

# A STUDY TO ASSESS THE EFFECTIVENESS OF AUTOGENIC TRAINING IN REDUCING INSOMNIA AMONG OLDER ADULTS IN SELECTED OLD AGE HOMES, ERODE.

1. AUTHOR/RESEARCHER.

Mrs. KRISHNAVENI. P., M.Sc., (Nursing)

ASST. PROFESSOR

DEPARTMENT OF PSYCHIATRIC NURSING, K R COLLEGE OF NURSING, BANGALORE, KARNATA.

2. AUTHOR/RESEARCHER.

Mr. GURUPRASAD. T R., M.Sc. Nursing, (Psychiatric Nursing,), PGDCP, DMH, CPDT.

ASSO.PROF/HOD

DEPARTMENT OF PSYCHIATRIC NURSING, SRI RAMANA MAHARASHI INSTITUTE OF NURSING, TUMKUR, KARNATAKA

# INTRODUCTION

In the Indian epic Mahabharata, a women was always blessed as "sau putravati bhavh" (be mother of hundred sons), because in those days, the prime role of women was childbearing. The situation has not changed much since then as till date in many parts of India, mainly rural areas, the main role assigned to her is that of child bearer. Thus pregnancy is one of the most important events in the life of Indian women. Routine antenatal visits may raise the awareness about the need for care at delivery or give women and their families, familiarity with health facilities that enable them to seek help more efficiently during crisis.

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period <sup>1</sup>. Maternal Health is an important aspect for the development of any country in terms of increasing equity &

reducing poverty. The survival and well-being of mothers is not only important in their own right but also central to solving large broader, economic, social and developmental challenges <sup>2</sup>.

Maternal and child health (MCH) care is the health service provided to mothers (women in their child bearing age) and children. The targets for MCH are all women in their reproductive age groups, i.e., 15 - 49 years of age, children, school age population and adolescents. Throughout the world, especially in the developing countries, there is an increasing concern and interest in maternal and child health care. This commitment towards MCH care gains further strength after the World Summit for Children, 1991, which gave serious consideration and outlined major areas to be addressed in the provision of Maternal and Child Health Care services <sup>3</sup>.

Improved maternal and child health is an important pre-requisite for women's advancement, yet due to low access and utilization of maternal healthcare, women, especially those in rural communities remain vulnerable and underserved. It is evident that the past decade has observed a dramatic improvement in the health of mothers, owing to improved maternal and childcare, nutritional practices and increased availability of low-cost and high impact public health measures such as Oral Rehydration Therapy (ORT) and vaccine for mothers/children <sup>4</sup>.

According to the world health organization (WHO), specific interventions such as iron or folic supplementation for pregnant and postpartum women, vitamin A supplementation for children and postpartum women, malaria prophylaxis intervention such as insecticide-treated nets (ITNs), as well as Intermittent Preventive Treatment in pregnancy (IPTp) and dietary supplementation for pregnant or lactating mothers, have helped improve maternal and child healthcare <sup>5</sup>.

Government of India adopted the Reproductive, Maternal, New-born, Child and Adolescent Health (RMNCH+A) framework in 2013, It essentially aims to address the major causes of mortality and morbidity among women and children. This framework also helps to understand the delays in accessing and utilizing health care services. Based on the framework, comprehensive care is provided to women and children through five pillars or thematic areas of reproductive, maternal, neonatal, child, and adolescent health. The programmes and strategies developed by various divisions are guided by central tenets of equity, universal

care, entitlement, and accountability to provide 'continuum of care' ensuring equal focus on various life stages <sup>6</sup>.

According to recent updates there is several maternal health and child health programmes has been launched in India. Some of the programmes are Pradhan Mantri Surakshit Matrutava Abhiyan (PMSMA), Janani Surakha Yojana (JSY), Janani Shishu Suraksha Karyakram (JSSK) etc. These programmes are providing adequate services to mothers to improve the maternal health prevent complications during child birth and also provide welfare schemes to mothers under slow socio-economic status or from weaker section <sup>7</sup>.

## **REVIEW OF LITERTURE:**

Review of literature is a systematic search of published work to achieve information and details about a research topic. It is a compilation that provides the groundwork for further research (Talbot). It is a key step in a research process. It is a critical examination of publication related to a topic of interest. Review should be comprehensive and evaluative. It helps to plan and conduct the study in a systematic and scientific manner.

AjitBhalchandraDahale, et al. (2020) conducted a multicenter, cross- sectional survey administered to 1,770 elderly primary care patients from 71 government primaryhealth centers in Kerala, India. Insomnia was evaluated by using the Insomnia Severity Index. Basic demographics and information about medical illness were collected. They got valid responses from 1,574 (89%) patients, of whom the mean age was 68.6 years and 55.5% were women. Clinical insomnia was reported by 11.8%, whereas 30.4% had subclinical insomnia. Primary care attendees with subclinical as well as clinical insomnia had increased odds of being older and female and having chronic medical illness compared with those without insomnia.

**Vivian Nguyen, et al. (2020)** reviewed 48 studies for the prevalence of insomnia among older adults. Purpose of the review was to evaluate and summarize providers on factors to consider when assessing and managing insomnia. They found 76 studies from 1/1/16 through 4/4/2019. They concluded that up to 75% of older adults experience symptoms of insomnia. Although one-fifth of older adults are still prescribed sleep medications, cognitive behavioral therapy for insomnia is the first line treatment for insomnia, resulting in short-term and long-term benefits.

A study examined the degree of inequality exist in maternal health care namely full antenatal care (full ANC), skilled attendants at birth (SBA), and postnatal care (PNC) in rural India. The study revealed that a substantial gap across socioeconomic groups exist in utilization of maternal health care has significantly reduced in rural India during 2005–16. The results found a noticeable improvement in maternal health care utilization, especially in utilization of skilled attendants at birth (SBA). During this decade, the concentration index for SBA showed a significant decline from 0.28 in 2005–06 to 0.09 in 2015–16, while that of full ANC declined from 0.47 to 0.32 over the same period, and reduction of inequality in full ANC was least. Further, the results of decomposition analysis suggested that secondary and higher education, mass media exposure, and scheduled tribe contributed a significant share to the inequality. The study concluded that health scheme related to maternal and child health care under NRHM be continued and focused for lower socioeconomic groups and marginalized mothers to reduce maternal health services inequality, particularly in the component of full ANC <sup>28</sup>.

### STATEMENT OF THE PROBLEM:-

### **OBJECTIVES OF THE STUDY**

- To assess the level of insomnia for experimental and control groups among older adults in selected old age homes using the modified Pittsburgh Sleep Quality Index scale.
- To evaluate the effectiveness of Autogenic Training on insomnia for an experimental group among older adults of selected old age home.
- To compare the post-test insomnia scores of experimental and control groups among older adults in selected old age homes.
- To find the association between post-test insomnia scores of older adults and their demographic variables in experimental group.

# **HYPOTHESIS:**

**H1:** There will be a significant difference between the pre-test and post-test insomnia scores in terms of effect of Autogenic Training on reducing insomnia for the experimental group.

**H2:** There will be a significant difference between post-test insomnia scores of experimental and control groups among older adults in selected old age homes.

**H3:** There will be a significant association between post-test insomnia score and their demographic variables in experimental group.

### **OPERATIONAL DEFINITIONS**

# **Effectiveness:**

• In this study effectiveness means, the extent to which the six steps of relaxing exercise has brought out significant reduction in the level of insomnia as measured by the post test score by using modified Pittsburgh Sleep Quality Index scale.

# **Autogenic Training:**

• In this study Autogenic Trainings as impel relaxing exercise that involves series of six mental exercises carried out for 30 minutes by the aged people to reduce the sleep problem.

### Insomnia:

• In this study insomnia means, trouble in initiating and / or staying in sleep lasts more than 3 nights in a week for a month.

# **Older Adults:**

• In this study both men and women aged 55 years and above are referred to as older adults.

# **Old-Age Homes:**

• In this study old age homes means, the place where aged people stay on payment in an assisted living facility, which is run by trust or some people.

### **DELIMITATIONS:**

- The study is delimited to older adults only.
- The data collection periodisde limited tone month.

# **RESULT:**

# SECTION - I: DEMOGRAPHIC CHARACTERISTICS OF ANTENATAL MOTHERS

Table 1: Distribution of antenatal mothers according to age

	1. Age	Frequency	Percentage
a.	Less than 25 years	11	18.3
b.	26-30 years	26	43.3
c.	31-35 years	17	28.3
d.	36 years and above	6	10.0
	Total	60	100

The table 1 depicts that majority 43.3% of subjects were in the age group of 26-30 years, 28.3% of subjects were in the age group of 31-35 years, 18.3% of the subjects were aged Less than 25 years and remaining 10% of them were aged 36 years and above.

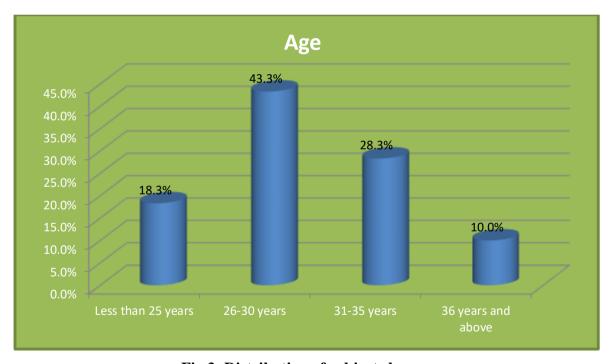


Fig 3: Distribution of subjects by age

Table 2: Distribution of antenatal mothers according to education

N = 60

	2. Education	Frequency	Percentage
a.	Illiterate	2	3.3
b.	Primary education	16	26.7
c.	Secondary education	11	18.3
d.	PUC	21	35.0
e.	Degree and above	10	16.7
	Total	60	100

The table 2 shows that the 35% of the subjects had pre-university education, 26.7% had primary education, 18.3% of the subjects had secondary education, 3.3% are illiterates and 16.7% were graduates.

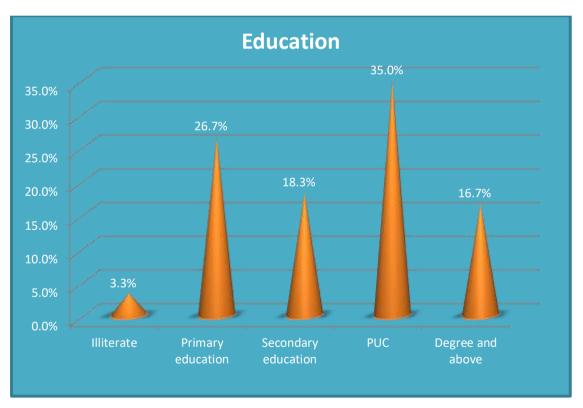


Fig 4: Distribution of subjects by education

Table 3: Distribution of antenatal mothers by occupation

	3. Occupation	Frequency	Percentage
a.	House wife	38	63.3
b.	Coolie	6	10.0
c.	Private employee	11	18.3
d.	Government employee	5	8.3
	Total	60	100

The table 3 depicts that among mothers 63.3% were housewives, 18.3% were private employees, 10% were coolie workers and remaining 8.3% were government employees.

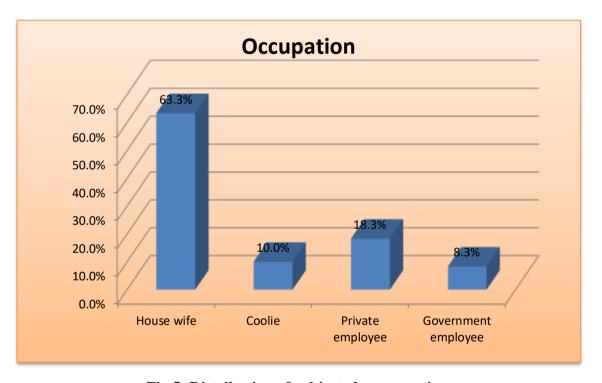


Fig 5: Distribution of subjects by occupation

Table 4: Distribution of antenatal mothers according to religion

N = 60

	4. Religion	Frequency	Percentage
		10	0.1.=
a.	Hindu	49	81.7
b.	Muslim	5	8.3
c.	Christian	6	10.0
	Total	60	100

The table 4 shows that majority 81.7% subjects belong to Hindu religion, 8.3% were Muslims and 10% were Christians.

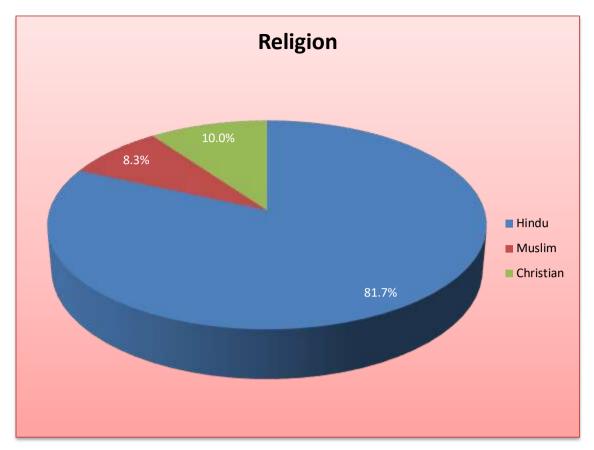


Fig 6: Distribution of subjects by religion

Table 5: Distribution of antenatal mothers by gravid status

5.	Gravida status	Frequency	Percentage
a.	Primi gravida	53	88.3
b.	Multi gravida	7	11.7
	Total	60	100

The table 5 reveals that 88.3% of subjects were primi gravida mothers and only 11.7% were multi gravida mothers.

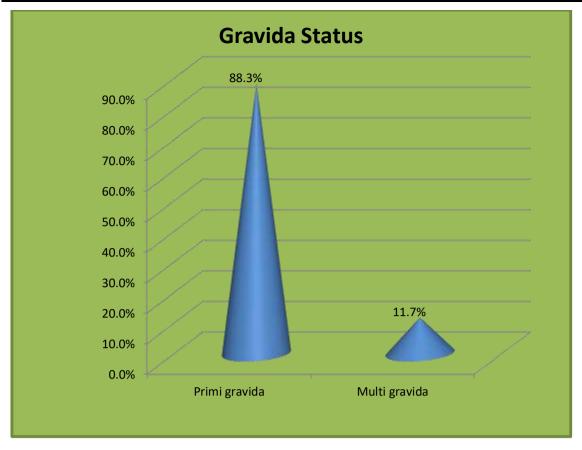


Fig 7: Distribution of subjects by their gravida status

Table 6: Distribution of antenatal mothers according to family income

6. Family Income		Frequency	Percentage	
a.	Less than Rs.5000	5	8.3	
b.	Rs.5001-10000	18	30.0	
c.	Rs. 10001-15000	29	48.3	
d.	More than Rs.15001	8	13.3	
	Total	60	100	

The table 6 shows that among mothers majority 48.3% of subjects had income between Rs. 10001-15000, 30% had family income between Rs.5001-10000, 8.3% had income less than Rs. 5000 and only 13.3% had income more than Rs.15001.

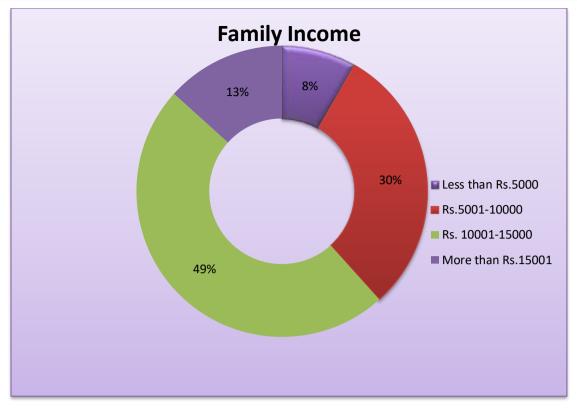


Fig 8: Distribution of subjects by family income

Table 7: Distribution of antenatal mothers according source of information

7.	Source of information	Frequency	Percentage
a.	Mass media	4	6.7
b.	Friends	19	31.7
c.	Relatives	19	31.7
d.	Health personnel	18	30.0
	Total	60	100

The table 7 reveals that 31.7% of subjects gets information by their friends, 31.7% from relatives and 30% of them had health personnel as their source of information.

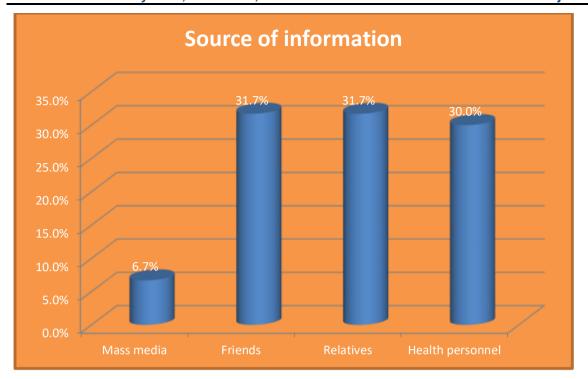


Fig 9: Distribution of subjects by present source of information

# SECTION II: KNOWLEDGE LEVEL OF ANTENATAL MOTHERS REGARDING THE MATERNAL AND CHILD HEALTH SERVICES

Table 8: Overall pretest and post test knowledge scores of the mothers.

N = 60

Knowledge level		Pre to	est	Post test		
	into weage level	Frequency	%	Frequency	%	
a.	Inadequate knowledge	34	56.7	4	6.7	
b.	Moderate knowledge	26	43.3	15	25.0	
c.	Adequate knowledge	0	0	41	68.3	
	Total	60	100	60	100	

Table 8 depicts that majority 56.7% of the mothers had inadequate knowledge and 43.3% had moderate knowledge in the pretest. After administration of planned teaching programme 68.3% of the subjects had adequate knowledge, 25% had moderate knowledge and only 6.7% had inadequate knowledge regarding Maternal and child health services in the post test.

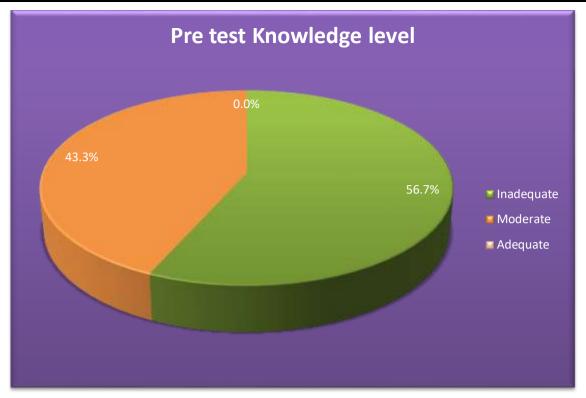


Figure 10: Overall pre test knowledge level of antenatal mothers

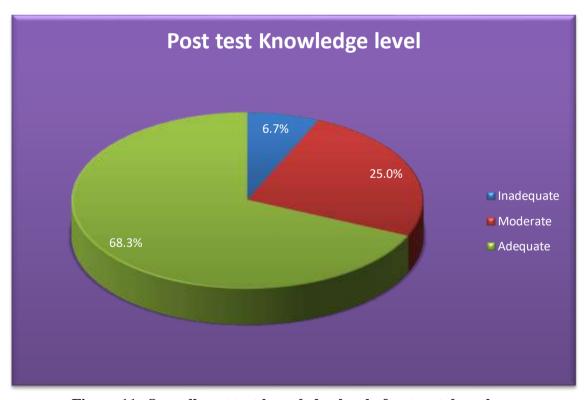


Figure 11: Overall post test knowledge level of antenatal mothers

Table – 9: Area wise analysis of pretest knowledge scores of antenatal mothers

Knowledge aspects	Number of Items	Maximum Score	Mean	Mean %	Median	SD
a. General information on PHC	7	7	3.22	46.0	3	1.698
b. Maternal services available at PHC	13	13	6.23	47.92	6	2.424
c. Immunization and child care services	10	10	4.25	42.5	5	1.910
Overall	30	30	13.7	45.66	15	5.030

Table 9 depicts that the maximum mean percentage obtained by the mother in pretest is in the aspect of Maternal services available at PHC (47.92%), followed by Immunization and child care services (46%), and least mean knowledge score (42.5%) found in the aspect of General information on PHC. Therefore overall knowledge scores of respondents were found to be 13.7 (45.66%) with standard deviation 5.030.

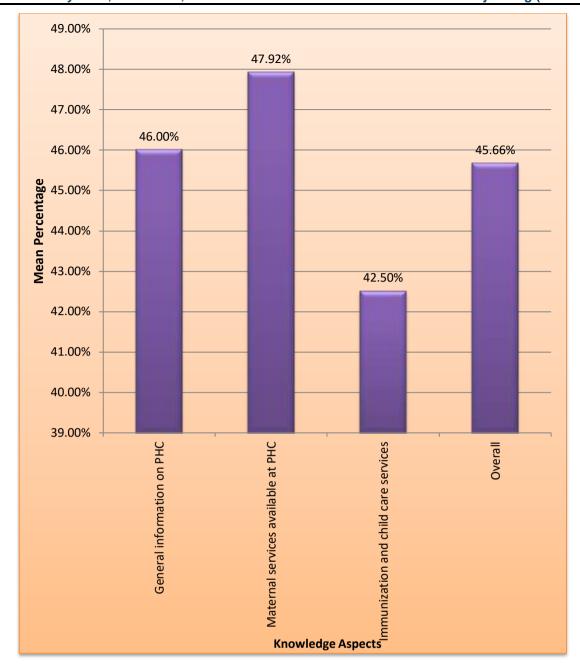


Figure 12: Area wise pre test knowledge scores of antenatal mothers

Table – 10: Area wise analysis of post test knowledge scores of antenatal mothers

N = 60

Knowledge aspects	Number of Items	Maximum Score	Mean	Mean %	Median	SD
a. General information on PHC	7	7	5.65	80.71	6	1.132
b. Maternal services available at PHC	13	13	9.9	76.15	10	2.784
c. Immunization and child care services	10	10	7.95	79.5	10	2.878
Overall	30	30	23.5	78.33	25	5.774

Table 10 depicts that the maximum mean percentage obtained by the mother in post test is in the aspect of General information on PHC (80.71%), followed by Immunization and child care services (79.5.%), and least mean knowledge score (76.15%) found in the aspect of Maternal services available at PHC. Therefore overall knowledge scores of respondents were found to be 23.5 (78.33%) with standard deviation 5.774.

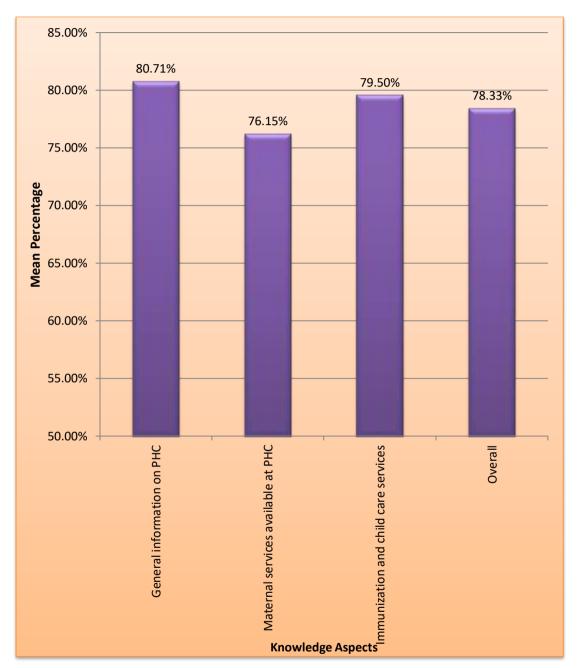


Figure 13: Area wise post test knowledge scores of antenatal mothers

# SECTION III: COMPARISON OF THE KNOWLEDGE LEVEL OF ANTENATAL MOTHERS

Table 11: Area-wise comparison of knowledge scores of antenatal mothers

N = 60

S		Pre	e test	Post	Test	Mean		Inferenc e
l N o	Knowledge aspects	Mean	SD	Mean	SD	differenc e	t value	
1	General information on PHC	3.22	1.698	5.65	1.132	2.43	10.429	S
2	Maternal services available at PHC	6.23	2.424	9.9	2.784	3.66	10.917	S
3	Immunization and child care services	4.25	1.910	7.95	2.878	3.7	10.891	S
(	Overall knowledge	13.7	5.030	23.5	5.774	9.8	14.202	S

From the table 11 it is evident that the obtained "t" value 14.202 is greater than the table value both at 0.05 level of significance. Therefore, "t" value is found to be significant. Hence it is inferred that there is significant difference between the knowledge antenatal mothers attending selected PHC's regarding the Maternal and child health services.

# Area-wise comparison of knowledge scores of antenatal mothers

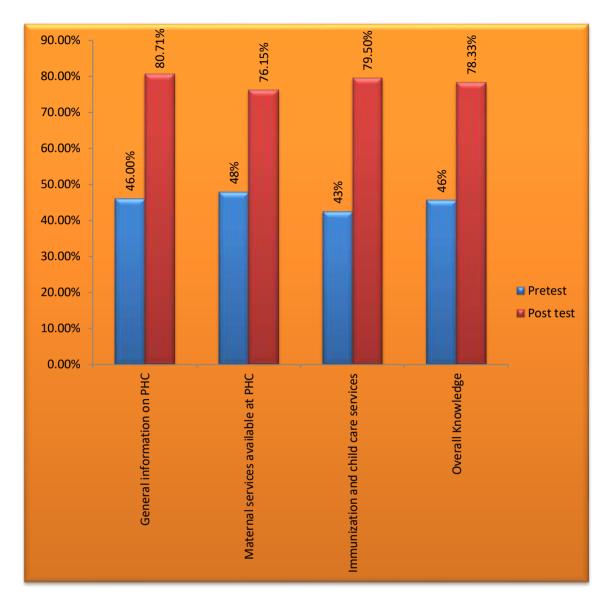


Figure 14: Comparison of mean percentage of pre-test and post-test scores

# SECTION IV: ASSOCIATION OF THE PRE TEST KNOWLEDGE SCORES OF ANTENATAL

# MOTHERS WITH THE DEMOGRAPHIC VARIABLES

Table – 12: Association of post test knowledge score of antenatal mothers with the demographic variables.

N=60

	Variables	Below Median	Median and above	Chi square	Df	P value (0.05)	Inference
1.	Age in years						
a.	Less than 25 years	8	3				
b.	26-30 years	11	6	9.225	3	7.82	S
c.	31-35 years			9.223	3	7.62	3
d.	36 years and above	3	3				
2.	Education						
a.	Illiterate	2	0				
b.	Primary education	11	5	8.541 4	9.49	NS	
c.	Secondary education	6	5				
d.	PUC	6	15				
e.	Degree and above	4	6				
3.	Occupation						
a.	House wife	20	18				
b.	Coolie	3	3	1.058	3	7.82	S
c.	Private employee	4	7	1.036	3	7.62	3
d.	Government employee	2	3				
4.	Religion						
a.	Hindu	25	24				
b.	Muslim	3	2	2.824	2	5.99	NS
c.	Christian	1	5				
5.	Gravida status						

a.	Primi gravida	26	27	0.095	1	3.84	NS
b.	Multi gravida	3	4				
6.	Income						
a.	Less than Rs.5000	4	1	15.064	3	7.82	S
b.	Rs.5001-10000	14	4				
c.	Rs. 10001-15000	7	22				
d.	More than Rs.15001	4	4				
7.	Source of information						
a.	Mass media	3	1	5.526	3	7.82	NS
b.	Friends	7	12				
c.	Relatives	13	6				
d.	Health personnel	6	12				

The table 12 shows  $\chi^2$  value computed between the knowledge level of antenatal mothers attending selected PHC's on Maternal and child health services and selected demographic variables. Variables such as age, occupation and source of information were significant at 0.05 level. Thus it can be inferred that there is significant association between knowledge level of the mothers and selected variables. Therefore the hypothesis stated there will be significant association between knowledge level of antenatal mothers and the selected demographic variables is accepted.

# IMPLICATIONS OF THE STUDY

The findings of the study can be used in the following areas of nursing profession.

1. **Nursing Practice** Nurses are the key persons of the health team, who play a major role in health promotion and maintenance. The nursing personnel need to prepare the instructional materials and provide teaching program which should be understandable to the pregnant mothers. Health teaching is an integral part of child and family welfare services.

# 2. Nursing Education.

As a nurse educator, there are abundant opportunities for nursing professionals to educate the mothers as well as their family members regarding Maternal and child health services. The study emphasizes significance of short term in-service education programmes for nurses related to health education regarding Maternal and child health services. Nursing personnel working in maternity hospital should be given in-service education.

# 3. Nursing Administration

Nursing administrators should take interest in motivating the nursing personnel's especially nurses in maternity hospital to improve their professional knowledge and skill by attending the health conferences, workshops, seminars and training program on Maternal and child health services. The nursing administrator should arrange regular in-service education program on Maternal and child health services.

### 4. Nursing Research

Research provides nurses credibility to influence decision making, policy and protocol formulation regarding Maternal and child health services. Findings of the present study suggest that educators and administrator should encourage nurses to read, discuss and conduct research studies so as to enable the nurse to make data based decision rather than intuitive decisions.

### LIMITATIONS OF THE STUDY

- Only knowledge was considered in the present study.
- ♣ The study was conducted in one area, which restricts the generalization.

### RECOMMENDATIONS

On the basis of the findings of the study following recommendations have been made:

- ♣ A Similar study can be replicated on large sample to generalize the findings.
- ♣ A Similar study can be conducted in different setting.
- ♣ A study can be conducted to assess the effectiveness of innovative teaching methods.

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