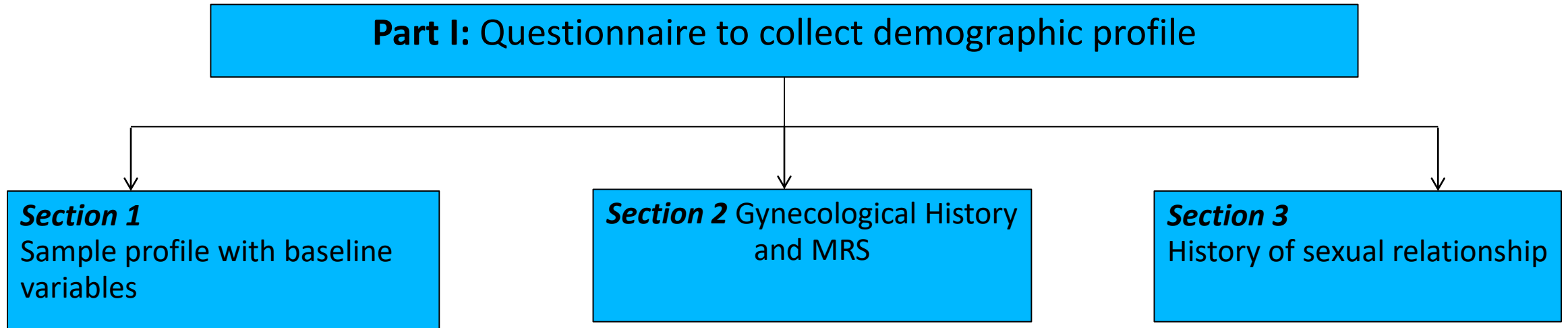
## Inclusion criteria

- ✓ **Women aged 45-55 years**
- ✓ **Women interested to undergo specific interventions**
- ✓ **Women who could communicate in Kannada or English.**

## Exclusion criteria

- ✓ **Exposed to similar interventions**
- ✓ **Undergoing gynecological treatment**
- ✓ **Women on treatment for menopausal problems**
- ✓ **Women with hypertension, diabetes, thyroid related disorders**

# Instruments used



**Part II:** Structured questionnaire to assess knowledge regarding management of menopausal problems. It included 20 questions. Each question had one correct answer carrying a score of 1.

**Part III:** Structured checklist to assess reported practice. There were 20 items, each item had 'yes or no' dichotomous question.



# Intervention

## Interventional package

### Nurse lead health education on Lifestyle modifications

- **Maintain healthy body weight**
- **Regular walking as exercise**
- **Pelvic floor muscle training exercise**

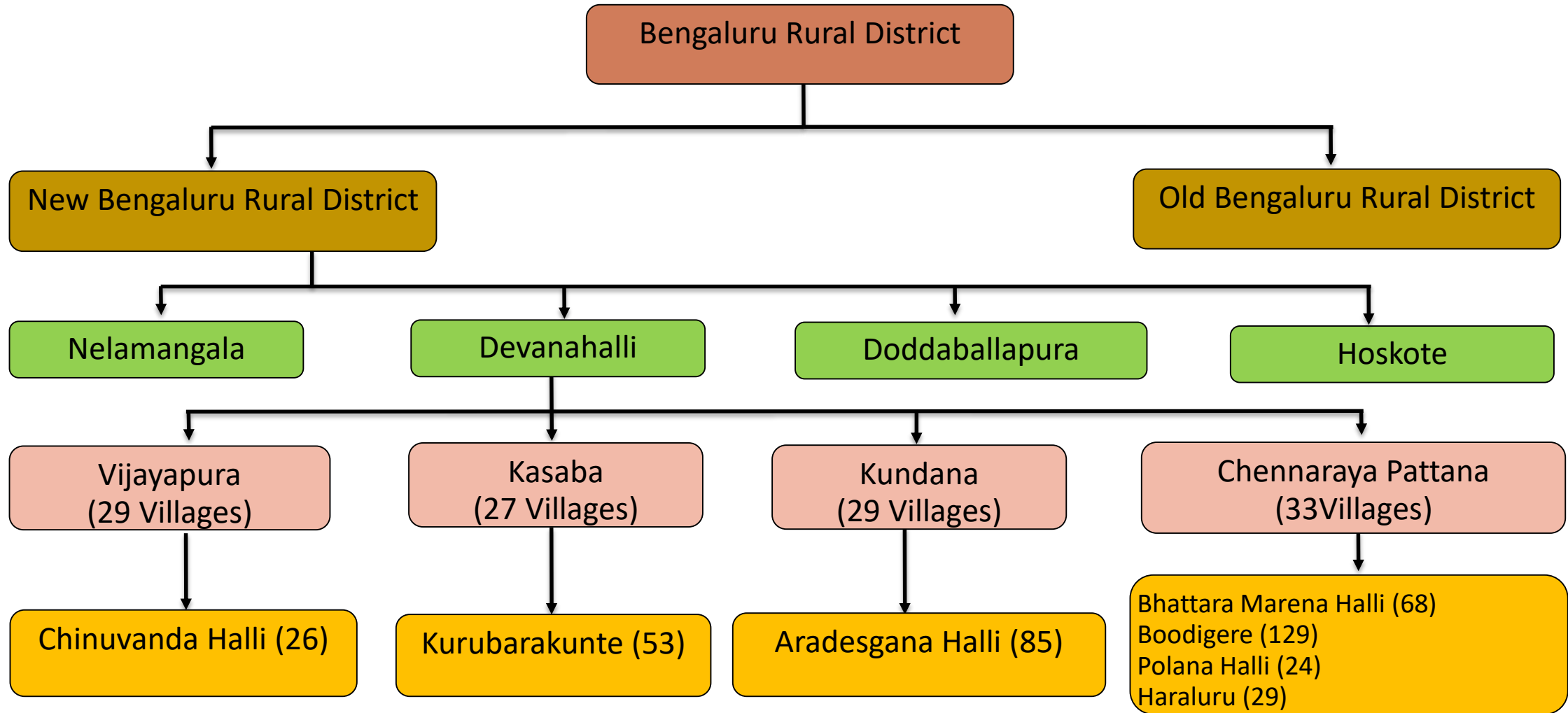
### Nurse lead health education on Dietary modifications

- **Protein rich diet**
- **Calcium rich diet**
- **High fiber diet**

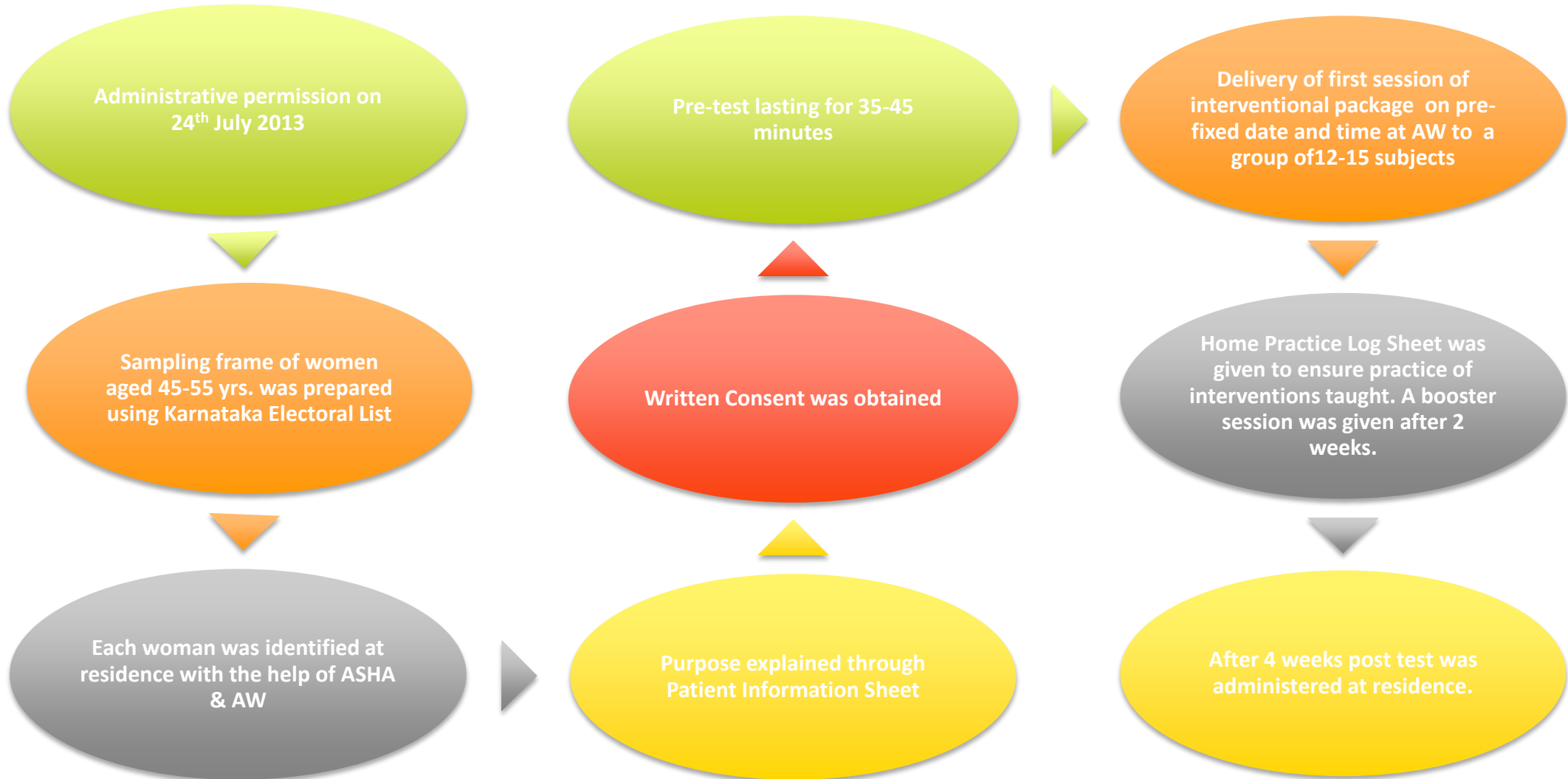
## Yoga with Relaxation and Breathing Technique

- **Suptha Baddha Konasana**
- **Adhomukha Svanasana**
- **Sarvangasana**
- **Viparitha Karani**
- **Relaxation Technique(Instant Relaxation Technique & Quick Relaxation Technique)**
- **Breathing Technique(Abdominal breathing & Breathing with feeling)**

# Sampling Technique



# Data Collection Procedure



# Intervention Fidelity

