

Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Puerperal Infections among  
Primi Postnatal Mothers in a Selected Rural Community Hyderabad, Ts

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## Findings

The findings revealed that majority of the mothers 14 (46.67%) were in the age group of 21-23 years, and 16 (53.33%) belongs to Hindu religion. Majority of the mothers from 21 (70%) were nuclear families. The sample was distributed in terms of education, as majority of mothers 13(43.33%) were higher school education.

Majority of the mothers 12(40%) were housewives, regarding monthly family income, most of the mothers 30(100%) were belongs to rural area. Most of the mothers 28(93.33%) were comes under unknown group of previous knowledge.

The results showed a marked improvement in posttest knowledge scores compared to pretest knowledge scores. Pretest scores indicated that about 8 (26.67%) of the mothers obtained below average (0-33%) scores and 22(73.33%) obtained average (34-66%) and above average knowledge level in pretest were found nil.

But, it was very encouraging to note that their scores improved significantly in posttest after structure teaching. In the post test most of the mothers 26(86.67%) obtained above scores 22(73.33%) obtained average scores in pretest, and none of the mothers obtained below average score in posttest. The obtained' value was 15.83. which was higher than the table 't' value of 2.0452 at 29df with 0.05 level of significance. It shows that there is significant difference ( $p < 0.05$ ) in pretest and posttest knowledge scores.

Comparison of the pretest and posttest knowledge score regarding prevention of puerperal infections, which were obtained 't' value was 15.83 which was significant at 0.05 level of significance at 29 degrees of freedom.

**Keywords:** Prevention Infection Primi Postnatal mothers, Hygienic Delivery, Puerperal sepsis,

## INTRODUCTION

"Prevention is one of the few known ways to reduce demand for health and aged care service Puerperium is the period which starts about an hour after the delivery of the placenta and includes the following six weeks. Puerperal infection is an infection which arises from bacterial invasion of the genital organs during puerperium. The infection that occurs within 11 days of childbirth. Now a days, despite scientific and technological advances in different knowledge areas, puerperal infection remains a big problem, due to its prevalence, morbidity .

Most puerperium infections take place after hospital discharge. This is usually 24 hrs. after delivery, in the absence of postnatal follow-up as is the case in many developing countries. Many cases of puerperal infections can go undiagnosed and unreported. The predisposing factors leading to the development of infections include home birth in unhygienic conditions, low socio-economic status, poor nutrition, primiparity, anemia, prolonged rupture of the membranes, prolonged labor, multiple vaginal examinations in labor, caesarean section obstetrical maneuvers within the uterus and postpartum hemorrhage. Puerperal infection may present as puerperal fever or sepsis, endometritis, wound infection, mastitis, urinary tract infection. "

Diane et al. Defined puerperal sepsis as infection several attempts have been made to validate the results of the genital tract following childbirth; still a major cause self-reported maternal morbidity and some of them of maternal death whereas it is undetected and / or compared the results from interviewing women shortly untreated.

According to World Health Organization puerperal sepsis is defined as infection of the genital tract occurring at any time between the rupture of membranes or labor, and the 42nd day postpartum in which 2 or more of the following are present:

1. Pelvic pain
2. Fever i.e., oral temperature  $38.5^{\circ}\text{C}$  or higher on any occasion
3. Abnormal vaginal discharge, e.g., presence of pus
4. Abnormal smell/foul odor of discharge
5. Delay in the rate of reduction of the size of the uterus ( $<2\text{cm/day}$  during the first 8 days)

**Purpose Of Review:** Sepsis is a major cause of maternal death worldwide. Little is known about the incidence of severe maternal morbidity related to sepsis. In this review, we focus on new findings concerning epidemiology, etiology, and outcome of maternal sepsis in low-income as well as high-income countries.

**Recent Findings:** UNICEF claims maternal mortality number of women and girls who died each year from complications of pregnancy and childbirth declined from 451,000 in 2000 to 287,000 in 2020. These improvements are particularly remarkable considering rapid population growth in many of the countries where maternal deaths are highest. Still, almost 800 women are dying each day from complications in pregnancy and childbirth, which is equivalent to one every two minutes.

Puerperal sepsis is defined as "infection of the genital tract occurring at any time between the onset of the rupture of membranes or labor and the 42nd day of post-partum in which fever and one or more of the following are present <sup>[1]</sup> pelvic pain <sup>[2]</sup> abnormal vaginal discharge <sup>[3]</sup> abnormal odor of discharge <sup>[4]</sup> delay in the rate of reduction of size of the uterus.

Thus, the Investigator feels that more is a great need to provide additional information on prevention of puerperal infection to the postnatal mothers with the gathered knowledge during their antenatal clinic visits .Hence, the study is undertaken to assess the effectiveness of structured teaching program on prevention of the puerperal sepsis among postnatal mother in a selected hospital at Hyderabad.

Maternal sepsis is an infrequent, but important complication of pregnancy, childbirth, and puerperium, resulting in significant maternal morbidity and mortality worldwide. Improved outcome is possible through improved service provision.

### **Need For The Study**

Worldwide, every day at least 800 women die from complications of pregnancy and childbirth, the majority of which occur in the developing countries Between 25 and 33percent of all deaths of women in the reproductive age group in developing countries are the result of complications of pregnancy and childbirth.

The World Health Organization reports in Nigeria had the highest number of maternal deaths, and accounted for more than a quarter (28.5%) of all estimated global maternal deaths in 2020, with approximately 82 000. Three other countries had more than 10 000 maternal deaths in 2020: India (24 000), the Democratic Republic of the Congo (22 000) and Ethiopia (10 000), with 8.3%, 7.5% and 3.6% of global maternal deaths, respectively. Six countries had more than 5000 maternal deaths (but fewer than 10 000) in 2020, in order from highest to lowest numbers: Pakistan, Afghanistan, Indonesia, Chad, Kenya and the United Republic of Tanzania. In total, 73 countries were estimated to have had just 20 or fewer maternal. deaths in 2020, the majority of which were in Europe (33 countries)

### **Statement of the Problem**

“Effectiveness of Structured-Teaching Programme on Knowledge Regarding Prevention of Puerperal Infections among Primi Postnatal Mothers In A Selected Rural Community At Hyderabad, Ts.

### **OBJECTIVES**

1. To assess the existing knowledge of primi postnatal mothers on prevention of selected puerperal infections by pretest.
2. To develop and administer structured teaching program on prevention of puerperal infections among primi postnatal mothers.
3. To assess the effectiveness of structured-teaching program on prevention of selected puerperal infections among primi postnatal mothers by posttest.
4. To determine association between the pre-test and post-test knowledge levels of primi postnatal, mothers with the selected demographic variables.

### **OPERATIONAL DEFINITIONS**

1. **Effectiveness:** In this study, the effectiveness refers to the extent to which the structure teaching program has achieved the desired effect about prevention of puerperal infections.
2. **Structured Teaching Programme:** In this study, it refers to the systematically developed instructional programme designed for primi postnatal mothers to provide information regarding prevention of puerperal infections.
3. **Knowledge** Response given by the primi mothers regarding prevention puerperal infections which is measured by the knowledge questionnaire.
4. **Prevention:** In this study, prevention refers to all the activities carried out by primi postnatal mothers to avoid the occurrence of puerperal infections.
5. **Puerperal Infections:** Puerperal infection is an infection occurring in 'puerperium' during the period of 6weeks after giving childbirth. In this study, puerperal infections are breast engorgement, urinary tract infections, and mastitis.
6. **Primi Mothers** : Mothers who had normal delivery for the first time and got discharged from hospital after delivery(21-32years).

## Hypothesis

H1: There will be significant difference between the pre and posttest knowledge scores of mothers on prevention of puerperal infections.

H2: There will be significant association between pretest knowledge score of primi postnatal mothers and with their selected demographic variables.

## Assumptions

1. Postnatal mothers have some knowledge regarding management of puerperal sepsis.
2. The structured teaching program on prevention of puerperal sepsis will improve the knowledge of postnatal mothers.

## Variables

1. Independent variables: structured teaching program.
2. Dependent variables : knowledge regarding prevention of puerperal sepsis.
3. Extraneous variables : Age, education, occupation, income, religion, type of family, area of living, previous knowledge .

## Delimitations of the Study

1. The study was limited to the primi post-natal mothers.
2. Only those mothers who have undergone normal vaginal mode of delivery.
3. Mothers who can understand Telugu or English.
4. Post natal mothers who are willing to participate in the study.

## Conceptual Framework

Conceptual models can be defined a set of concepts and those assumptions that integrate them into meaningful configurations. Conceptual framework is theoretical approach to study problems, which is scientifically based on the emphasis on selection, arrangement and classification of concept which deals within the study. Conceptual framework is adapted for the present study is based on Ludwig von Bertalanffy's General System.

Open systems are those in which there is an exchange of energy material, information with environment. These are characterized by o Input of energy into system o Through put during which the system process, changes, recognizes imported energy.

1. Output of energy into environment in the form of goods, services, intellectual products.
2. Feedback by which a part of output returns to the system.

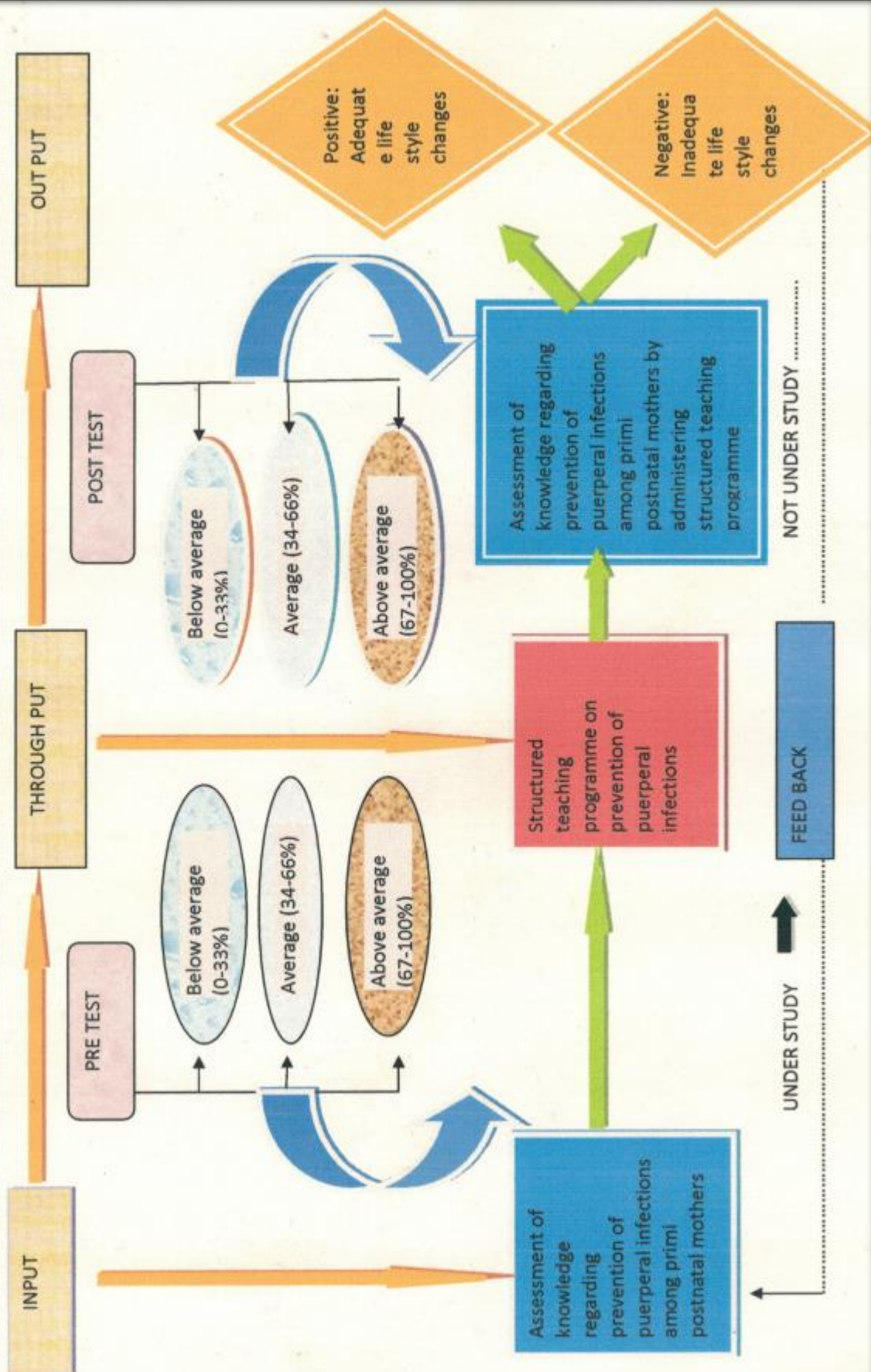
**Input:** The first component of the system is input, which is the information, energy or matters that enters the system. For a system to work well input should contribute to achieving the purpose of the system. It refers to demographic data and knowledge on the prevention of puerperal infections. These factors were taken into consideration on input for evaluation. the effectiveness in bringing out the change in knowledge level of primi postnatal mothers.

**Through Put:** The action needed to accomplish the desired task, to achieve the desired task that is to assess the effectiveness of structured teaching programme on prevention of puerperal infections. The following process is adapted to the through put of the study was the assessment of knowledge by pre-test questionnaire, preparation of structured teaching on the prevention of puerperal infections, validation of structured teaching, administration of posttest questionnaire, evaluation of structured teaching.

**Out Put:** After the input and process, the system returns output to the environment, in an altered state, the result or product of system. Output vary widely depending on the type and purpose of system affecting environment, here output refers to knowledge of the primi postnatal mothers regarding the prevention of puerperal infections. If the knowledge level are found to be inadequate, rectification can be done by strengthening the existing knowledge through continuous monitoring which is not under the preview of the study.

**Feedback:** The process of communicating what found in evaluation of system. The feedback can be measured by output whether knowledge is adequate or inadequate, that is, if the client gain adequate knowledge after the administration of structured teaching or not. The developed structured teaching will be considered useful to update knowledge of primi postnatal mothers .If the knowledge is inadequate it refers that the system input, throughput must be re-evaluated which is not included in the study.

FIGURE -I: CONCEPTUAL FRAME WORK BASED ON LUDWIG VON BERTALANFFY GENERAL SYSTEM MODEL



## **Review Of Literature**

A research literature review is a written summary of the state of existing knowledge on a research problem. The task of reviewing research literature involves the identification, selection, critical analysis, and written description of existing information on a topic. The review of literature refers to an extensive thorough and systematic examination of publications relevant to the research project. It helps the investigator in designing the framework, developing the methodology and tools for data collection and in planning the data analysis. It is an essential part of the research project.

To gain better insight into the present study ,the related literature review has been made and described under the following areas.

The review of literature for the present study has been organized and presented under the following headings.

1. Literature related to the causes of Puerperal Infections ● Literature related to the incidence of Puerperal Infections
2. Literature related to the prevention of Puerperal Infections
3. Literature related to Urinary Tract Infection
4. Literature related to Breast Engorgement
5. Literature related to Breast Infections(Mastitis)
- 6.

## **Methodology**

It includes the research approach, research design, variables ,description of setting, population ,sample, sampling technique, sample characteristics, method of data collection, development and administration of the tool, validity and reliability of the questionnaire, pilot study, procedure for data collection and plan for data analysis.

In the present study, the investigator aims to study the effectiveness of structured teaching program through conducting pretest and posttest on knowledge regarding prevention of selected puerperal infections among primi postnatal mothers at selected rural community, Hyderabad.

## **Research Design**

A research design is the plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process

The research design selected for the study is "one group pretest and posttest" design. In this design the total sample is taken as one group and it is pretested or premeasured.

After pre-test, the investigator introduced the independent variable( structured teaching) to the entire sample irrespective of their pretest knowledge scores.

The effectiveness of independent variable on dependent variable (knowledge of primi postnatal mothers regarding prevention of puerperal infections) was tested with help of posttest after one week.

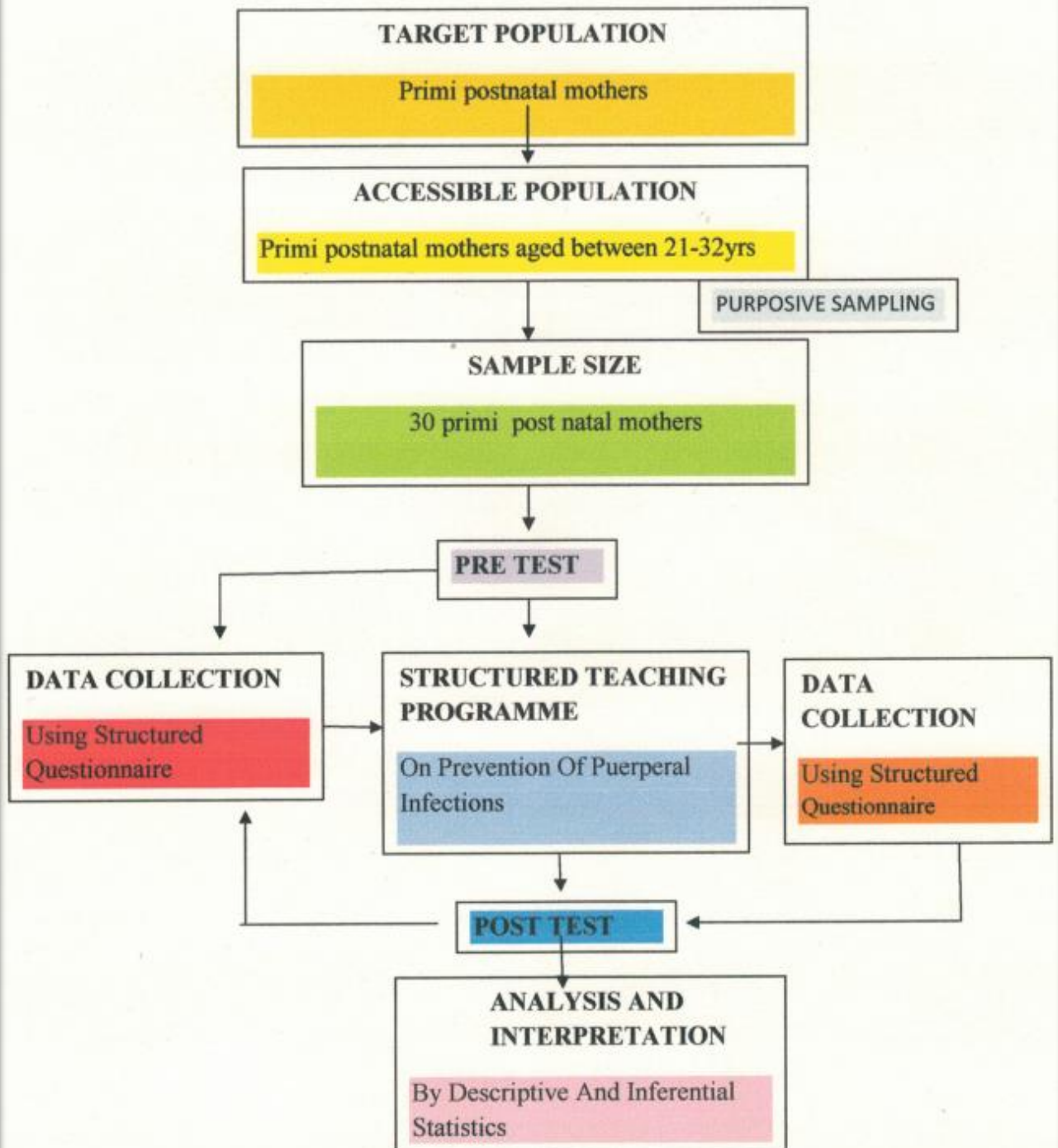
01X02

01— pretest knowledge on the prevention of puerperal infections among primi mothers

X - Structured teaching program

02 - posttest on the knowledge on the prevention of puerperal infections among primi mother

**Fig.2: SCHEMATIC REPRESENTATION OF THE RESEARCH PROCESS**



Setting of the Study:

Research study setting "The study setting is the location in which the research is conducted-it could be natural, partially controlled, or highly controlled. Natural or field setting is an uncontrolled real-life situation. In a partially controlled situation, environment is partially modified to control extraneous variables, while in highly controlled situations, study environment is fully controlled to combat the effect of extraneous. the selection of an appropriate setting for conducting a study is crucial to its successful completion.

The setting of the present study is community area at Rural Hyderabad.

### **Population**

A Population is the total group of subjects that meet a designated set of criteria . The entire set of individual or objects having some common characteristics selected for a research study. The population in the present study consist of primi postnatal mothers, rural community Hyderabad.

**Target Population** is the aggregate of cases about which the researcher would like to make generalization. In the present study, the target population was primi postnatal mothers who are present in the rural community Hyderabad,

**Accessible Population** is the aggregate of cases the confirm to the designated criteria and that are accessible as a pool of subject for the study, the accessible population in this study primi postnatal mothers who were present in rural community Hyderabad.

### **Sample and Sampling Technique**

A **Sample** is a subset of population elements, which are the most basic units about which data are collected. The sample was chosen to represent the key characteristics of population, freeform bias and errors, substitution, and completeness. The sample used for the present study was 30 primi postnatal mothers in rural community Hyderabad.

**Sampling technique** is the process of selecting a portion of population to represent entire population. For the present study, purposive sampling technique through nonprobability sampling approach was felt to be the most appropriate for the present study.

### **Criteria For Sample Selection**

#### **Inclusive criteria:**

1. Primi Postnatal mothers who had normal delivery, who were discharged from the Hospital.
2. Primi Postnatal mothers who were present during data collection.
3. Primi Postnatal mothers who were willing to participate in the study.
4. Primi Postnatal mothers who could speak and understand the Telugu or English.

**Exclusive criteria:**

1. Primi Postnatal mothers who were not willing to participate in the study.
2. Primi Postnatal mothers who were not present during data collection.
3. Primi Postnatal mothers who are not able to speak and understand. Telugu or English

**Sample Characteristics**

The sample is described in terms of Bio-socio demographic data, which includes age, religion, type of family, education qualification, occupation, income of the family, area of living, and previous knowledge regarding prevention of puerperal infections .

**Method of Data Collection**

The method of data collection is questioning, with the help of structured questionnaire. It is a method of gathering self-report information from respondents through interview. The questionnaire includes a set of questions that are generally answered in a specified sequence and predesigned response. The questionnaire was selected as the most appropriate useful data gathering device in research project to collect desired information.

**Selection and Development of Study Instruments**

According to Burns and Grove (2001), a questionnaire is a "printed self-report form designed to elicit information" and is developed with specific items to assist with the data collection.

The tool was prepared based on objectives of the study. A structured questionnaire is to collect data on the knowledge on the prevention of puerperal infections among primi postnatal mothers.

**Development and Description of Tool**

A search of literature was made for the purpose of developing appropriate tools for assessing the effectiveness of structured teaching programs on prevention of puerperal infections. An instrument in the form of structured questionnaire was developed with the help of selected literature from various textbooks , journals, and discussion with experts in the field of obstetrical nursing.

Data collected with structured Questionnaire.

The structured Questionnaire consists of 2 parts.

**Part I:** Deals with demographic data of the primi postnatal mothers like age, religion, type of family, educational qualifications, occupation, income of the family, area of living

**Part II:** It is further classified into 3 sections it.

deals with sections of assessment of knowledge ,types of selected infections, prevention of infections ,it consists of 30 questions. Each question carries one mark, so all questions put together a total of 30 marks. All the questions are designed with multiple choices with one correct answer.

**Part-II of the tool consists of 4 areas.**

**Area 1 :** Questions related to knowledge of Puerperium.

**Area 2:** Questions related to Urinary tract infections and their prevention.

**Area 3:** Questions related to Breast engorgement and its prevention.

**Area 4:** Questions related to Mastitis and its prevention.

### **Score Interpretation**

In this study, categorization of knowledge was done based on the scores to classify primi postnatal mothers into 3 groups.

1. 0-33% Below average
2. 34-66% Average
3. 67%-100% Above Average

### **Validity & Reliability Of The Tool**

#### **Validity**

.According to Nancy burns (2007) , the validity of an instrument is a determination of how well the instrument reflects the abstract concept being examined.

The questionnaire was given for content validity to nursing and medical experts in obstetrics and gynecological nursing and then suggestions were incorporated. The list of experts is enclosed in the Appendix - X .

#### **Reliability**

According to Nancy burns (2003) reliability is concerned with how consistently the measurement technique measure the concept of interest.

In the present study the effectiveness of structured teaching program on prevention of puerperal infection ought to be measured. The reliability of the tool was tested by test and retest method with a time gap of one week. The correlation co —efficient was calculated by using karl Pearson formula and was , found to be 0.9.

## **Pilot Study**

Pilot study is a small —scale version or trial run designated to test the method to be used in a larger, more rigorous study, which is sometimes referred to as the parent study [POLIT 8<sup>TH</sup> EDITION]

Pilot study was conducted to assess the effectiveness of prevention of puerperal infections and to ensure the practicability, feasibility, and appropriateness of the study and to plan for statistical analysis of the data. Pilot study was conducted, 6 primi postnatal mothers were given pretest followed by structured teaching program on prevention of puerperal infections individually, posttest was then administered on the day of one week in community to measure the effectiveness of structured teaching. Statistical analysis was done with the help of paired 't' test. The calculated 't' value was significantly higher than the table value 1.42 at two degrees of freedom with 0.05 level of significance ( $p < 0.05$ ). Hence the study was found feasible, practicable and appropriate.

## **PROCEDURE OF DATA COLLECTION**

The investigator conducted survey to identify the primi post-natal mothers who met the selection criteria. Mothers explained the purpose of the study. Subjects were given pretest individually at their convenient hours. After the pretest, the investigator conducted structured teaching program on prevention of puerperal infections to each subject. Later, after week the post test was conducted on the same subject.

### **Plan for Data Analysis**

It is planned to analyze and interpret data with the help of descriptive statistics and inferential statistics. Mean, standard deviation, standard error and paired t-test was computed from the raw scores obtained in the pretest and posttest, the values will be then compared to assess the impact of structured teaching. Data analysis and interpretation is organized in three parts as

**Section —I** Description of the sample in terms of the demographic data.

**Section-II** Description of the sample in terms of the scores obtained by the subjects in the assessment of knowledge regarding prevention of puerperal infection. This section will also indicate the effectiveness of structured teaching programs regarding prevention of puerperal infections on the knowledge of the sample units.

**Section —III** Association of the sample in terms of gain in knowledge scores in relation to selected variables.

### **Analysis and Interpretation**

Analysis and interpretation of the data collected for the present study. Data was collected from 30 primi postnatal mothers on prevention of selected puerperal infections among primi postnatal mothers at selected rural community, Hyderabad. Analysis and interpretation was done with the help of descriptive and inferential statistics to meet the objectives of the study.

Analysis is the process of organizing and synthesizing data. To answer the research question and test the hypothesis. Interpretation is the process of making sense of results and of examining their implications.

### **Objectives of the study**

1. To assess the knowledge of primi postnatal mothers on prevention of selected puerperal infections by pretest.
2. To develop and administer structured teaching program on prevention of selected puerperal infections among primi postnatal mothers.
3. To assess the effectiveness of structured-teaching program on prevention of selected puerperal infection among primi postnatal mothers by post test
4. To determine association between the pre-test and posttest knowledge levels of primi postnatal mothers with the selected demographic variables like age, education, religion, occupation, income, type of family, area of living and source

The data analysis was based on the following hypotheses.

**H1 :** There will be significant difference between the pre and posttest knowledge scores of mothers on prevention of puerperal infections.

**H2:** There will be significant association between pretest knowledge score of primi postnatal mothers and with their selected demographic variables.

The data was entered in the master sheet for analysis and interpretation. Descriptive and inferential statistical procedures such as frequencies, percentages, mean, standard deviation, Chi square and paired t-test were used.

**Data was presented in following headings.**

**Section A:** Frequency and percentage distribution of prevention of puerperal infections among mothers according to demographic data.

**Section B:** Frequency and percentage distribution of knowledge scores of mothers in pretest and posttest on prevention of puerperal infections among mothers.

**Section C:** Association between the knowledge of mothers and selected demographic variables.

#### **Section A**

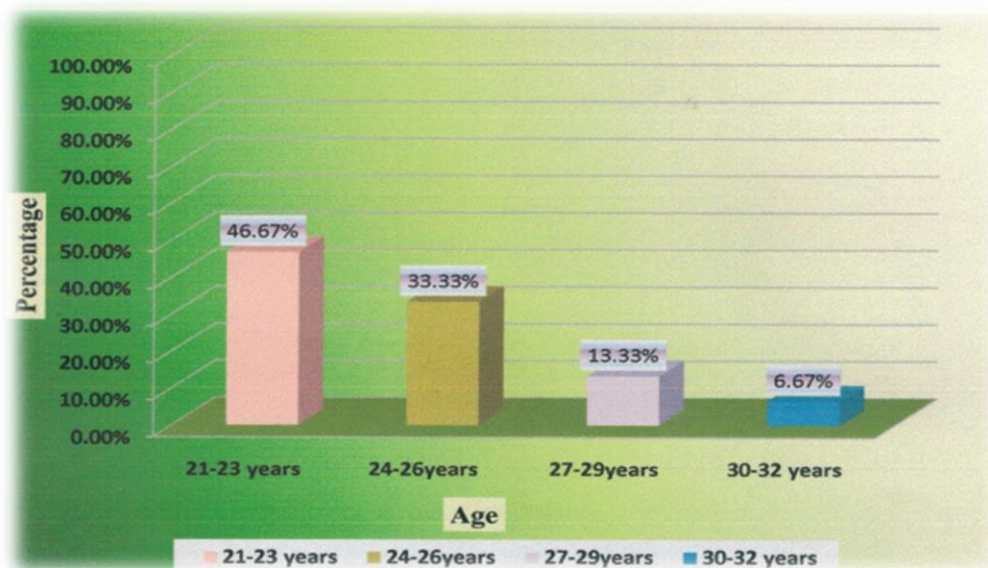
**Frequency and percentage distribution of primi postnatal mothers according to age, education. (N=30)**

<b>Bio-Socio Demographic Data</b>	<b>Frequency</b>	<b>Percentage</b>
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<b>Age</b>			
1.	21-23 years	14	46.67%
2.	24-26years	10	33.33%
3.	27-29years d 30-32 ears	4	13.33%
		2	6.67%
		<b>Total</b>	<b>Total</b>
<b>Education</b>			
1.	Illiterate		0%
2.	Primary School Education	12	40%
3.	Higher School Education	13	43.33%
4.	d Graduate & PG	5	16.67%
		<b>Total 30</b>	<b>Total</b>

The above table shows that majority of 14 (46.67%) were in the age group of 21-23 years, 10 (30%) belongs to 24-26 years age group, 4 (13.33%) belongs to 27-29 years age group and 2(6.67%) belongs to 30-32 years age group. According to education majority of 13 (43.33%) were higher school education, illiterate found nil, 12 (40%) were primary school education and 5 (16.67%) were graduate & PG.

**Figure 3 : PERCENTAGE DISTRIBUTION OF PRIMI POSTNATAL MOTHERS ACCORDING TO AGE**



**Figure 4: Percentage Distribution of Primi Postnatal Mothers**

ACCORDING

TO

EDUCATION

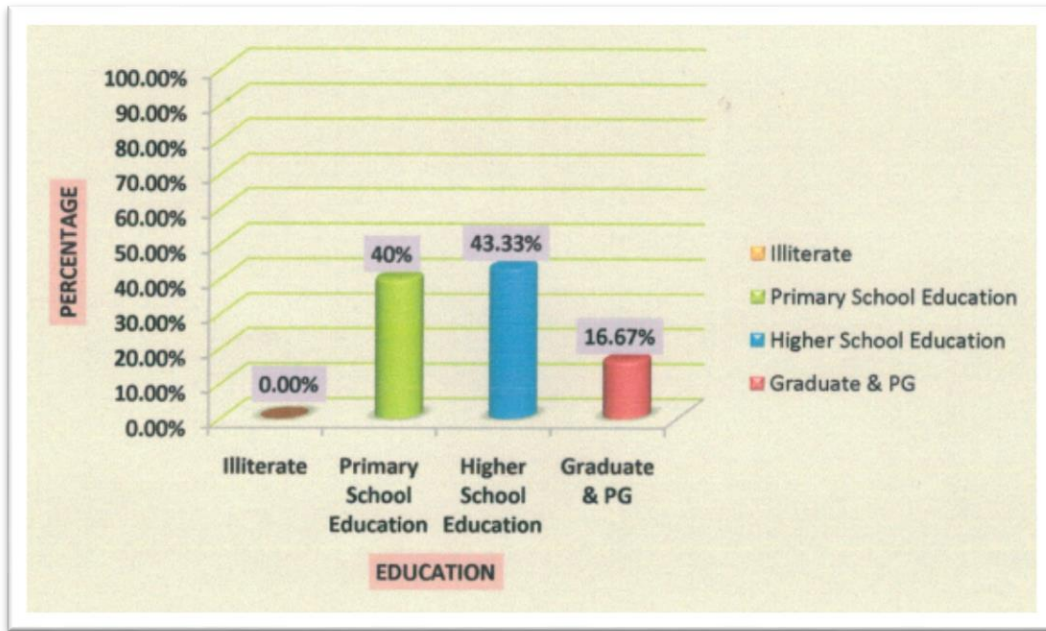


Table-2

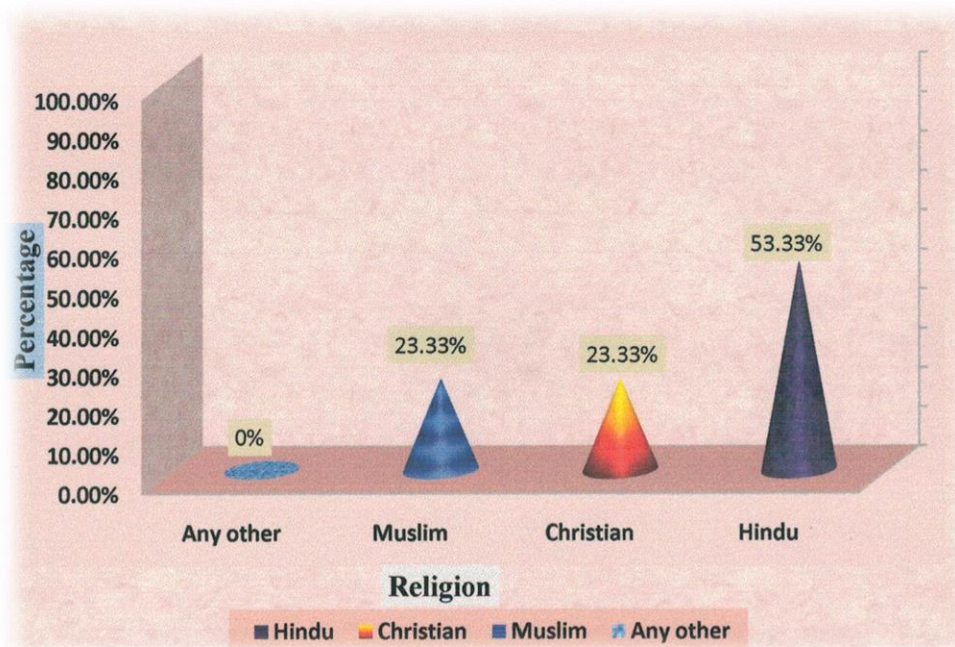
Frequency and percentage distribution of primi postnatal mothers according to religion and occupation

Bio-Socio Demographic Data	Frequency	Percentage
<b>Religion</b>		
1. Hindu	16	53.33%
2. Christian	7	23.33%
3. Muslim	7	23.33%
4. d Any other	0	0%
	Total 30	Total 100%
<b>Occupation</b>		
1. Housewife	12	
2. Daily wages	6	20%
3. Private job	6	20%
4. Government job	2	6.67%
5. Business	2	6.67%
6. Self-employee	2	6.67%
	Total 30	Total 100%

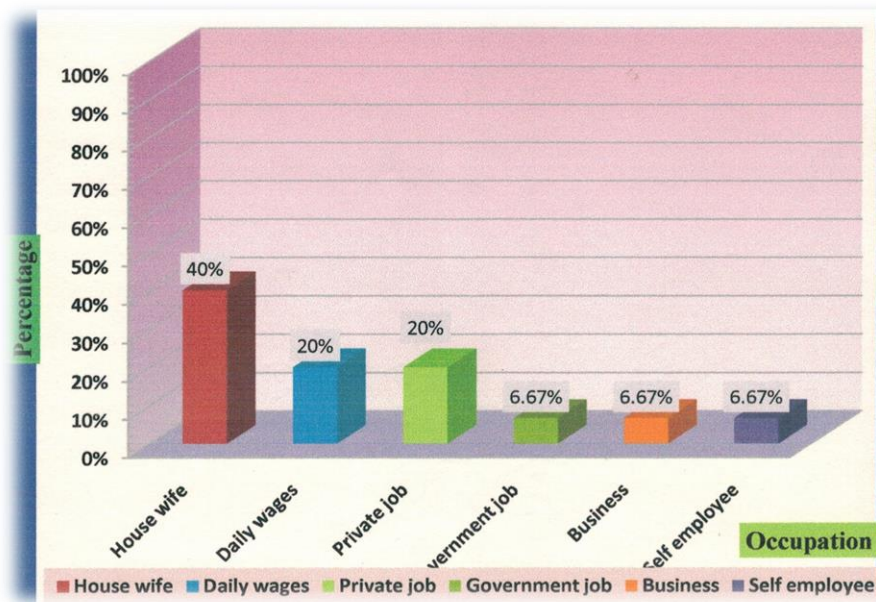
Regarding religion majority of 16 (53.33%) were Hindus, 7 (21.67%) were daily wages, 6 (20%) were private jobs, 2 (6.67%) were government jobs, 2 (6.67%) were business and 2 (6.67%) were self-employees.

**Figure.5 : Percentage Distribution Of Primi Postnatal Mothers**

**ACCORDING TO RELIGION**



**Figure 6 : Percentage Distribution Of Primi Postnatal Mothers ACCORDING TO OCCUPATION**



**Table-3**

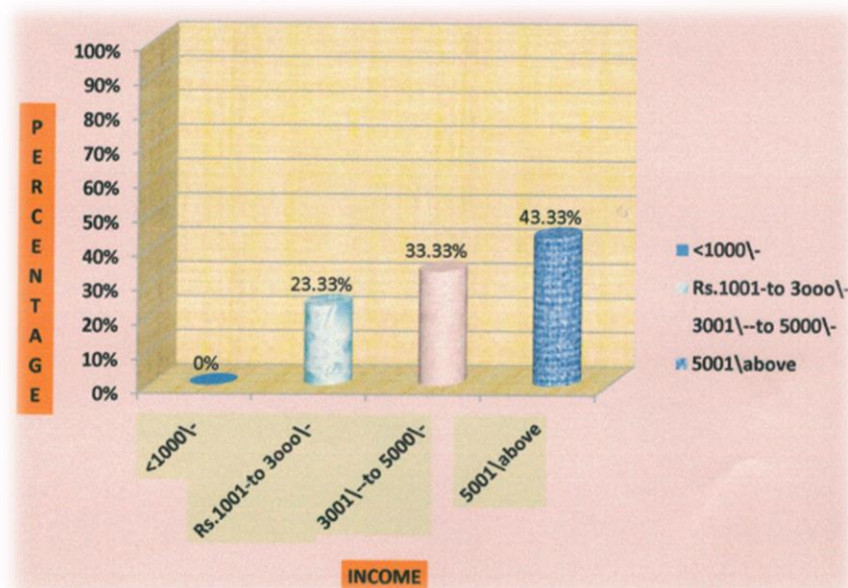
**Frequency and Percentage Distribution of Primi**

**Postnatal Mothers According to Income, Type of Family. (N=30)**

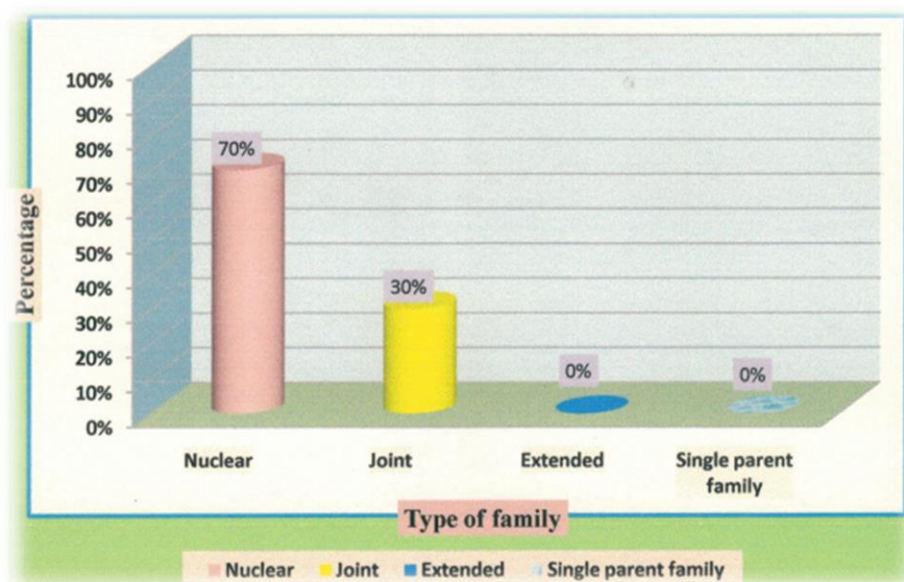
Characteristics	Frequency	Percentage
Income per month		0%
1. Rs.<1000/-	7	23.33%
2. Rs.1001/- to 3000/-	10	33.33%
3. Rs.3001/- to 5000/-	13	43.33%
4. Rs. 5001/- above	Total 30	Total 100 %
Type of family	21	70%
1. Nuclear	9	30%
2. Joint		0%
3. Extended	0	0%
4. Single parent family	Total 30	Total 100 %

The above table shows that majority of 13 (43.33%) were income per month Rs.5001/- above, Rs.<1000/- were found nil, 7 (23.33%) were income per month Rs. 1001/- to 3000/-and 10 (33.33%) were income per month Rs. 3001/- to 5000/- According to type of family majority of 21 (70%) were nuclear, 9(30%) were joint, extended, and single parent family were found nil.

**Figure 7: Percentage Distribution of Primi Postnatal Mothers  
According to Income**



**Figure 7: Percentage Distribution of Primi Postnatal Mothers According to Income**



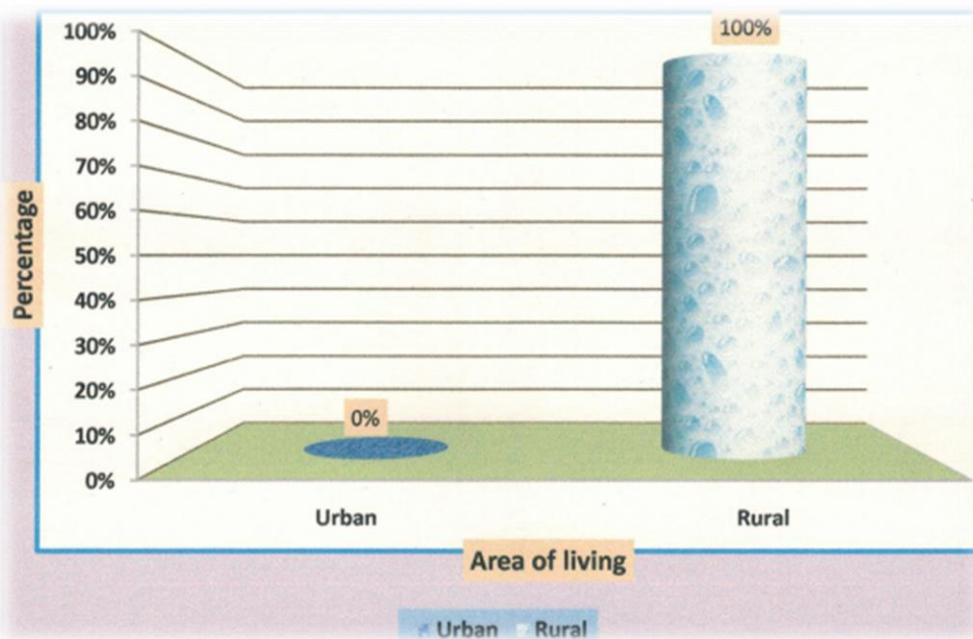
**Table-4**

**Frequency and percentage distribution of primi postnatal mothers according to area of living and previous knowledge (N=30)**

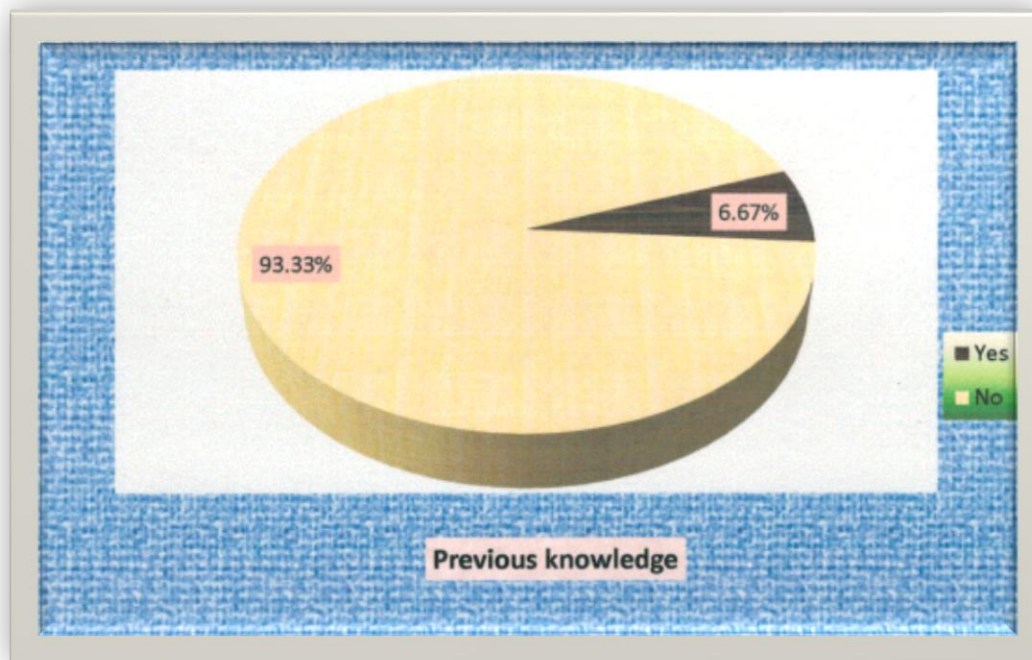
Characteristics	Frequency	Percentage
<b>Area of living</b>		
1. Urban	0	0%
2. Rural	30	100%
	<b>Total 30</b>	<b>Total 100%</b>
<b>Do you have any previous knowledge regarding prevention of puerperal infections?</b>		
1. Yes	2	6.67%
2. No	28	93.33%
	<b>Total 30</b>	<b>Total 100%</b>

The above table shows that regarding area of living majority of 30 (100%) were living in rural area and in urban were found nil. According to previous knowledge majority of 28 (93.33%) said no and only 2 (6.67%) said yes.

**Figure 9 : Percentage Distribution of Mothers According to Area of Living**



**Figure 9 : Percentage Distribution Of Mothers According To Previous Knowledge**



## Section — B

It dealt with the categorization of mothers into three groups such as below average, average, and above average based on the knowledge scores obtained in pretest and posttest. The effectiveness of structured teaching program was estimated with the help of paired t-test of significance.

**Table- 5**

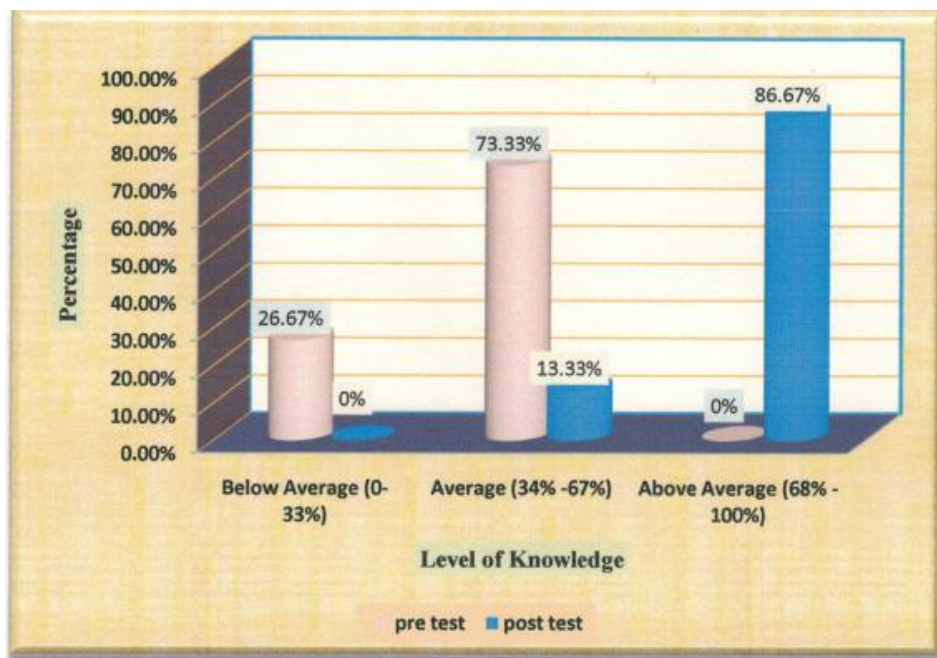
**Frequency and percentage distribution of knowledge scores of primi postnatal mothers in pretest and posttest on prevention of puerperal infections (N=30)**

Level of Knowledge	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
Below Average (0%-33%)	8	26.67%		0%
Average (34%-66%)	22	73.33%	4	13.33%
Above Average (67%-100%)	0	0%	26	86.67%
	Total 30	100.00%	Total 30	100.00%

The above table shows frequency and percentage based on knowledge scores of the primi postnatal mothers about prevention of puerperal infections. Below average (0-33%) indicates the scores in between 0 to 10, Average (34% -67%) indicates the scores in between 11 to 20 and above average (68%-100%) indicates the scores in between 21 to 30.

According to above table 8 (26.67%) were below average knowledge level in pretest whereas below average knowledge level in posttest were found nil, 22 (73.33%) were under average knowledge level in pretest whereas 4 (13.33%) were average knowledge level in posttest, above average knowledge level in pretest were found nil, whereas 26 (86.67%) were under above average knowledge level in posttest. These differences indicated that structured teaching program was highly affected on primi postnatal mothers.

**Figure 11: Level Of Knowledge in Pre and Post Test on Prevention of Puerperal Infections**



**Table 6**

**Pretest and posttest mean knowledge scores and paired t-test of significance on prevention of puerperal infections. (N=30)**

Knowledge Scores	Pretest	Post test
Mean	13.9667	24.8667
Standard Deviation	3.0792	2.5962
Standard Error	0.5622	0.4740
Paired t-test	15.83	

29df

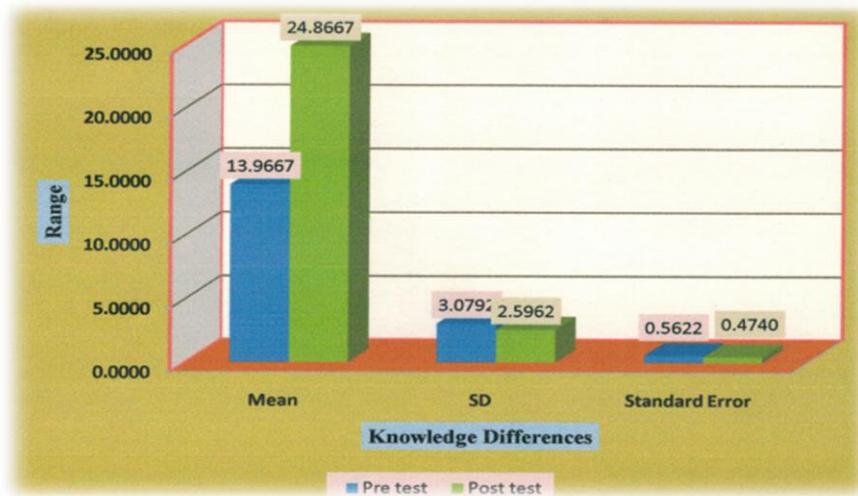
Table t-value 2.0452

p<0.05

Table above table shows that the pretest mean was 13.9667 with 3.0792 standard deviation and that of posttest mean was 24.8667 with 2.5962 standard deviation. The calculated 't' value was 15.83, which is higher than the table 't' value. 2.0452 at 29df with 0.05 level of significance. It shows that there is significant difference ( $p<0.05$ ) in pretest and posttest knowledge scores.

Hence, it is concluded that after structured teaching programs on prevention of puerperal infections the knowledge scores of the mothers have been increased. This positive result is a clear indication of effectiveness of structured teaching program on prevention of puerperal infections. Hence, HI was accepted.

**Figure 12: Knowledge Difference of Mothers in Pre and Post Prevention of Puerperal Infections**



**Table 7**

**Frequency and percentage distribution of knowledge scores of mothers in pretest and posttest on puerperium**

**N=30**

Level of Knowledge	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
<b>Below Average (0%-33%)</b>	4	13.33%		0%
<b>Average (34%-67%)</b>	26	86.67%	1	3.33%
<b>Above Average (68%-100%)</b>	0	0%	29	96.67%
	<b>Total 30</b>	<b>Total: 100%</b>	<b>Total 30</b>	<b>Total 100%</b>

**Pretest mean = 6.0667      SD =1.2567**

**Post test mean = 10.7**

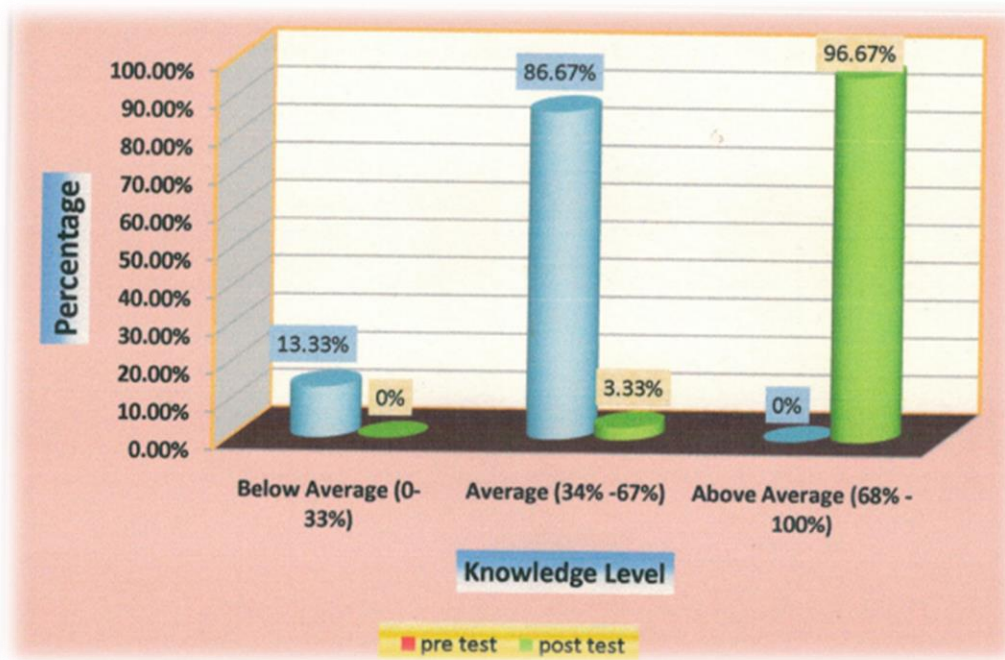
**SD = 1.0222**

Above table shows that 4 (13.33%) were below average knowledge level in pretest whereas below average knowledge level in posttest were found nil, 26.

(86.67%) were under average knowledge level in pretest whereas in posttest 1 (3.33%) were under average knowledge level, above average knowledge level in pretest were found nil whereas 29(96.67%) were under

above average knowledge level in posttest. The pretest mean was 6.0667 with 1.2567 standard deviation and that of posttest mean was 10.70 with 1.0222 standard deviation. These differences indicated that structured teaching program was affected on puerperium among primi postnatal mothers.

**Figure 3 : Level of Knowledge on Puerperium in Pre and Post Test**



**Table 8:**

Frequency and percentage distribution of knowledge scores of mothers in pretest and posttest on prevention of urinary tract infection N=30

Level of Knowledge	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage

<b>Below Average (0%-33%)</b>	<b>14</b>	<b>46.67%</b>		<b>0%</b>
<b>Average (34 %-67%)</b>	<b>16</b>	<b>53.33%</b>	<b>10</b>	<b>33.33%</b>
<b>Above Average(68- 100%)</b>	<b>0</b>	<b>0%</b>	<b>20</b>	<b>66.67%</b>
	<b>Total 30</b>	<b>Total 100 %</b>	<b>Total 30</b>	<b>Total 100%</b>

Pretest mean = 2.4667

SD = 0.8995

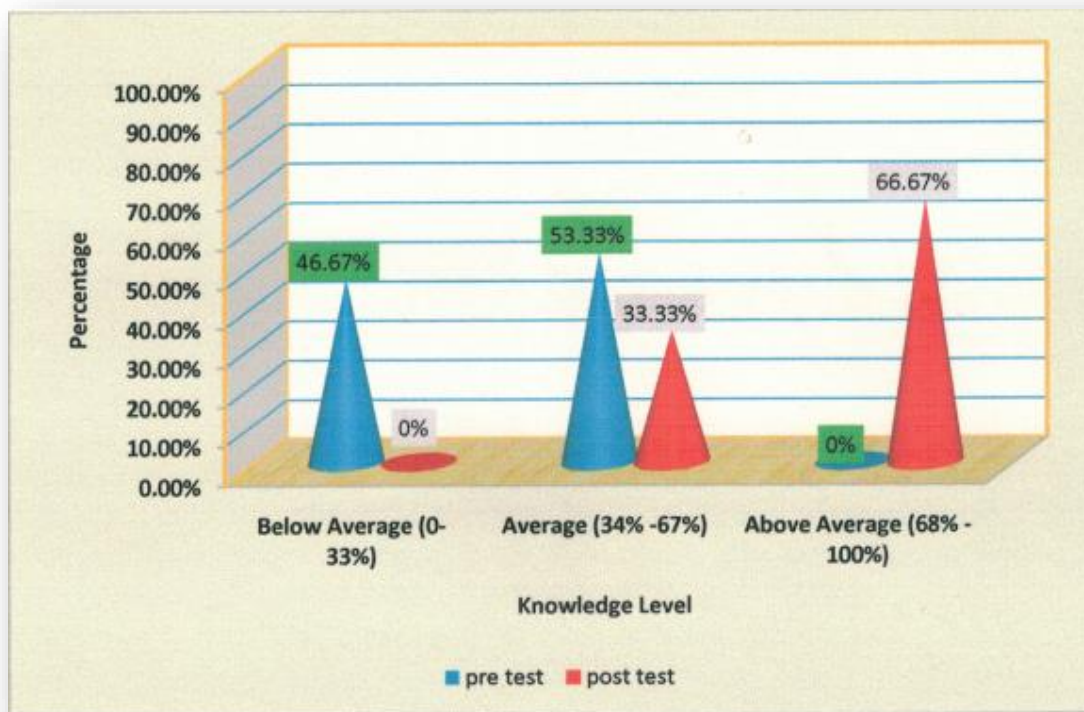
Post test mean = 4.8667

SD = 0.9732

Above table shows that 14 (46.67%) were below average knowledge level in pretest whereas below average knowledge level in posttest were found nil, 16. (53.33%) were under average knowledge level in pretest whereas in posttest 10 (33.33%) were under average knowledge level, above average knowledge level in pretest were found nil whereas 20(66.67%) were under above average knowledge level in posttest.

The pretest mean was 2.4667 with 0.8995 standard deviation and that of posttest mean was 4.8667 with 0.9732 standard deviation. These differences indicated that structured teaching program was affected on prevention of urinary tract infection among primi postnatal mothers.

**Figure 14:** Level Of Knowledge Of Mothers On Prevention Of Urinary Tract Infection in Pre and Post Test



**Table 9**

Frequency and Percentage Distribution of Knowledge Scores of Mothers in Pre-Test and Post Test on Breast Engorgement  
N=30

Level of Knowledge	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
Below Average (0%-33%)	11	36.67%	2	6.67%
Average (34%-67%)	18	60%	12	40%
Above Average (68%-100%)	1	3.33%	16	53.33%

	<b>Total 30</b>	<b>Total:100%</b>	<b>Total 30</b>	<b>Total 100%</b>
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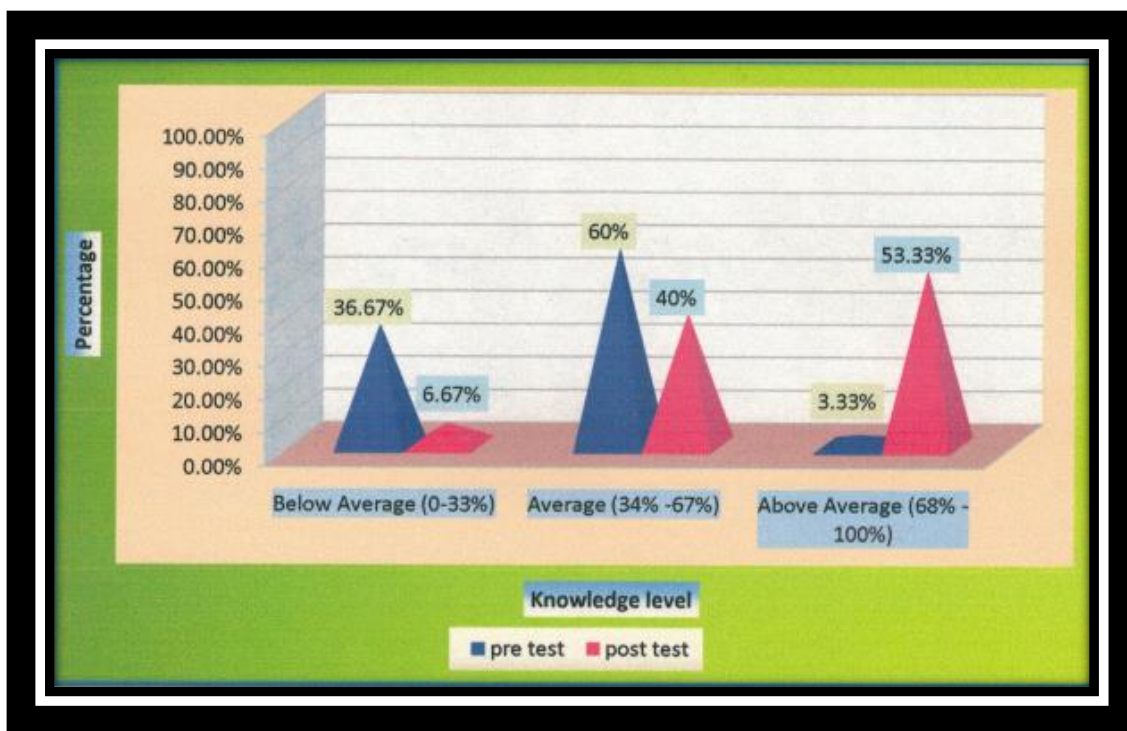
Pretest mean = 2.6667      SD = 0.9942

Post test mean = 4.4667      SD = 0.8995

Above table shows that 11 (36.67%) were under below average knowledge level in pretest whereas in posttest 2 (6.67%) were below average knowledge level, 18 (60%) were under average knowledge level in pretest whereas in posttest 12 (40%) were under average knowledge level, 1 (3.33%) were under above average knowledge level in pretest whereas 16 (53.33%) were under above average knowledge level in posttest.

The pretest mean was 2.6667 with 0.9942 standard deviation and that of posttest mean was 4.4667 with 0.8995 standard deviation. These differences indicated that structured teaching program was affected on breast engorgement among primi postnatal mothers.

**Figure 15:** Level of Knowledge of Mothers on Breast Engorgement in Pre and Post Test



**Table 10**

Frequency and Percentage distribution of knowledge scores of mothers in pretest and posttest on mastitis

**N=30**

Level of Knowledge	Pretest		Post test	
	Frequency	Percentage	Frequency	Percentage
<b>Below Average (0%-33%)</b>	<b>10</b>	<b>33.33%</b>		<b>0%</b>
<b>Average (34 %-67%)</b>	<b>19</b>	<b>63.33%</b>	<b>10</b>	<b>33.33%</b>
<b>Above Average (68%-100%)</b>	<b>1</b>	<b>3.33%</b>	<b>20</b>	<b>66.67%</b>
	<b>Total 30</b>	<b>Total: 100%</b>	<b>Total 30</b>	<b>Total 100%</b>

Pretest mean 2.7667

SD - 1.0063

Post test mean = 4.8333

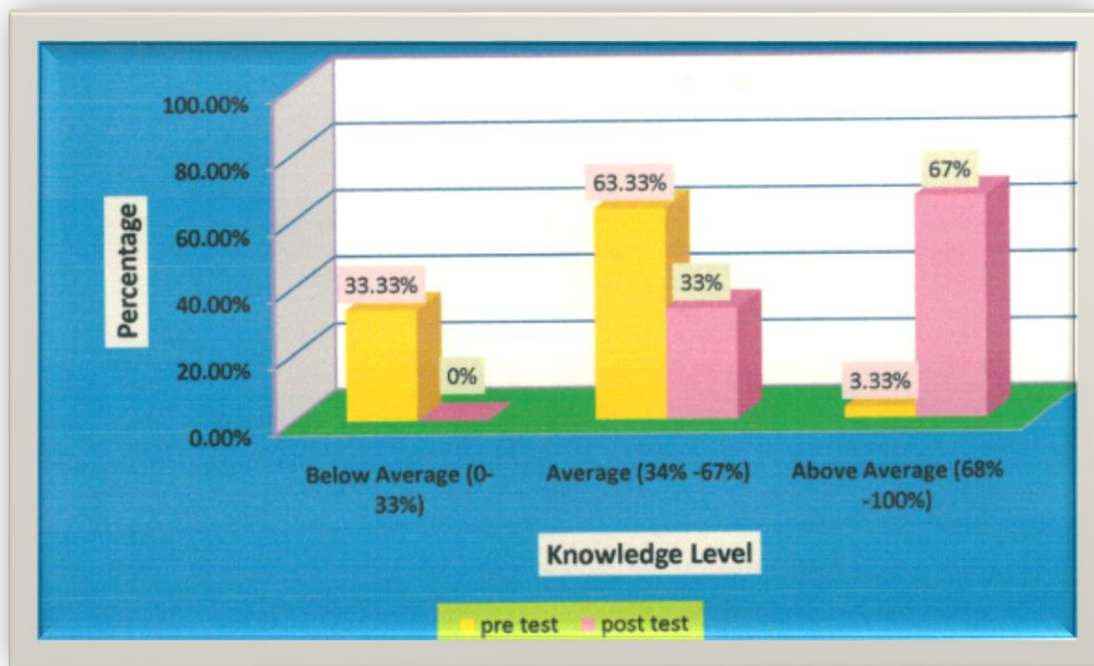
SD = 0.874

Above table shows that 10 (33.33%) were below average knowledge level in pretest whereas below average knowledge level in posttest were found nil, 19.

(63.33%) were under average knowledge level in pretest whereas in posttest 10 (33.33%) were under average knowledge level, in pretest 1 (3.33%) were found above average knowledge level where as 20(66.67%) were under above average knowledge level in posttest. The pretest mean was 2.7667 with 1.0063 standard deviation and that of posttest mean was 4.8333 with 0.8743 standard deviation. These differences indicated that structured teaching program was affected on mastitis among primi postnatal.

mothers.

**Figure 16 :** Level of Knowledge of Mothers on Mastitis in Pre and Post Test



Item	Area of knowledge	Pretest correct responses		Post test correct responses	
			%	f	%
1.	What is puerperium?	30	100.0	30	100.00
2	What is the duration of puerperium?	9	30.00	24	80.00
3	Which of the following changes occur during	14	46.66	26	86.66

	puerperium?				
4	What is a puerperal infection?	13	43.33	25	83.33
5	Which of the following is not a puerperal infection?	13	43.33	24	80
6	When does puerperal sepsis occur?	13	43.33	26	86.66
7	What is the cause for puerperal infection?	16	53.33	27	90.00
8	What are the contributing factors for puerperal infection?	11	36.66	25	83.33
9	What is the most common sign of puerperal infection?	12	40.00	21	70
10	Why should a postnatal mother go for postnatal checkup ?	14	46.66	26	86.66
11	Puerperal infections can be prevented by ?	14	46.66	26	86.66
12	What are the benefits, by preventing puerperal infections ?	15	50	29	96.66

**Table 11** Item Wise Frequency and Percentage Distribution Of correct responses of the primi postnatal mothers regarding knowledge on puerperium.

The above table shows that 100% of the primi postnatal mothers were having the knowledge regarding puerperium in the pretest whereas in the post test it was 100%.

Regarding duration of puerperium 30% of puerperal mothers were having the knowledge in the pretest whereas in the post test it was increased to 80%.

Regarding What is a puerperal infection 43.33% of the primi postnatal mothers had the knowledge in the pretest whereas in the post test it was increased to 83.33%.

Which of the following is not a puerperal infection of primi postnatal mothers were having 43.33% in the pretest whereas in the posttest it was increased to 80%.

Regarding When does puerperal sepsis occur 43.33% of the primi postnatal mothers had the knowledge in the pretest whereas in posttest it was increased to 86.66%.

Regarding What is the cause for puerperal infection 53.33% of the primi postnatal mothers were having the knowledge in the pretest whereas in posttest it was increased to 90%.

Regarding What are the contributing factors for puerperal infection 36.66% of the primi postnatal mothers were having the knowledge in the pretest whereas in posttest it was increased to 83.33%.

Regarding What is the most common sign of puerperal infection 40% of the primi postnatal mothers were having the knowledge in the pretest whereas in posttest it was increased to 70%.

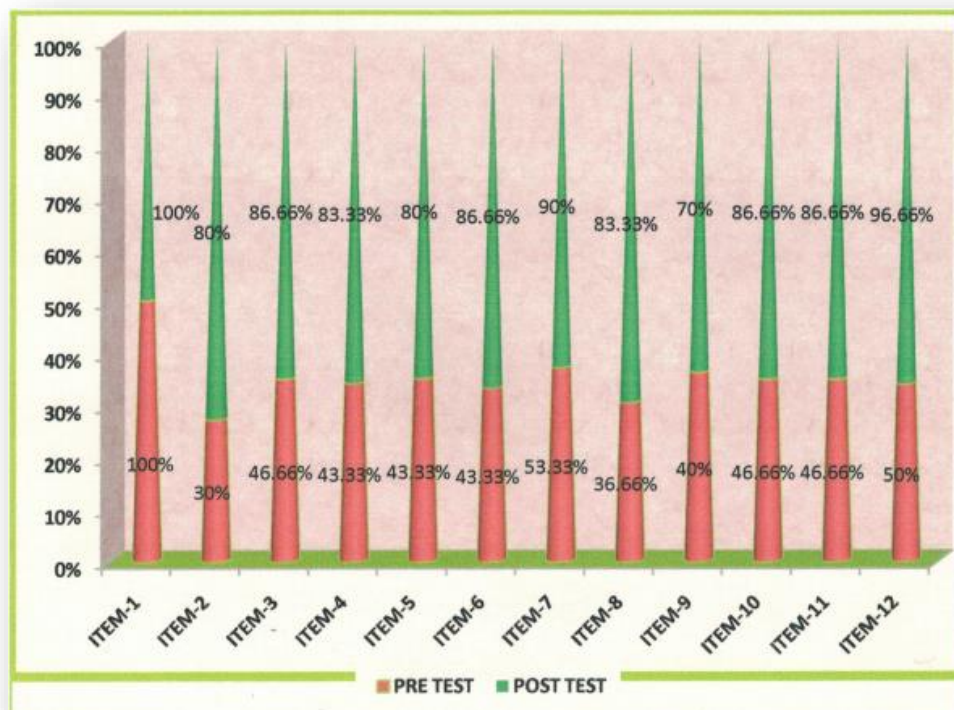
Regarding Why a postnatal mother should go for postnatal check up 46.66% of the primi postnatal mothers had the knowledge in the pretest whereas in posttest it was increased to 86.66%.

Puerperal infections can be prevented by 46.66% of the primi postnatal mothers having the knowledge in the pretest whereas in posttest it was increased to 86.66%.

Regarding What are the benefits, by preventing puerperal infections 50% of the primi postnatal mothers were having the knowledge in the pretest whereas in posttest it was increased to 96.66% .

**Figure-17**

Item Wise Percentage Distribution Of The Correct Responses Of Primi Postnatal Others Regarding The Knowledge Of Puerperium



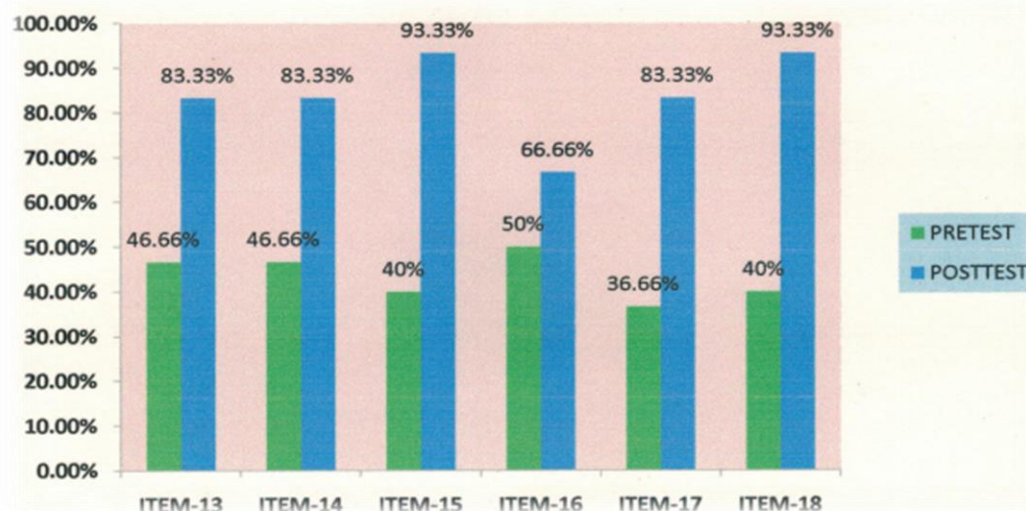
**Table 12**

Item Wise Frequency and Percenbtage Distribution Of Correct Responses Of Primi Postnatal Mothers Regarding Prevention Of Urinary Tract Infection

Item	Area of knowledge	Pretest correct responses		Post test correct responses	
		f	%	f	%
13	What is urinary tract infection?	14	46.66	25	83.33
14	What is the major cause of urinary tract infection?	14	46.66	25	83.33
15	What is the sign of urinary tract infection?	12	40.00	28	93.33
16	What is the primary site of urinary tract infection?	15	50	20	66.66
17	What is the best measure that you take to prevent urinary tract infection?	11	36.66	25	83.33
18	How do you clean the perineal area to prevent risk of urinary tract infection	12	40	28	93.33

The above table shows that 46.66% of the primi postnatal mothers had the knowledge regarding the urinary tract infection in the pretest whereas in the post test it was increased to 83.33%. Regarding What is the major cause of urinary tract infection 46.66% primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 83.33%. Regarding What is the sign of urinary tract infection 40% of primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 93.33%. Regarding What is the primary site of urinary tract infection 50% of the primi postnatal mothers had the knowledge in the pretest whereas in the post test it was increased to 66.66%. Regarding What is the best measure that you take to prevent urinary tract infection 36.66% of primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 83.33%. Regarding How do you clean the perineal area to prevent risk of urinary tract infection 40% of the primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 93.33%.

**Figure.18** Item Wise Percentage Distribution Of The Correct Responses Of Primi Postnatal Mothers Regarding The Prevention Of Urinary Tract Infection



**Table - 13**

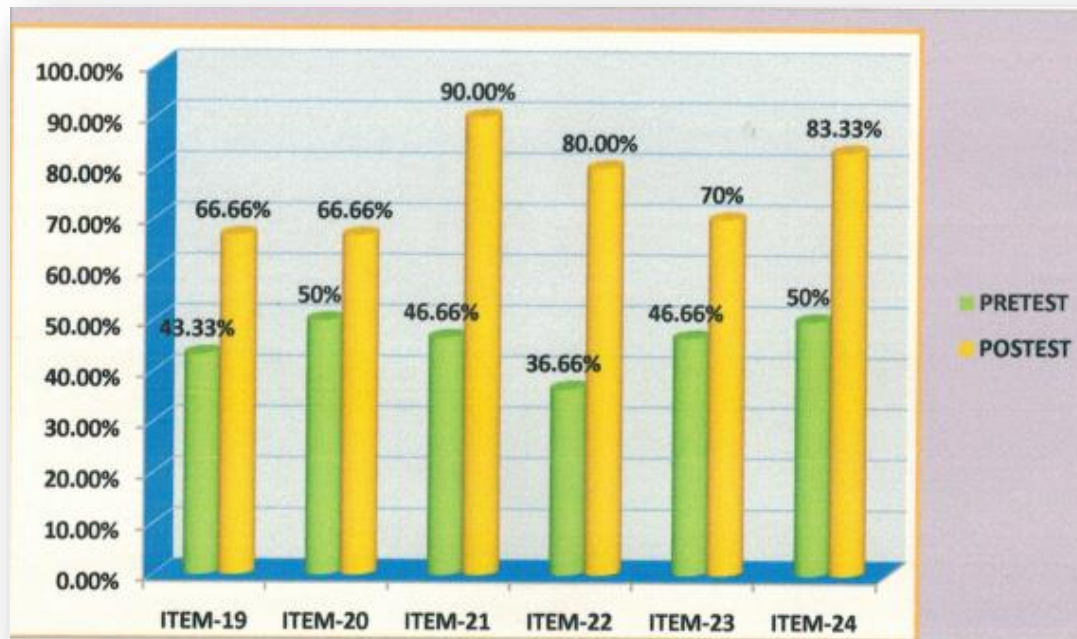
Item Wise Frequency and Percentage Distribution of Correct Responses of the Primi Postnatal Mothers  
Regarding Prevention of Breast Engorgement

Item	Area of knowledge	Pretest correct responses		Post-test correct responses	
19.	What is Breast engorgement?	13	43.33	20	66.66
20.	When does the Breast engorgement occur?	15	50	20	66.66
21.	What are the causes of Breast engorgement?	14	46.66	27	90.00
22.	What are the significant symptoms of Breast engorgement?	11	36.66	24	80.00
23.	What measures do you take to prevent Breast engorgement?	14	46.66	21	70
24.	How can you prevent the breast engorgement by breast feeding?	15	50	25	83.33

The above table shows that regarding What is Breast engorgement 43.33% of the primi postnatal mothers were having the knowledge regarding in the pretest whereas in the post test it was increased to 66.66%

Regarding When does the Breast engorgement occur 50% of primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 66.66%. Regarding What are the causes of Breast engorgement 46.66% of the primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 90%. What are the significant symptoms of Breast engorgement 36.66% of the primi postnatal mothers were having the knowledge in the pretest whereas in the posttest it was increased to 80%. How can you prevent breast engorgement by breast feeding 50% of the primi postnatal mothers were having the knowledge in the pretest whereas in the posttest it was increased to 83.33%.

**Figure-19:** Item Wise Frequency and Percentage Distribution of Correct Responses of the Primi Postnatal Mothers Regarding Prevention of Breast Engorgement



**Table - 14**

Item Wise Frequency and Percentage Distribution of Correct Responses of the Primi Postnatal Mothers Regarding Prevention of Mastitis

Item	Area of knowledge	Pretest correct responses		Post-test correct responses	
		f	%	f	%
25	What is mastitis?	16	53.33	27	90.00
26.	What are the causes of mastitis?	16	53.33	24	80.00

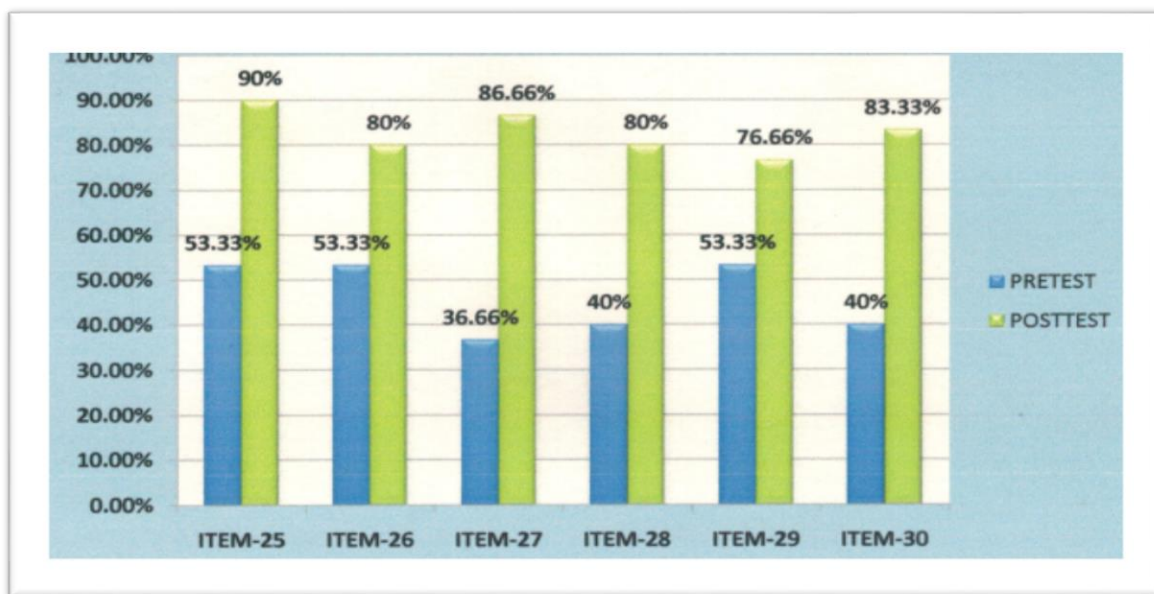
27.	Who are more prone to get mastitis?	11	36.66	26	86.66
28	What are the signs of mastitis?	12	40	24	80.00
29.	What measures do you take to prevent mastitis?	16	53.33	23	76.66
30.	How can you prevent mastitis by breast care?	12	40.00	25	83.33.

The above table shows that regarding What is mastitis 53.33% of the primi postnatal mothers had the knowledge regarding in the pretest whereas in the post test it was increased to 90%. Regarding What are the causes of mastitis 53.33% of primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 80% .

Regarding Whom are more prone to get mastitis 36.66% of the primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 86.66% .Regarding What are the signs of mastitis 40% of the primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 80%.

Regarding What measures do you take to prevent mastitis 53.33 % of the primi postnatal mothers were having the knowledge in the pretest whereas in the post test it was increased to 76.66%. Regarding How can you prevent mastitis by breast care 40% of the primi postnatal mothers had the knowledge in the pretest whereas in the post test it was increased to 83.33%.

**Figure. 20** Item Wise Percentage Distribution of Correct Responses of the Primi Postnatal Motiier Regarding Prevention Of Mastitis



### Section-C

This part deals with assessing association between knowledge of primi postnatal mothers on prevention of selected puerperal infections with demographic variables such as age, education, religion, occupation, income, type of family, area of living and previous knowledge on prevention of selected puerperal infections by using the chi square test.

**Table - 15**

Association between pre and posttest knowledge of primi postnatal mothers on prevention of selected puerperal infections with age **N=30**

Age	Level of Knowledge													
	Pretest							Post test						
	Below Average		Average		Above Average		Total Fre	Below Average		Average		Above Average		Total Fre
		O/o												
21-23 years	2	6.67	12	40			14			1	3.33	13	43.33	14
24-26years	4	13.33	6	20			10			1	3.33	9	30	10
27-29years			4	13.33			4			2	6.67	2	6.67	4
30-32 years	2	6.67	0	0			2					2	6.67	2
Total	8	26.67	22	73.33			30			4	13.37	26	86.67	30

Pretest  $\chi^2 = 0.1176$  df6  $P < 0.05$  Post test  $\chi^2 = 0.4798$  df6  $P < 0.05$

**Table-15** showed that association between pretest and posttest knowledge on prevention of selected puerperal infections among primi postnatal mothers with age. For pretest the table value of  $\chi^2$  at 0.05 level of significance with df6 is 12.59, as the calculated value of  $\chi^2$  (0.1176) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with age. For posttest the table value of  $\chi^2$  at 0.05 level of significance with df6 is 12.59, as the calculated value of  $\chi^2$  (0.4798) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with age.

**Table - 16**

Association between pre and posttest knowledge of primi postnatal mothers on prevention of selected puerperal infections with Education **N=30**

Education	Level of Knowledge													
	Pretest							Post test						
	Below Average		Average		Above Average		Total Fre	Below Average		Average		Above Average		Total Fre
Illiterate														
Primary School Education	3	10	9	30			12			2	6.67	10	33.33	12
Higher School Education	2	6.67	11	36.67			13			1	3.33	12	40	13
Graduate & PG	3	10	2	6.67			5			1	3.33	4	13.33	5
Total	8	26.67	22	73.33			30			4	13.33	26	86.67	30

Pretest  $X^2=0.2813$  df6

$P<0.05$

2

Post test  $X^2=0.7865$ df6

$P<0.05$

Table no-16 showed that association between pretest and posttest knowledge on prevention of selected puerperal infections among primi postnatal mothers with education. For pretest the table value of  $X^2$  at 0.05 level of significance with df6 is 12.59, as the calculated value of  $X^2$  (0.2813) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with education. For posttest the table value of  $X^2$  at 0.05 level of significance with df6 is 12.59, as the calculated value of  $X^2$  (0.7865) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with education.

**Table 17**

Association between pre and posttest knowledge of primi postnatal mothers on prevention of selected puerperal infections with religion **N=30**



Housewife	4	13.33	8	26.67			12			2	6.67	10	33.33	12
Daily wages			6	2-			6			1	3.33	5	16.67	6
Private job	1	3.33	5	16.67			6			1	3.33	5	16.67	6
Government job	1	3.33	1	3.33			2					2	6.67	2
Business	1	3.33	1	3.33			2					2	6.67	2
Self employee	1	3.33	1	3.33			2					2	6.67	2
Total	8	26.67	22	73.33			30			4	13.33	26	86.67	30

**Pretest  $X^2=0.9244$  df10  $P<0.05$  Post test  $X^2=0.9997$  df10  $P<0.05$**

**Table 18** showed that association between pretest and posttest knowledge on prevention of selected puerperal infections among primi postnatal.

mothers with occupation. For pretest the table value of  $X^2$  at 0.05 level of significance with df10 is 18.31, as the calculated value of  $X^2$  (0.9244) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with occupation. For posttest the table value of  $X^2$  at 0.05 level of significance with df10 is 18.31, as the calculated value of  $X^2$  (0.9997) was less than the table value that shows there was no significant association between the level of prevention occupation.

**Table 19**

Association between pre and posttest knowledge of primi postnatal mothers on prevention of selected puerperal infections with Type of Family N=30

Type of Family	Level of Knowledge													
	Pretest							Post test						
	Below Average		Average		Above Average		Total Fre	Below Average		Average		Above Average		Total Fre
Nuclear	6	20	15	50			21			1	3.33	20	66.67	21
Joint	2	6.67	7	23.33			9			3	10	6	20	9
Extended Single parent family														
Total	8	26.67	22	73.33			30			4	13.33	26	86.67	30

**Pretest  $X^2=0.6312$  df6  $P<0.05$  Post test  $X^2=0.8505$  df6  $P<0.05$**

**Table 19** showed that association between pretest and posttest knowledge on prevention of selected puerperal infections among primi postnatal. mothers with type of family. For pretest the table value of  $X^2$  at 0.05 level of significance with df6 is 12.59, as the calculated value of  $X^2$  (0.6312) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with type of family. For posttest the table value of  $X^2$  at 0.05 level of significance with df6 is 12.59, as the calculated value of  $X^2$  (0.8505) was less than the table value that shows there was no significant association between the level of prevention type of family.

**Table 20**

Association between pre and posttest knowledge of primi postnatal mothers on prevention of selected puerperal infections with Area of Living N=30

	Level of Knowledge							
	Pretest				Post test			
	Below Average	Average	Above Average	Total Fre	Below Average	Average	Above Average	Total Fre

Area of living														
Urban														
Rural	8	26.67	22	73.33			30			4	13	26	86.67	30
Total	8	26.67	22	73.33			30			4	13	26	86.67	30

**Pretest  $X^2=0.5274$  df6 P<0.05 Post test  $X^2=0.1492$  df6 P<0.05**

**Table 20** showed that association between pretest and posttest knowledge on prevention of selected puerperal infections among primi postnatal mothers with area of living. For pretest the table value of  $X^2$  at 0.05 level of significance with df6 is 5.99, as the calculated value of  $X^2$  (0.0821) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with area of living. For posttest the table value of  $X^2$  at 0.05 level of significance with df2 is 5.99, as the calculated value of  $X^2$  (0.0817) was less than the table value that shows there was no significant association between the level of prevention area of living.

**Table 21**

Association between pre and posttest knowledge of primi postnatal mothers on prevention of selected puerperal infections with Previous Knowledge N=30

Previous Knowledge	Level of Knowledge													
	Pretest							Post test						
	Below Avera e		Average		Above Avera e		Total Fre	Below Avera e		Average		Above Avera e		Total Fre
Yes	1	3.33	1	3.33			2					2	6.67	
No	7	23.33	21	70			28			4	13.33	24	80	28
Total	8	26.66	22	73.33			30			4	13.33	26	86.67	30
Pretest X <sup>2</sup> =0.7210      df2      P<0.05      Post test X <sup>2</sup> =0.8326      df2      P<0.05														

**Table 21** showed that association between pretest and posttest knowledge on prevention of selected puerperal infections among primi postnatal mothers with previous knowledge. For pretest the table value of  $X^2$  at 0.05 level of significance with df2 is 5.99, as the calculated value of  $X^2$  (0.7210) was less than the table value that shows there was no significant association between the level of knowledge on prevention of selected puerperal infections among primi postnatal mothers with previous knowledge. For posttest the table value of  $X^2$  at 0.05 level of significance with df2 is 5.99, as the calculated value of  $X^2$  (0.8326) was less than the table value that shows there was no significant association between the level of prevention of previous knowledge.

## IMPLICATIONS AND RECOMMENDATIONS, CONCLUSIONS DISCUSSIONS, LIMITATIONS.

The study was undertaken to assess the effectiveness of structured teaching program regarding prevention of puerperal infections among primi postnatal mothers at Rural Community , Hyderabad.

### Objectives of the study

- ❖ To assess the knowledge of primi postnatal mothers on prevention of selected puerperal infections by pretest
  - ❖ To develop and administer structured teaching program on prevention of selected puerperal infections among primi postnatal mothers.
1. To assess the effectiveness of structured teaching program on prevention of selected puerperal infections among primi postnatal mothers by posttest

2. To determine association between the pre-test and post-test knowledge levels of primi postnatal mothers with the selected demographic variables.

The investigator felt that this study would help primi postnatal mothers to adopt preventive measures of puerperal infections.

Review of the literature helped the investigator to gain an insight into the importance of prevention of puerperal infections and its complications and to obtain in depth knowledge to develop the conceptual framework for the study and questionnaire for the data collection.

Pre experimental research with one group pre and posttest design was adopted. The setting of the study was at Rural Community Hyderabad. the sample consisted of 30 primi postnatal mothers who can speak and understand Telugu and English.

The data was collected with the help of a structured questionnaire. The tool consisted of a structured questionnaire which was divided into 2 sub-parts.

1. **part I**

deals with bio demographic data of the primi postnatal mothers such as Age , Education, Religion Occupation , Income of the family per month ,Type of family, Area of living, do you have any previous knowledge regarding prevention of puerperal infections.

2. **Part-II**

deals with sections of assessment of knowledge ,types of selected infections prevention of infections ,it consists of 30 questions. Each question carries one mark, so all questions put together a total of 30 marks. All the questions are designed with multiple choices with one correct answer.

**Part-II** of the tool consists of 4 areas.

**Area I :** Questions related to knowledge of Puerperium.

**Area 2:** Questions related to Urinary tract infections and their prevention.

**Area 3:** Questions related to Breast engorgement and its prevention.

**Area 4:** Questions related to Mastitis and its prevention.

The tool was given for content validity to various experts from nursing obstetrics, gynecology, and statistics departments. The questionnaire was tested for reliability by using Karl Pearson's correlation co-efficient formula and was found reliable.

The pilot study was conducted at Community Hyderabad. After the pilot study it was determined that it is feasible and practicable to conduct the main study. The basic knowledge of primi postnatal mothers regarding prevention of puerperal infections was assessed by the pretest. Later structure teaching on prevention of puerperal infections was imparted on same day. Post test was given after week to examine the effectiveness of teaching.

The relationship between the effectiveness of structured teaching on mother's knowledge with selected variables was assessed through chi-square test. The result showed that there was no significant relationship between the knowledge and selected variables like age, Education, Religion Occupation ,income of the family per month ,Type of family, Area of living, previous knowledge regarding prevention of puerperal infections. This indicates that the increase in posttest mean knowledge scores was because of structured teaching and not because of selected variable.

## CONCLUSION

The following conclusions were drawn based on the findings of the study.

1. In pretest almost all the primi postnatal mothers have scored average marks.
2. After structured teaching there was a significant improvement in knowledge scores on the prevention of puerperal infections which is indicated by posttest scores in which all the primi postnatal mothers have scored average and above average marks.
3. Primi postnatal mothers responded well and showed their improved knowledge in posttest performance which was a clear indication of the effectiveness of structured teaching.
4. Primi postnatal mothers showed a lot of interest to learn prevention of puerperal infections.
5. Relationship between the primi postnatal mothers' knowledge on prevention of puerperal infections and selected demographic variables such as age, religion, type of the family, educational qualification, occupation, income of the family, area of living, and previous knowledge of the mothers were computed by using chi-square test of significance. These findings showed that there is no significant difference between the knowledge scores of primi post-natal mothers on prevention of puerperal infections and the selected variables.

## DISCUSSION

The present study assessed the primi postnatal mothers' knowledge regarding prevention of puerperal infections. This study was conducted on 30 primi postnatal mothers at rural community Hyderabad .

In relation to demographic data, it was observed that majority of the mothers 14(46.67%) were in the age group of 21-23 years, and 16 (53.33%) belongs to Hindu religion. Majority of the mothers from 21 (70%) were nuclear families. The sample was distributed in terms of education, as majority of mothers 13(43.33%) were higher school education.

Majority of the mothers 12(40%) were housewives, regarding monthly family income, most of the mothers 30(100%) were belongs to rural area. Most of the mothers came under unknown group of previous knowledge.

The results showed a marked improvement in posttest knowledge scores compared to pretest knowledge scores. Pretest scores indicated that about 8 (26.67%) of the mothers obtained below average (0-33%) scores and 22(73.33%) obtained average (34-66%) and above average knowledge level in pretest were found nil. Area wise analysis of knowledge scores of primi postnatal mothers and effectiveness of structured teaching program in each area wise done. There was a significant difference in pretest and posttest knowledge scores.

But, it was very encouraging to note that their scores improved significantly in posttest after structure teaching. In the post test most of the mothers 26(86.67%) obtained above scores 22(73.33%) obtained average scores in pretest, and none of the mothers obtained below average score in posttest. The obtained' value was 15.83. which was higher than the

table 't' value of 2.0452 at 29df with 0.05 level of significance. It shows that there is significant difference ( $p < 0.05$ ) in pretest and posttest knowledge scores.

Comparison of the pretest and posttest knowledge score regarding prevention of puerperal infections, which were obtained 't' value was 15.83 which was significant at 0.05 level of significance at 29 degrees of freedom.

The relationship between the effectiveness of structured teaching on mothers' knowledge with selected variables was assessed through chi-square test. The result showed that there was no significant relationship between the knowledge and selected variables like age, Education, Religion Occupation, income of the family per month, Type of family, Area of living, previous knowledge regarding prevention of puerperal infections. This indicates that the increase in posttest mean knowledge scores was because of structured teaching and not because of selected variable.

## **IMPLICATIONS**

### **Nursing practice**

1. Staff nurses can help mothers in maternity hospitals to build awareness about the consequences of puerperal infections through extensive continuing education.
2. Staff nurses can help the mothers in antenatal and postnatal wards to know the benefits of prevention of puerperal infections.
3. Nurses play a major role in preventing puerperal infections, as they are more accessible to postnatal mothers in postnatal wards.

### **Nursing education**

Students are equipped with updated knowledge of self-care practices on prevention of puerperal infections are better persons to impart appropriate knowledge to the primi postnatal mothers, which will help in preventing puerperal complications and lead to a near normal life.

During basic nursing education courses, student may be given clinical assignments. The activities may involve finding out the special needs of the primi postnatal mothers like breast care perineal care, bladder care. The schools and colleges of nursing play a significant role in creating awareness among mothers regarding prevention of puerperal infections.

### **Community services**

Nursing students can spread information among the mothers during their community experience by undertaking education programs and group discussions with antenatal and post-natal mothers. Knowledge of the health workers, dais, and community health visitors regarding prevention of puerperal infections should be updated by conducting workshops and education programs online and upload of educational videos in the YouTube and other online platforms.

## **Nursing administration**

Nursing administrations need to encourage and plan staff development program in hospital as well as community on prevention of puerperal infections, thus the staff can be informed of the advances which can help in educating the mothers, family, and community.

## **Nursing research**

Research provides nurses with the opportunity to take decisions regarding the needs of the mothers in relation to prevention of puerperal infections.

## **LIMITATIONS**

1. The study results are limited to the primi postnatal mothers discharged from the hospital.
1. The study is limited only to the post-natal primi mothers who could understand and speak Telugu & English.
2. Findings of the study cannot be generalized as the size of the sample is small.
3. As there is no standard tools available so the investigator for the purpose of the study developed the tool to assess the knowledge of primi post-natal mothers and to analyze the effectiveness of structured teaching.

## **Recommendations**

Based on the findings of the study it is recommended that.

1. A similar study can be replicated on a large sample to validate the findings of the study.
2. A similar study can be undertaken by adopting an experimental design.
3. A similar study may be undertaken by antenatal mothers in the puerperium preparation classes .
4. A comparative study may be undertaken to find out the difference between primi postnatal mothers and multiparous mothers about knowledge on prevention of puerperal infections in rural & urban areas.
5. A similar study can be done in the families of newborns with partner and family members involvement.
6. A similar study may be undertaken with follow-up, to find out the number of mothers following preventive measures.

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