



# A PRE - EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING POLYCYSTIC OVARIAN DISEASE AMONG COLLEGE GIRLS OF SELECTED COLLEGES OF JALANDHAR , PUNJAB, INDIA 2021-2022 .”

**Ms Jasleen Kaur, Ms Harpreet Kaur,**

Bsc (n) fourth year students

Clinical instructor, clinical instructor, Students of Army College of nursing Jalandhar Cantt

*Abstract:* Polycystic Ovarian Disease is the most common endocrine disorder among women between the ages between 18-44. It affects approximately 2% to 20% of this age group. It is one the leading endocrine disease and which affects one in 15 women in worldwide. The incidence of PCOD among adolescents is estimated to be between 11 and 26% (3) and about 50% are overweight.

*Index Terms – structured teaching programme, knowledge*

**“The highest education is that which does not merely give us information but makes our life in harmony with all existence.”** -Rabindranath Tagore

Adolescent period is an extraordinary period in which huge changes takes place in the female's likewise physical, sexual maturity and emotional imbalance which affect our lifestyle.

PCOD is a common health problem in the teenagers and adolescent which affects 5% to 10% of women in the age group of 18-44.

Polycystic Ovarian Disease is the most common endocrine disorder among women between the ages between 18-44. It affects approximately 2% to 20% of this age group. It is one the leading endocrine disease and which affects one in 15 women in worldwide. The incidence of PCOD among adolescents is estimated to be between 11 and 26% (3) and about 50% are overweight.

PCOD is a common gynecological endocrine disorder which has unknown etiology, with a occurrence vary from 8.1 to 17.8% in reproductive age group women. Women with PCOD are characterized by polycystic ovaries, chronic an ovulation, and hyperandrogenism and gonadotropin abnormalities.

In India PCOD in adolescence is 9.13%. India has witnessed about 30% rise in PCOD cases in the last couple of years. This draw awareness to the issue of early diagnosis in adolescent girls. The term Polycystic Ovarian Disease was first described by Irving stein and Micheal Leventhal

as a Triad of Amenorrhea", „Obesity", and „Hirsutism" in 1935 when they observed the relation between obesity and reproductive disorders. It is hence also known as the „Stein- Leventhal Syndrome" or „Hyper androgenic An ovulation" and is the most common endocrine ovarian disorder affecting approximately 2-8% women of reproductive age. Now a day's, it is also referred to as the „Syndrome O" i.e. over nourishment, overproduction of insulin, ovarian confusion and ovulatory disscruption.

PCOD is a health problem in the teenagers and adolescent, its affects 5% to 10% of women in reproductive age group and cause the infertility among the women. PCOD is a common gynecological endocrine disorder which has unknown etiology, with a occurrence vary from 8.1 to 17.8% in reproductive age group women. Women with PCOD are characterized by polycystic ovaries, chronic an ovulation, and hyperandrogenism and gonadotropin abnormalities. In India PCOD in adolescence is 9.13%. India has witnessed about 30% rise in PCOD cases in the last couple of years. This draw awareness to the issue of early diagnosis in adolescent girls.

*Index Terms – structured teaching programme, knowledge*

### RESEARCH METHODOLOGY

According to Sharma, "Research is methodology involves the systemic procedure by which the researcher starts from initial identification of the problem to its final conclusion. The role of methodology consists of procedure and techniques for conducting the study." This chapter deals with the research approach, research design, setting of the study population, criteria for the selection of sample, sample size, sampling techniques instrument, data collection and dataanalysis. This also describes the pilot study.

#### RESEARCH APPROACH

In this study quantitative evaluative research approach was used to assess the effectiveness of structured teaching programme on knowledge regarding polycystic ovarian disease among college girls.

#### RESEARCH DESIGN

A blue print for conducting the study that maximize control over the validity of findings. The research design guide the researcher in planning and implementing the study in a way that is most likely to achieve the intended goal.

Pre-Experimental one group pretest post test design without control group was selected for the pretest study to assess the effectiveness structured teaching programme for Polycystic Ovarian disease on level of knowledge among college girls.

The diagrammatic representation of research design is given below

GROUP	Day 1	Day 7
Experimental	O1 X	O2

Keys:

O1 = Pretest knowledge regarding Polycystic Ovarian disease.

X = Structured teaching programme regarding Polycystic Ovarian disease. O2 = Post test knowledge regarding Polycystic Ovarian disease on 7th day

## VARIABLES

### *Independent variables:*

Variables that are purposely manipulated or changed by the researcher known as independent variables.

In this study the independent variables is Structured teaching programme regarding Polycystic Ovarian disease.

### *Dependent Variables:*

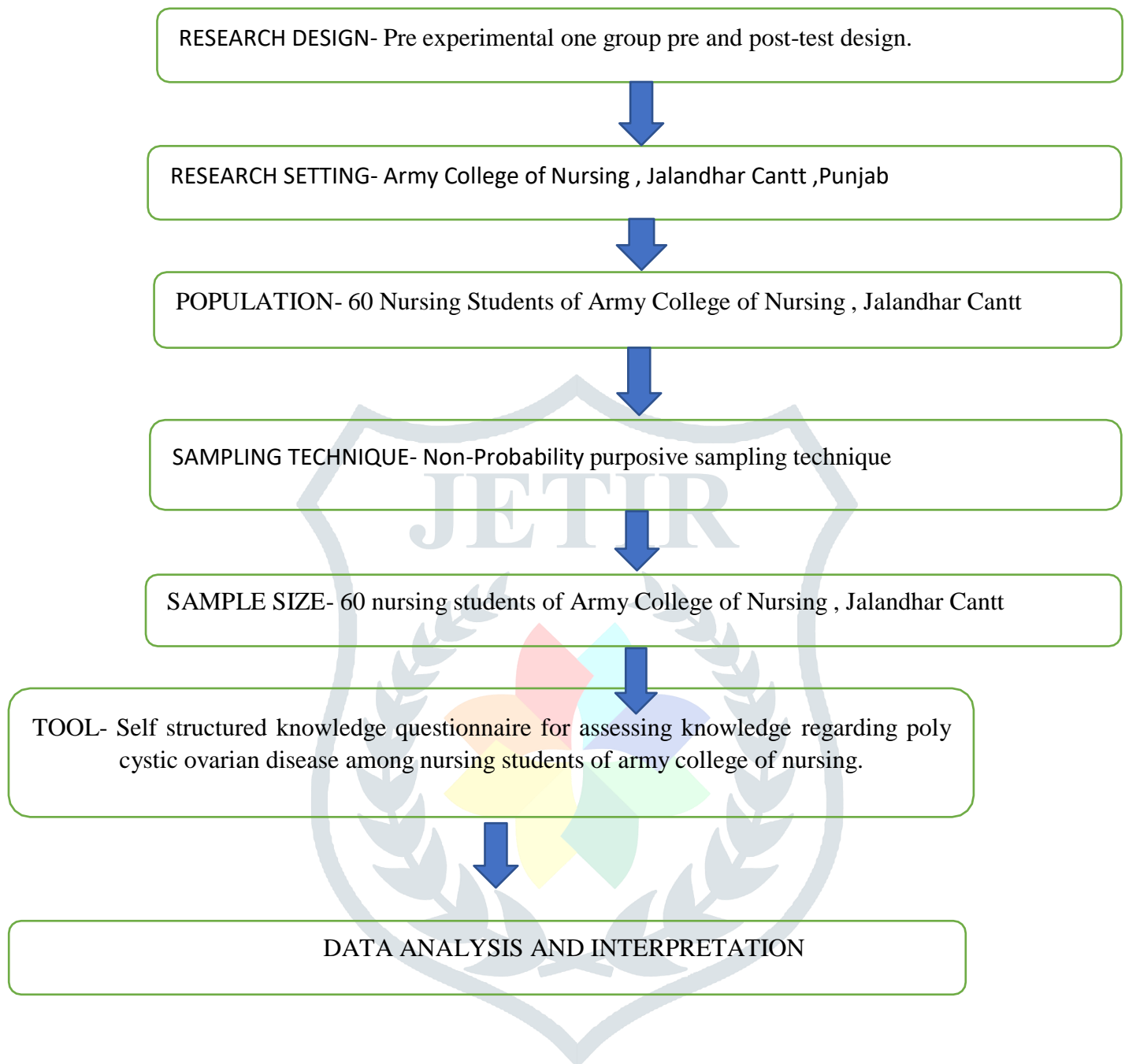
The dependent variables are the variable the researcher is interested in explaining and preceding.

In this study the dependent variables is level of knowledge regarding Polycystic Ovarian disease.

### *Socio demographic variables:*

The socio demographic data consisted of 06 items which include age of the girls, religion, family income, type of activity, type of diet, menstrual pattern, body mass index, source of information.





**FIGURE 2: SCHEMATIC DESIGN OF RESEARCH METHODOLOGY**

## SETTING OF THE STUDY

The study was conducted in Army college of Nursing , which is located at Jalandhar cantt,Punjab.

## POPULATION OF THE STUDY

Target population selected for this study was all the college girls aged between the age group of 18-24 years. Accessible population selected for this study includes college girls in Army college of Nursing Jalandhar Cantt.

## SAMPLING TECHNIQUE

Non-probability purposive sampling technique was used in this study.

*SAMPLE AND SAMPLE SIZE*

The sample of this study was 60 college girls between the age group of 18- 24 years.

*CRITERIA FOR SAMPLE SELECTION:***INCLUSION CRITERIA**

- 1.College girls who are aged between 18-24 years.
- 2.College girls who are willing to participate in the study.
- 3.College girls who are present during the data collection period.
- 4.College girls who can able to read and write English.

*EXCLUSION CRITERIA*

- 1.The study is delimited to selected college.
- 2.The study is delimited to the College girls.

**3.4Statistical tools and econometric models***RESEARCH TOOL/ SELECTION AND THE DEVELOPMENT OF TOOLS*

The researcher constructed the tool and intervention based on the literature review and opinion from experts which consists of :

Part A: Baseline characteristics

art B: Structured multiple choice questionnaire to asses the knowledge regarding PolycysticOvarian disease.

*Selection and development of tool*

Tool are the procedures or instruments used by the researcher to the collect the data.The tools were prepared on the basis of objectives of the study.

The following steps were adopted in the development of tool.

- 1.Review of literature
- 2.Discussion with experts
- 3.Development of blueprint
- 4.Development of structured questionnaire
- 5.Content validity
- 6.Pretesting of the tool
- 7.Reliability

*Preparation of blueprint*

The investigator will develop a blueprint based on the obtained information from the review of literature and discussion with the guide ,co-guide and experts from other departments ,will distribute the items into 2 domains mainly knowledge .The blueprint of items pertaining to knowledge will be prepared as per the objectives and conceptual framework . The blueprint includes the anatomy and the function of ovary,definition ,incidence, risk factors, signs and symptoms, diagnosis, management, prevention and complications

### *Construction of structural interview schedule*

The tool for the study consists of two parts.

#### *Parts A: Baseline characteristics*

The baseline characteristics consisted of 08 items that includes demographic variables of college girls such as age in years, religion, family income , type of activity, menstrual pattern, body mass index , source of information.

#### *Part B: Knowledge Questionnaire*

It consists of two parts.

ection - I includes structural multiple -choice questions regarding baseline characteristics.

Section -II include structured multiple- choice question on function,incidence,diagnosis and its prevention and management.

A total of 30 multiple-choice question will be used to asses the knowledge regarding Polycystic Ovarian disease among college girls in pre and post-test.The questions are constructed in relatives to general information, definition, incidence, risk factors, signs and symptoms, diagnosis, its prevention and management and complications.

### *SCORING PROCEDURE*

Part A : Baseline characteristics were filled according to their personal status Part B: scoring process for knowledge questionnaire-

It consists of total 30 multiple-choice question regarding general information about function,incidence,diagnosis and its prevention and management on Polycystic Ovarian disease. The correct and incorrect answer was given one and zero respectively. The maximum total score was 30.

The total score is computed and categorized as follows.

Level of knowledge	Score
Excellent	24-30
Good	15-23
Average	8-14
Below average	0-7



*INTERPRETATION OF SCORE*

SCORE	LEVEL OF KNOWLEDGE
0-07	Below average
08-14	Average
15-23	Good
24-30	Excellent

**DEVELOPMENT OF STRUCTURED TEACHING PROGRAMME**

The structured teaching programme was developed on Polycystic Ovarian disease among college girls of selected colleges of Jalandhar . It is developed on the basis of extensive review and opinion of experts .

The steps involved for the development of the tool:

- 1.Review of literature and discussion with experts
- 2.Preparation of first draft of STP
- 3.Development of criteria rating scale and content validity of STP
- 4.Pretesting of STP
- 5.Preparation of final draft

*Preparation of first draft:*

The STP is developed stepwise according to the objectives planned. The investigator prepared the overall plan of STP and A.V. aids such as charts, flash cards, power point presentation.

The developed STP with A.V. aids will be given to five experts to establish content validity and will be asked to give their opinion and suggestion about the content validity and will be asked to give their opinion and suggestions about the content of STP .

They will be given criteria checklist and will be asked to place a tick mark ( ) against. Based on the suggestion and with the help of the guide, necessary modification will be made and the teaching plan will be finalized.

STP covers the following content are as:

- General information on anatomy and function of ovary
- Definition
- Incidence
- Risk factors
- Signs and symptoms
- Diagnostic method
- Its prevention and management
- Complication

*Pretesting of the STP:*

Pretesting of STP will be done by administering it to 06 student in SGL College of Nursing.

*Preparation of the final draft of STP:*

The final draft will be prepared based on the content validity, reliability and pretesting.

*CONTENT VALIDITY*

Content validity refers to the degree to which an instrument measures what it measures what it is supposed to measure.

The prepared instrument along with the objectives, blueprint, operational definition, hypothesis, STP and checklist will be submitted to 05 experts in the field of gynecologist and other department.

The draft of the tool consists of 08 items in baseline characteristics, Knowledge assessment contain 30 items on Polycystic Ovarian disease.

Based on the suggestions given by the validators, necessary modifications will be done.

*PRETESTING OF THE TOOL:*

Pretesting in the stage in survey research when survey questions and questionnaires are tested on members of target population / study population, to evaluate the reliability and validity of the survey instruments prior to their distribution.

Pretesting of the tool will be carried out at SGL College of Nursing, subjects who fulfill the inclusion criteria will be selected.

*RELIABILITY OF THE TOOL :*

Research reliability is the degree to which research method produces stable and consistent results. A specific measures is considered to be reliable if its application on the subject of measurement number of times procedure the results.

Reliability of the tool will be established by administering the tool to 06 subject SGL College of Nursing. The reliability of the tools was tested by split-half method.

*PILOT STUDY*

A pilot study, also called a „feasibility study, is a small scale preliminary study conducted before any large scale quantitative research in order to evaluate the potential for a future, full-scale project. Pilot study was conducted on 06 subjects, SGL College of Nursing in order to test the present study tools for its validity, clarity, applicability, and it was found to be feasible.



The investigator conducted the pilot study in SGL College Of Nursing from. The sample size for the pilot study will be 06. Administrative approval will be obtained from the Principle of SGL College Of Nursing to conduct the pilot study. The purpose of pilot study was to:

- Evaluate the effectiveness of structure teaching programme .
- Find out the feasibility the final study.
- Determine the methods of data analysis.

The purpose of the study was explained to the subjects and the written consent was obtained. A total 06 college girls was selected for the study by using structured knowledge questionnaire. The data was collected personally using structured interview schedule on knowledge. Their responses was assessed confidentially. The average time taken for pretest was assessed . STP was conducted and after 07 days post-test was conducted with the same tool. Data analysis was done by using descriptive and inferential statistics.

#### *PLAN FOR DATA COLLECTION*

The written permission was obtained from Principal , Army College Of Nursing, Jalandhar Cantt. The data collection of main study done on 8 August 2022. The participants in study were selected by non-probability purposive sampling technique among college girls . Totally 60 BSc Nursing 2<sup>nd</sup> year college girls were selected who fulfilled the inclusive criteria and present at the time of data collection.

Written consent was taken before collecting the pretest . Every sample was given structured teaching programme on Polycystic Ovarian disease. Before giving the intervention , the investigator conducted pretest for study group. After 7 days of intervention , investigator conducted post-test which was done by using same tool to assess the level of knowledge on Polycystic Ovarian disease.

#### *METHOD OF DATA ANALYSIS*

Data analysis is a process used by researchers for reducing data to a story and interpreting it to derive insights. The obtained data is analyzed by using both descriptive and inferential statics based on the objectives and hypotheses of the study.

- 1.To compute the data , a master sheet will be prepared by the investigators .
- 2.Demographic data will be analyzed in terms of frequency and percentage .
- 3.The knowledge of the student after collection of STP will be calculated by mean, median and standard deviation.
- 4.he significant difference between the mean pre and post-test knowledge will be calculated by using „t“ test.

#### *PROTECTION OF HUMAN RIGHTS*

All official permissions to carry out the study were secured from pertinent authorities. All students were informed about the important and aim of this study. Oral consent was obtained from all the participants. All students were informed that their participation is voluntary and their rights to withdraw at any time, and

confidentiality of the information obtained. Also the students were informed that the collected data would be used only for the purpose of the present study, as well as for their benefits.

### *SUMMARY*

This chapter dealt with the methodology under taken for the study. It includes research approach, research design, setting of the study, variables, population, sample and sampling technique ,development of tool, content validity, and reliability of tool, pilot study, data collection procedure and plan for data analysis.

## **IV. RESULTS AND DISCUSSION DATA ANALYSIS AND INTERPRETATION**

This chapter deals with analysis and interpretation of data collected by a self structured knowledge questionnaire to evaluate effectiveness of structured teaching programme on PCOD among 2<sup>nd</sup> year B.SC. nursing students of Army college of nursing Jalandhar cant, Punjab

.The aim of analysis was to reduce , organize and give meaning of the study.

The purpose of analysis is to summarize , compare and the proposed the relationship and inter findings of data. The data collected are tabulated on the master sheet and analyzed using descriptive and inferential statistics.

### *OBJECTIVES OF THE STUDY*

1. To assess the pretest knowledge regarding scores Polycystic Ovarian disease among college girls.
2. To assess the post-test knowledge regarding scores Polycystic Ovarian disease among college girls.
3. To determine the effectiveness of structured teaching programme by comparing the pre and post- test knowledge regarding scores Polycystic Ovarian disease among college girls.
4. To determine the association of knowledge with their selected socio demographic variables (age, religion, family income, type of activity, type of diet, menstrual pattern, body mass index ,source of information) among college girls.

### *HYPOTHESES*

- H<sub>1</sub> : There is a significant difference in the level of knowledge regarding Polycystic Ovarian disease between pretest and post-test scores.
- H<sub>2</sub>: There is a significant association between post-test level of knowledge regarding Polycystic Ovarian disease among college girls and their selected demographic variables.

### *ORGANIZATION OF STUDY FINDINGS*

The analysis of data was organized and finalized according to the plan for data analysis and presented in the form of table and figures. The analyzed data was presented under the following headings.

**SECTION I:** Description of demographic characteristics of respondents.

**SECTION II:** Determine the effectiveness of structured teaching programme on PCOD among nursing students.

SECTION II(a): Frequency distribution of sample based on the level of knowledge score of pretest and post test .

SECTION II(b): Effectiveness of structured teaching program on PCOD among 2<sup>nd</sup> year BSc nursing students .

SECTION III: Find out association of post teaching knowledge score of PCOD among 2<sup>nd</sup> year BSc nursing students .

#### *SECTION I: Description of demographic characteristic of respondents*

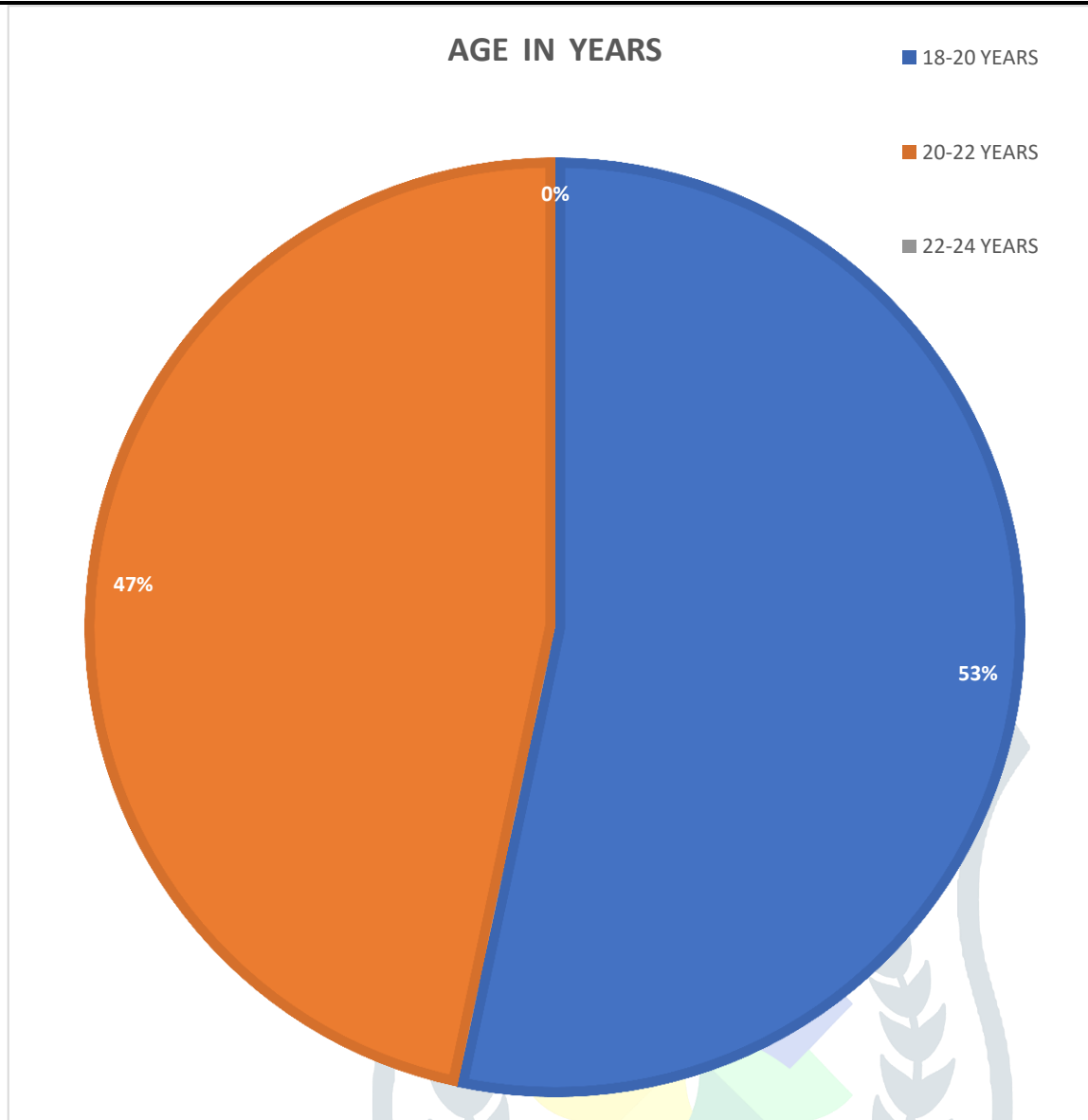
This section deals with the description of the demographic characteristics of 2<sup>nd</sup> year BSc nursing students and has been presented in the form of frequency and percentage.

The data given in table 1 depicts the frequency and percentage distribution of 2<sup>nd</sup> year BSc nursing students by demographic characteristics which includes age in years ,religion ,annualfamily income ,type of activity ,type of diet ,menstrual pattern ,body mass index, source of information.

**TABLE 1 : SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY**

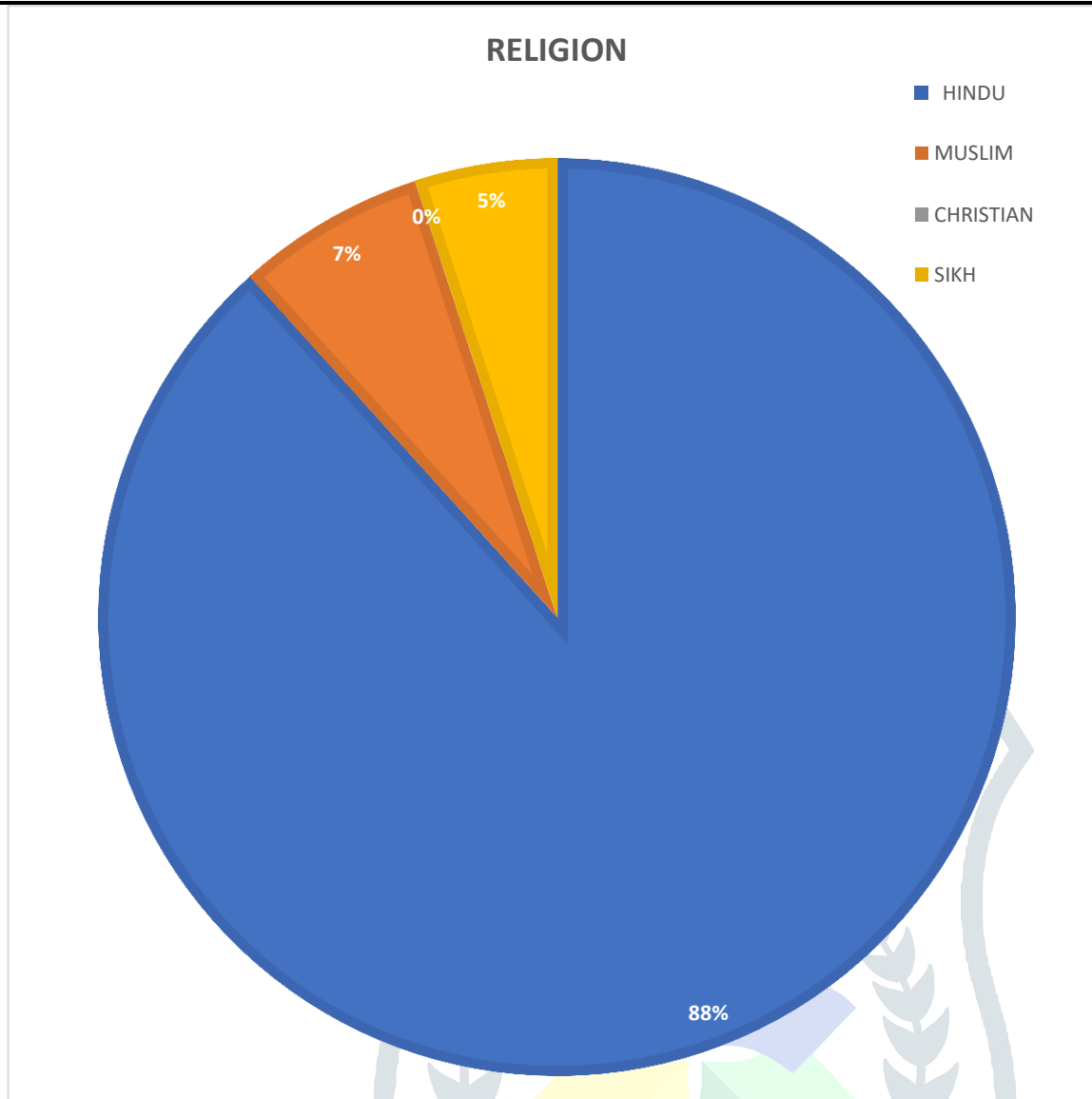
DEMOGRAPHIC VARIABLES	FREQUENCY (f)	PERCENTAGE(%)
<b>Age in years:</b>		
18-20 years	32	53.3
20-22 years	28	46.7
22-24 years	0	0
<b>Religion:</b>		
Hindu	53	88.3
Muslim	4	6.7
Christian	0	0
Sikh	3	5
<b>Annual Family Income:</b>		
Less than 2 lakh	7	11.7
3 lakh-5 lakh	42	69.9
5 lakh-7 lakh	7	11.7
More than 7 lakh	4	6.7
<b>Type of activity:</b>		
Walking	51	84.7
Cycling	5	8.5
Indoor games	4	6.8
Aerobics	0	0
<b>Type of diet:</b>		
Vegetarian	28	46.7
Non-vegetarian	20	33.3

Eggetarian	12	20
<b>Menstrual pattern:</b>	53	88.3
Regular	7	11.7
Irregular	0	0
Scanty	0	0
Heavy		
<b>Body Mass Index:</b>		
18.5	7	11.7
18.5-24.9	50	83.3
25-29.9	3	5
>30	0	0
<b>Source of Information:</b>		
Health personnel	31	51.7
Parents	11	17.2
Teachers	4	6.4
Mass media	14	24.7
<b>TOTAL</b>	<b>60</b>	<b>100</b>



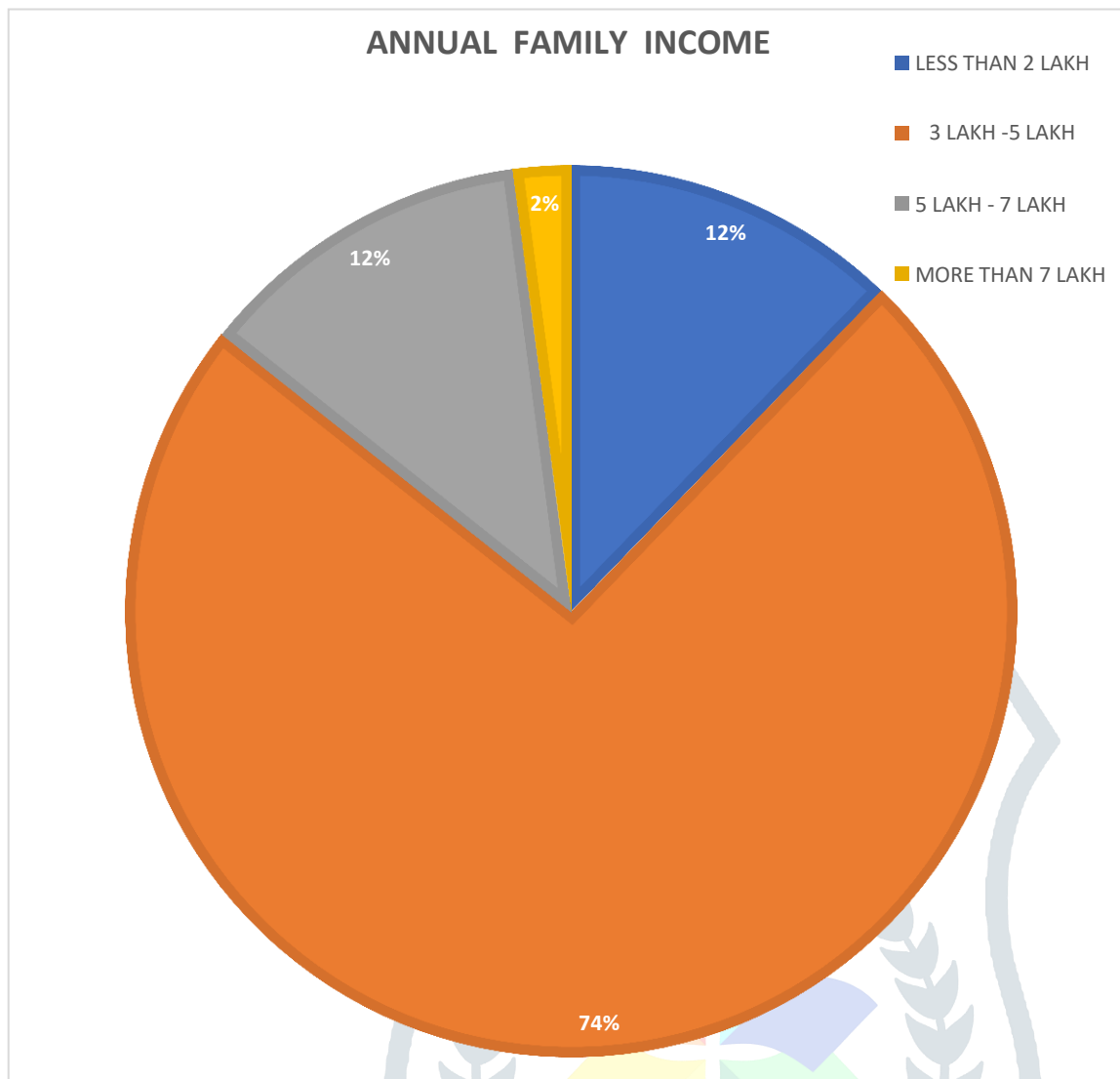
**FIGURE 3: CLASSIFICATION OF RESPONDENTS BY AGE**

Figure 3 indicated that out of 60 2<sup>nd</sup> year BSc nursing students majority 53% of participants were found in age group of 18 to 20 years followed by 47% in the age group of 20 to 22years.



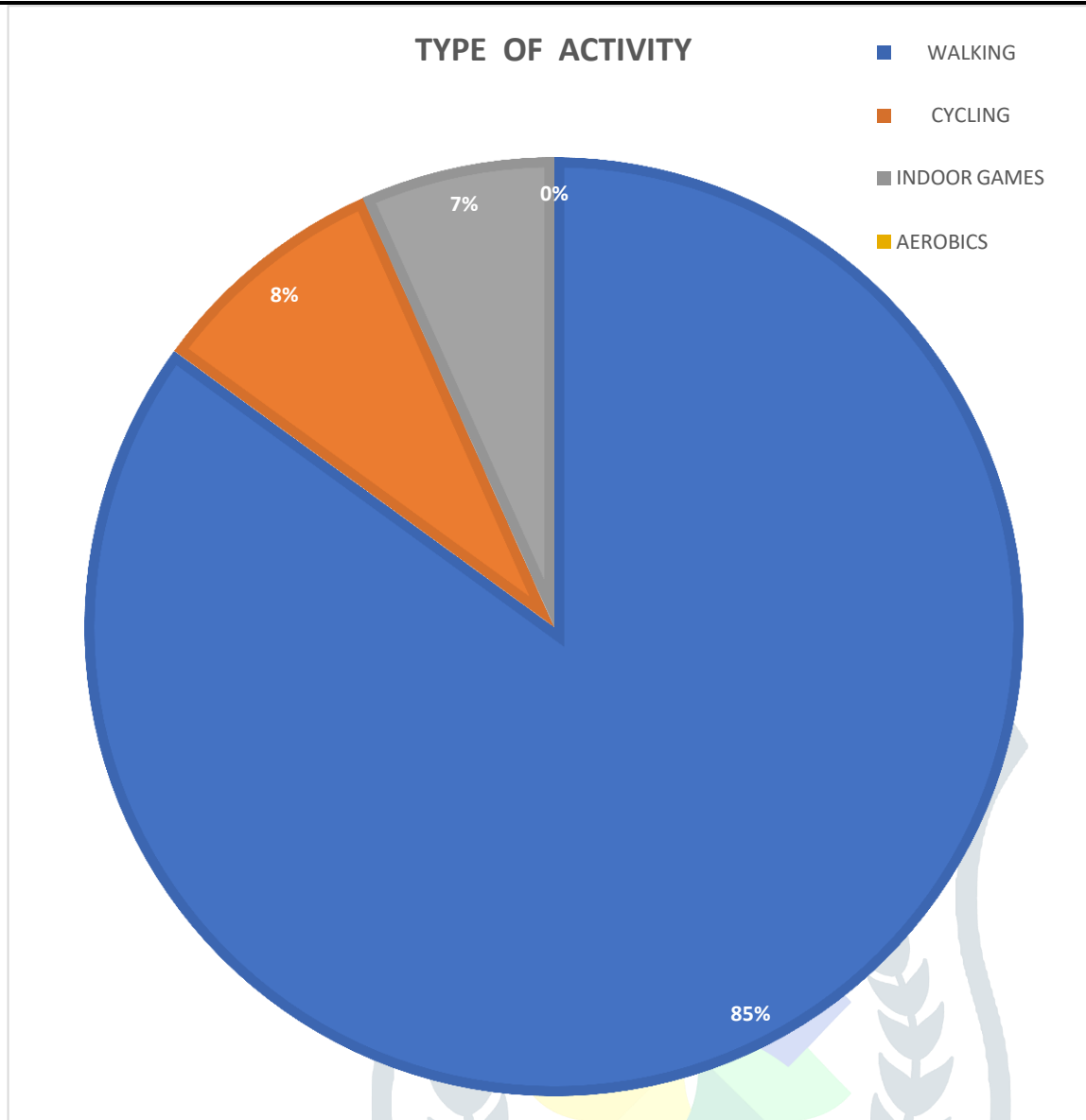
**FIGURE 4: CLASSIFICATION OF REDPONDENTS BY RELIGION**Figure 4 shows religion majority 88% of 2<sup>nd</sup> year BSc nursing students are Hindu and 7% of of 2<sup>nd</sup> year BSc nursing students are Muslim and 5% of 2<sup>nd</sup> year BSc nursing students are Sikh.





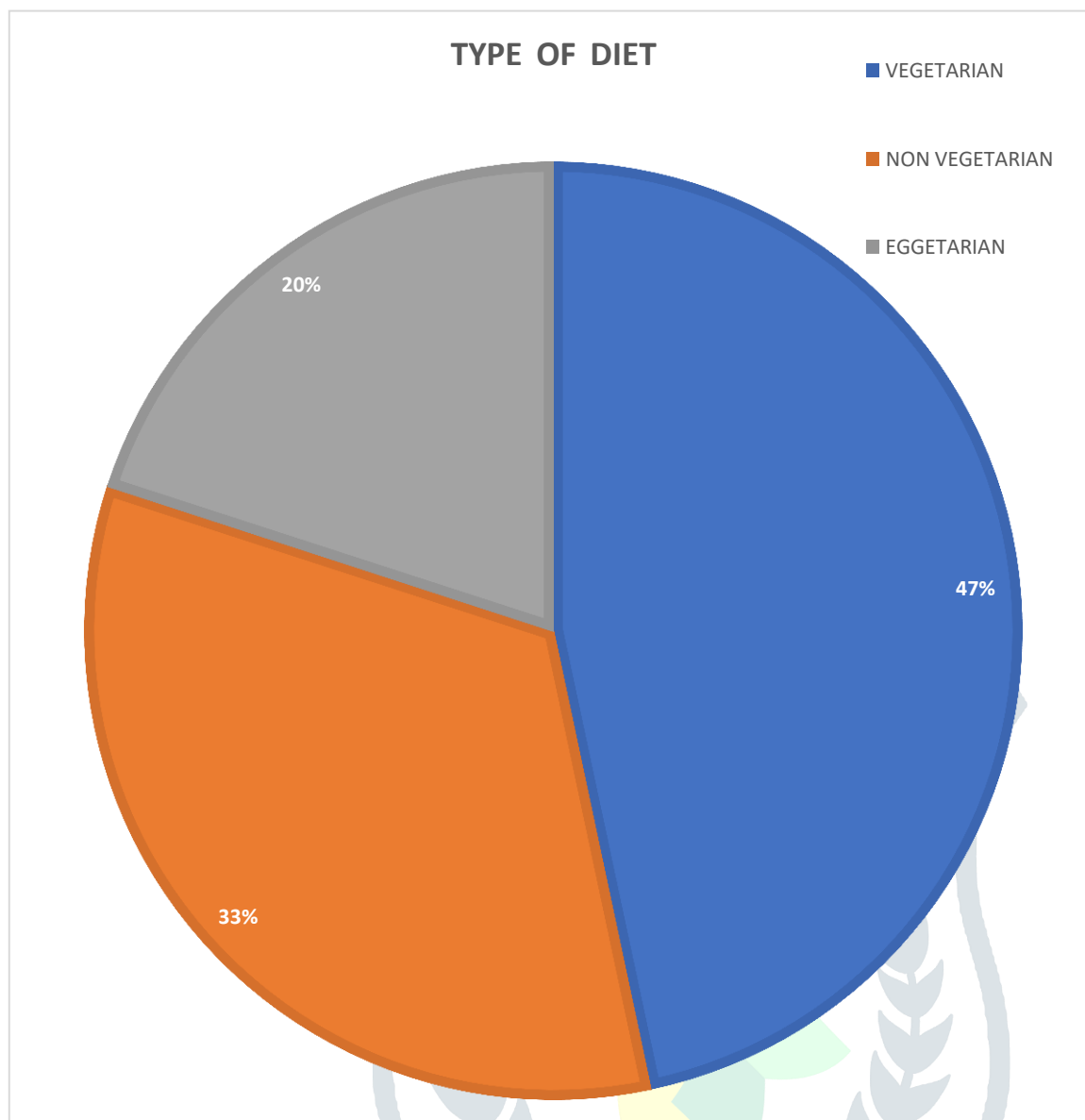
**FIGURE 5 : CLASSIFICATION OF RESPONDENTS BY ANNUAL FAMILY INCOME.**

Figure 5 indicates that 74% 2<sup>nd</sup> year BSc nursing student's annual family income is between 3 lakh to 5 lakh, 12 % 2<sup>nd</sup> year BSc nursing student's annual family income is between 5 lakh to 7 lakh and 12 % is less than 2 lakh and remaining 2% are more than 7 lakh.



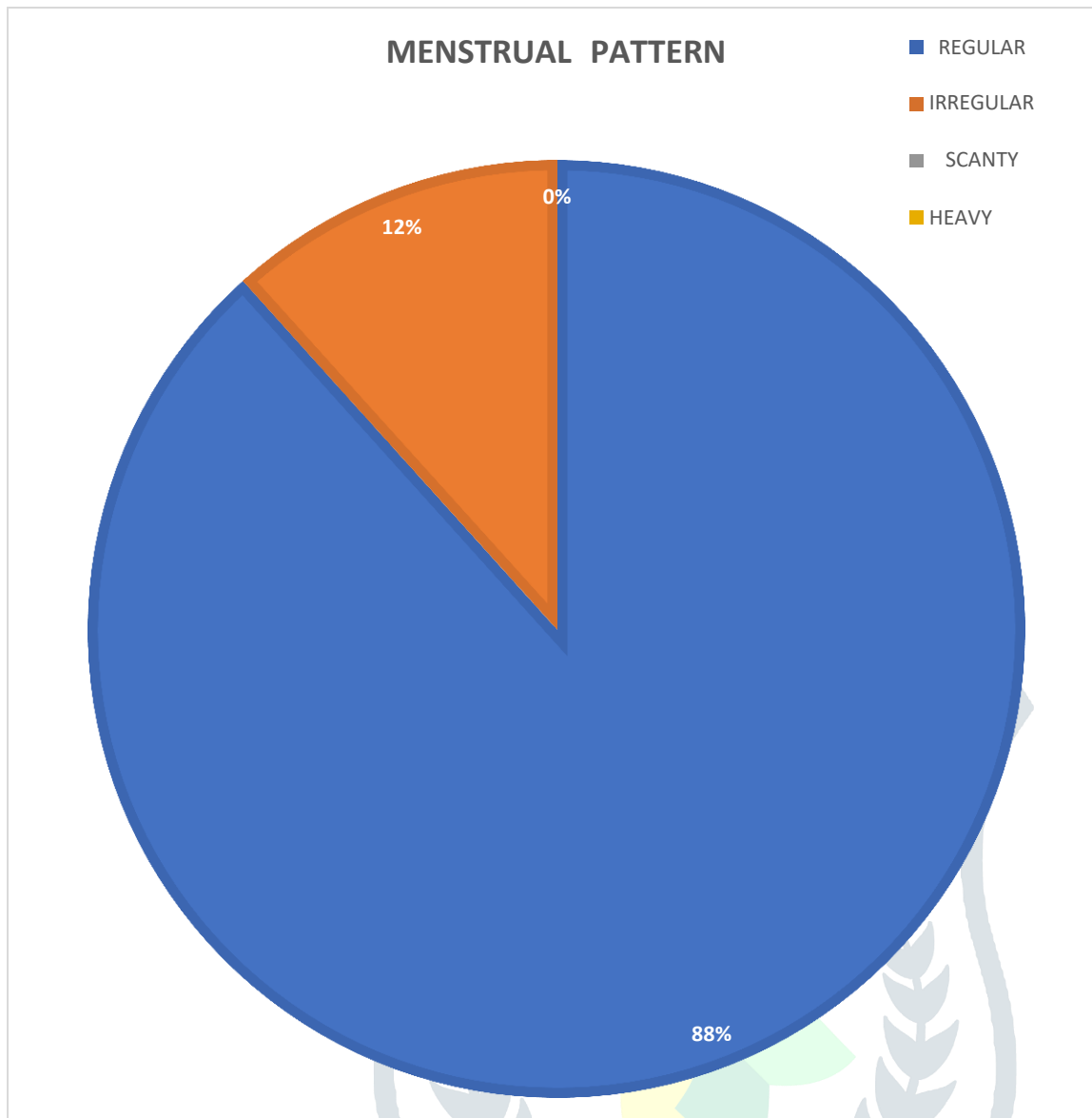
**FIGURE 6: CLASSIFICATION OF RESPONDENTS BY TYPE OF ACTIVITY.**

Figure 6 indicates that 85% of 2<sup>nd</sup> year BSc nursing students type of activity is walking, 8% of 2<sup>nd</sup> year BSc nursing student's type of activity is cycling and 7 % 2<sup>nd</sup> year BSc nursing student's type of activity is indoor games.



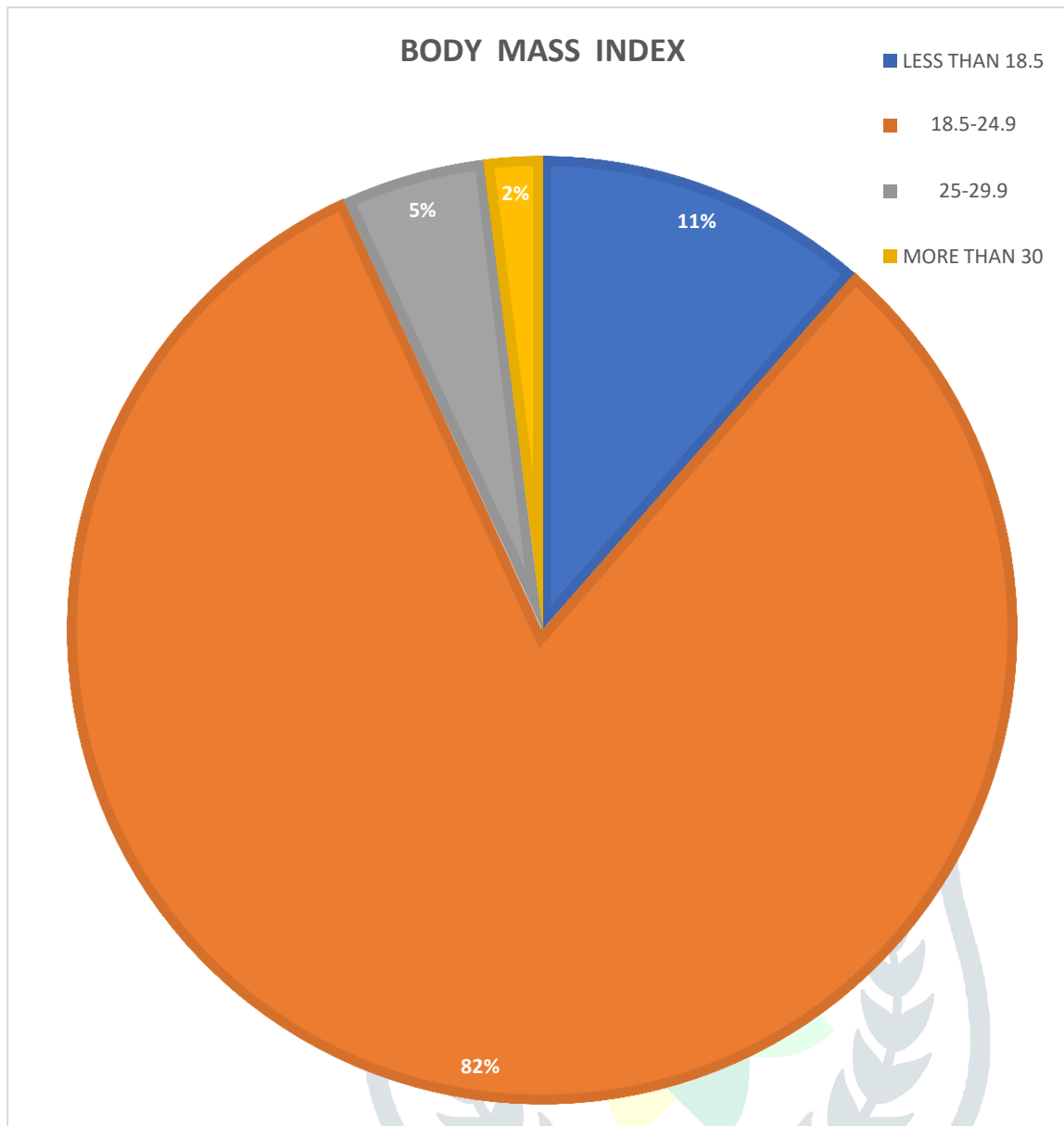
**FIGURE 7 : CLASSIFICATION OF RESPONDENTS BY TYPE OF DIET**

Figure 7 indicates that 47% of 2<sup>nd</sup> year BSc nursing student's type of diet is vegetarian, 33 % of 2<sup>nd</sup> year BSc nursing students type of diet is non vegetarian and 20% of 2<sup>nd</sup> year BSc nursing students type of diet is eggetarian.



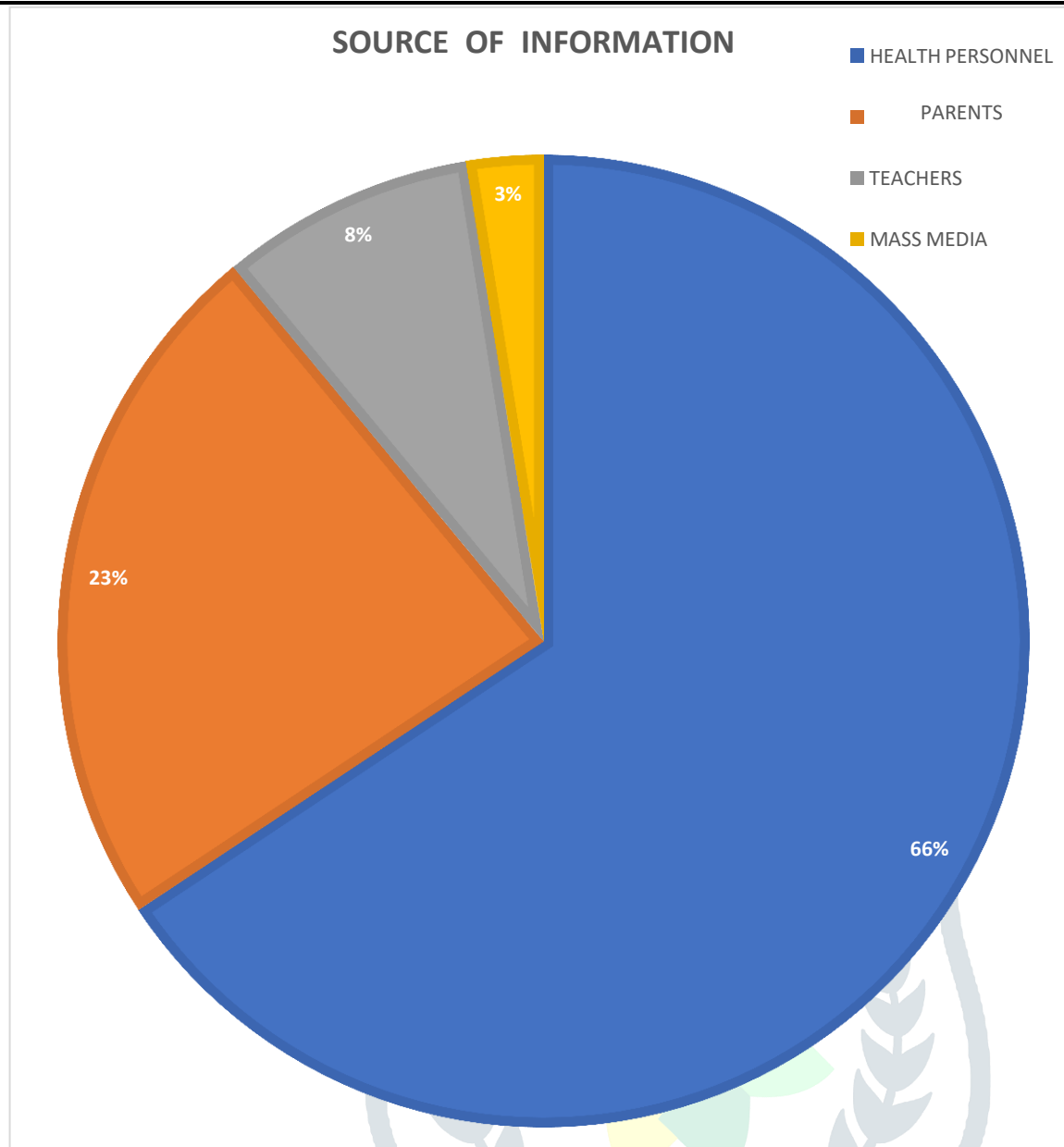
**FIGURE 8 : CLASSIFICATION OF RESPONDENTS BY MENSTRUAL PATTERN.**

Figure 8 indicates that 88% of 2<sup>nd</sup> year BSc nursing student's menstrual pattern is regular, 12% of 2<sup>nd</sup> year BSc nursing students menstrual pattern is irregular.



**FIGURE 9 : CLASSIFICATION OF RESPONDENTS BY BODY MASS INDEX**

Figure 9 indicates that 82% of 2<sup>nd</sup> year BSc nursing student's body mass index is between 18.5 to 24.9 , 11 % of 2<sup>nd</sup> year BSc nursing students body mass index is less than 18.5 , 5% of 2<sup>nd</sup> year BSc nursing students body mass index is between 25 to 29.9 and 2% is more that 30.



**FIGURE 10 : CLASSIFICATION OF RESPONDENTS BY SOURCE OF INFORMATION**

Figure 10 indicates that 66% of 2<sup>nd</sup> year BSc nursing student's source of information is by health personnel, 23% of 2<sup>nd</sup> year BSc nursing students source of information is by parents, 8% of 2<sup>nd</sup> year BSc nursing students source of information is by teachers and 3% is by mass media.

**Section II :** Determine the effectiveness of structured teaching programme on PCOD among 2<sup>nd</sup> year BSc nursing students.

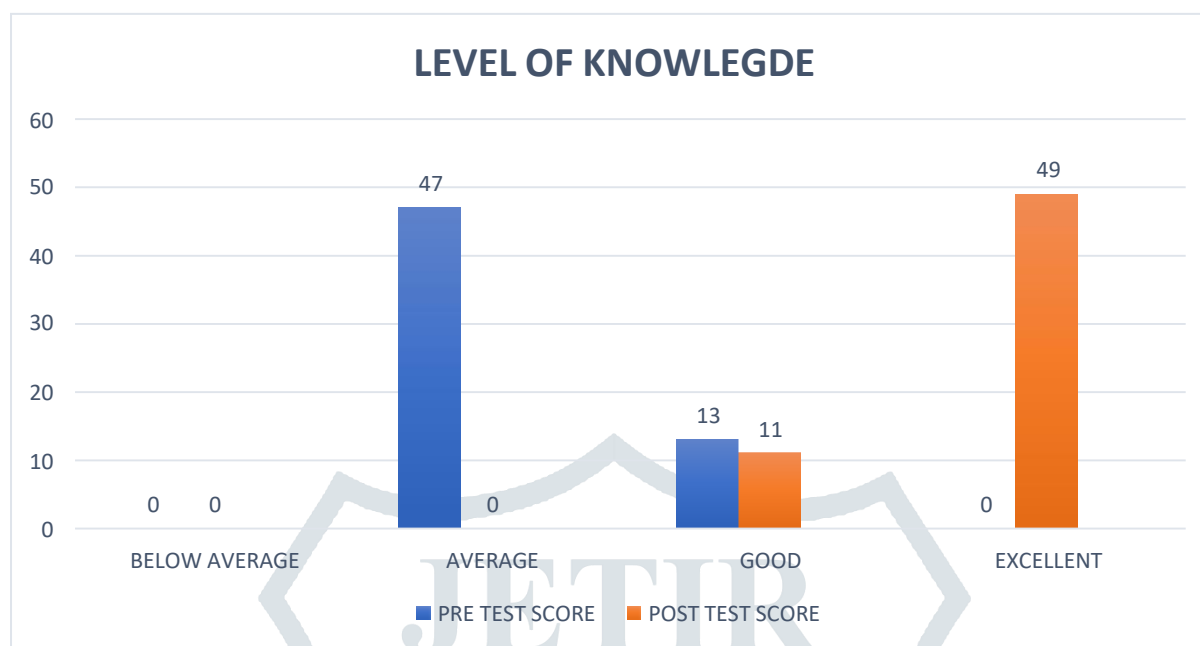
This section deals with the details of analysis of mean pretest and post test level of knowledge score of which were measured using a tool.

**SECTION II (a) :** frequency distribution of sample based on the level of knowledge score of pretest and post test.

S.NO.	LEVEL OF KNOWLEDGE	PRE TEST SCORE	POST TEST SCORE
1.	BELOW AVERAGE(0-7)	0	0
2.	AVERAGE(8-14)	47	0
3.	GOOD(15-23)	13	11
4.	EXCELLENT(24-30)	0	49



**TABLE 2: FINDINGS OF PRE TEST AND POST TEST DIFFERENCE IN LEVEL OF EFFECTIVENESS BEFORE AND AFTER IMPLEMENTING THE STRUCTURED TEACHING PROGRAM.**



**FIGURE 11 THE FREQUENCY DISTRIBUTION OF SUBJECTS LEVEL OF EFFECTIVENESS BEFORE AND AFTER IMPLEMENTING STRUCTURED TEACHING PROGRAM.**

#### **SECTION II(b) : EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ONPCOD AMONG 2<sup>ND</sup> YEAR BSC NURSING STUDENTS.**

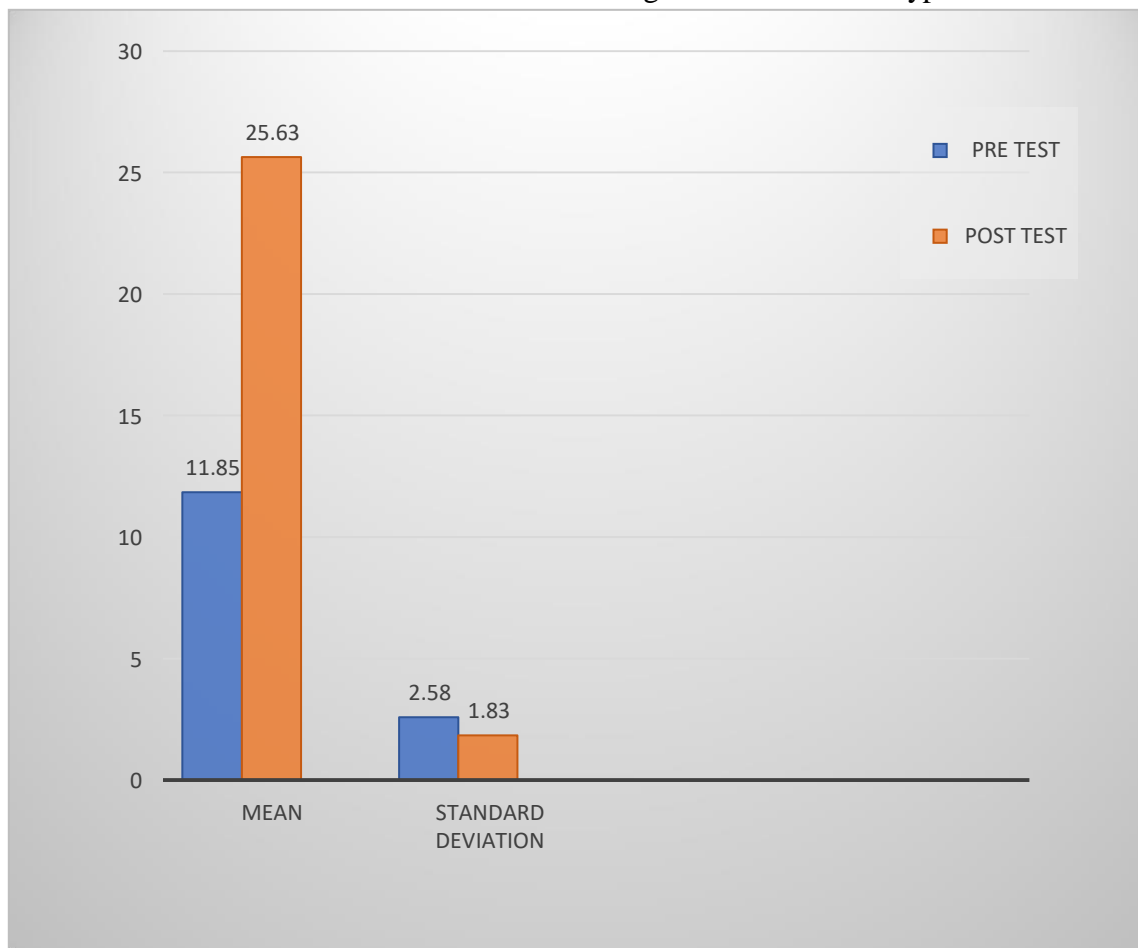
This section deals with the analysis of comparison of pre and post test level of knowledge score, and paired „t;test value on level of knowledge score among 2<sup>nd</sup> year BSc nursing students and also the research hypothesis was analyzed to know the significance at  $p < 0.05$  level.

**HYPOTHESIS H<sub>1</sub>** : There is a significant difference in the level of knowledge regarding Polycystic Ovarian disease between pretest and post-test scores. H1 was tested to find out the significance at  $p < 0.05$  level in order to test the hypothesis the researcher used paired t test.

LEVEL OF KNOWLEDGE	MAX SCORE	PRETEST		POSTTEST		MEAN DIFFERENCE	PAIRED T VALUE
		MEAN	SD	MEAN	SD		
OVERALL	28	11.85	2.58	25.63	1.83	13.78	2.09

**TABLE 3 : 'T' TEST VALUE**

The obtained value is more than these table value at 0.05 level of significance thus the hypothesis 1 is accepted.



*FIGURE 12: INTERPRETATION T TEST VALUE AFTER COMPARING THE PRE TEST AND POST TEST SCORE.*

**SECTION III: Find out association of post teaching knowledge score of PCOD among 2<sup>nd</sup> year BSc nursing students .**

DEMOGRAPHIC VARIABLES	SCORE WHICH FALL BELOW MEDIAN	SCORE WHICH FALL ABOVE MEDIAN	TOTAL	$\chi^2$ VALUE	D(f)	LEVEL OF SIGNIFICANCE
<b>Age in years:</b>						
18-20 years	18	15	33	0.17	2	Non Significant
20-22 years	14	13	27			
22-24 years	0	0	0			
TOTAL	32	28	60			
<b>Religion:</b>						
Hindu	27	26	53	1.08	3	Non significant
Muslim	3	1	4			
Christian	0	0	0			
Sikh	2	1	3			
TOTAL	32	28	60			
<b>Annual Family Income:</b>						
Less than 2 lakh	6	1	7	5.67	3	Non significant
3 lakh-5 lakh	20	22	42			
5 lakh-7 lakh	5	2	7			
Above 7 lakh	1	3	4			
TOTAL	32	28	60			
<b>Type of activity:</b>						
Walking	27	24	51	2.7	3	Non Significant
Cycling	4	1	5			
Indoor games	1	3	4			
Aerobics	0	0	0			
TOTAL	32	28	60			
<b>Type of diet:</b>						
Vegetarian	16	12	28	0.83	2	Non Significant
Non-vegetarian	11	9	20			
Eggetarian	5	7	12			
TOTAL	32	28	60			
<b>Menstrual pattern:</b>						
Regular	28	25	53	0.03	3	Non Significant
Irregular	4	3	7			
Scanty	0	0	0			
Heavy	0	0	0			
TOTAL	32	28	60			
<b>Body Mass Index:</b>						
<18.5	5	2	7	1.33	3	Non
18.5-24.9	25	25	50			

25-29.9	2	1	3			signifi
>30	0	0	0			cant
TOTAL	32	28	60			
<b>Source of Information:</b>						
Health personnel	20	11	41			
Parents	4	7	11			
Teachers	2	2	4	5.4	3	Non
Mass media	6	8	14			Signify
TOTAL	32	28	60			Cant

TABLE 4: THE ABOVE TABLE PROVES HYPOTHESIS (H2) THAT THERE IS NO SIGNIFICANT ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES AND POST TEST SCORE .

**H<sub>2</sub>:** There is a significant association between post-test level of knowledge regarding Polycystic Ovarian disease among college girls and their selected demographic variables.

The findings indicate variable such as age in years ( $\chi^2 = 0.17$ ) is found to be non significant , religion ( $\chi^2 = 1.08$ ) is found to be non significant , annual family income ( $\chi^2 = 5.67$ ), type of activity ( $\chi^2 = 2.7$ ), type of diet ( $\chi^2 = 0.83$ ), menstrual pattern ( $\chi^2 = 0.03$ ), body mass index ( $\chi^2 = 1.33$ ) and source of information ( $\chi^2 = 5.4$ ) were not significant at 0.05 level of significance thus it can be interpreted that there is no significance association between post test level on knowledge among BSc nursing students with their selected demographic variable

### SUMMARY

This chapter deals with the summary of the whole study ,which includes the statement of the problem ,objectives ,assumptions ,conceptual framework ,review of literature, research methodology, statistical inference , final findings of the study ,discussion and conclusion.

### STATEMENT OF THE PROBLEM

“ A Pre-Experimental study to assess the effectiveness of structured teaching programme on knowledge regarding Polycystic Ovarian disease among college girls of selected college of Jalandhar , Punjab, India 2021 -2022. ”

### OBJECTIVES

- 1.To assess the pretest knowledge regarding polycystic ovarian disease among college
- 2.girls.
- 3.To assess the post test knowledge regarding polycystic ovarian disease among college girls.
- 4.To determine the effectiveness of structured teaching programme by comparing the pretest and post test knowledge regarding Polycystic Ovarian disease among collegegirls.
- 5.To determine the association of knowledge with selected demographic variables (age, religion, family income, type of activity, type of diet,menstrual pattern, body mass index

,source of information) among the college girls.

### *HYPOTHESES*

- $H_1$  : There is a significant difference in the level of knowledge regarding polycystic ovarian disease between pretest and post-test scores.
- $H_2$ : There is a significant association between post-test level of knowledge regarding polycystic ovarian disease among college girls and their selected demographic variables.

### *THE TOOL USED IN DATA COLLECTION*

The researcher constructed the tool and intervention based on the literature review and opinion from experts which consists of :

Part A: Baseline characteristics

Part B: Structured multiple choice questionnaire to assess the knowledge regarding Polycystic Ovarian disease.

### *THE FINDINGS DISCUSSED UNDER THE FOLLOWING*

#### *HEADING BASED ON OBJECTIVES OF THE STUDY*

#### *SECTION I : Frequency distribution of demographic data .*

Age wise distribution of sample 2<sup>nd</sup> year B.SC. Nursing students, 32(53.3%) are in between the age group of 18-20 years. 28(46.7%) of them are in between 20-22 years and none are in between the age group of 22-24 years.

Percentage distribution based on Religion of 2<sup>nd</sup> year B.SC. Nursing students are 53(88.3%) are of Hindu religion, 4(6.7%) are of Muslim religion, 3(5%) are of Sikh religion and none is of Christian religion.

Percentage distribution based on annual family income of 2<sup>nd</sup> year B.SC. nursing students, out of which 7(11.7%) are having less than 2 lakh income, 42(69.9%) are having income between 3 lakh-5 lakh, 7(11.7%) are having between 5 lakh-7 lakh and 4(6.7%) are having more than 7 lakh.

Percentage distribution based on type of activity of 2<sup>nd</sup> year B.SC. Nursing students, out of which 51(84.7%) are of walking, 5(8.5%) are of cycling, 4(6.8%) of indoor games, 0(0%) are aerobics.

Percentage distribution based on type of diet of 2<sup>nd</sup> year B.SC. Nursing students, out of which 28(46.7%) are of vegetarian, 20(33.3%) are of non vegetarian, 12(20%) are of egg vegetarian.

Percentage distribution based on the type of menstrual pattern of 2<sup>nd</sup> year B.SC. Nursing students, out of which 53(88.3%) are of regular, 7(11.7%) are of irregular, 0(0%) are of heavy, 0(0%) are of scanty.

Percentage distribution based on the body mass index of 2<sup>nd</sup> year B.SC. Nursing students, out of 7(11.7%) are having body mass index <18.5, 50(83.3%) are having body mass index between 18.5-24.9, 3(5%) are having body mass index between 25-29.9, 0(0%) are having body mass index >30.

Percentage distribution based on the source of information of 2<sup>nd</sup> year B.SC. Nursing students, out of 31(51.7%) got information from health personnel, 11(17.2%) got information from parents, 04(6.4%) got information from teachers, 14(24.7%) got information from massmedia.

*SECTION II : Evaluate the effectiveness of structured teaching program on PCOD among 2<sup>nd</sup> year BSc Nursing students .*

**Section II:** (a) Frequency distribution of sample based on the level of knowledge score of pretest and post test .

The finding of pretest showed that 0%, were having knowledge level as below average, while 78.3% had found with average knowledge level and other 21.6% found with good knowledge and 0% were having with excellent knowledge.

Findings of post -test data show that 18.3% found with good knowledge and 81.6% found with excellent knowledge.

**Section II:** (b) Effectiveness of structured teaching program on PCOD among 2<sup>nd</sup> year BSc Nursing students .

Comparison of pretest knowledge scores of 2<sup>nd</sup> year B.sc Nursing students regarding polycystic ovarian disease the obtained t- value 0.96 is greater than table value at 0.05(2,0010) level of significance. Therefore t- value is found to be significant. It indicates that there is a significant difference between pre-test and post- test knowledge of 2<sup>nd</sup> year B.sc. Nursing students regarding polycystic ovarian disease.

*SECTION III: Find out association of selected demographic variables( age, religion, annual family income, type of diet, type of activity, menstrual pattern, body mass index, source of information) with pretest knowledge.*

To test the association between post test knowledge of 2<sup>nd</sup> year B.SC.nursing students and demographic variables following research hypothesis is formulated.

H2:- There is a significant association between post-test level of knowledge regarding polycystic ovarian disease among college girls and their selected demographic variables.

The finding indicate variables such as age( $X^2 = 0.17$ ), is found to be non significant at 0.05 level of significance, and variables such as religion ( $X^2 = 1.08$ ), variables annual family income( $X^2 = 5.67$ ), variables type of activity( $X^2 = 2.7$ ), variables type of diet( $X^2 = 0.83$ ), variables menstrual pattern( $X^2 = 0.03$ ), variable body mass index( $X^2 = 1.13$ ), variables source of information ( $X^2 = 5.4$ ) were not significant at 0.05 level of significance. Thus it can be interpreted that there is no significance association between post-test levels of knowledge among 2<sup>nd</sup> year B.SC. Nursing students with there selected demographic variables .

## CONCLUSION

The present study assessed the knowledge regarding Polycystic Ovarian disease among 2<sup>nd</sup> year BSc. Nursing students army college of nursing, Deepnagar ,Jalandhar Cant, Punjab and found that the majority of students had below average knowledge related to Polycystic Ovarian disease. After structured teaching



programme on Polycystic Ovarian disease there was significant improvement on knowledge of the 2<sup>nd</sup> BSc. Nursing students regarding Polycystic Ovarian disease. The study conclude that the structured teaching programme was effective in improving knowledge of 2<sup>nd</sup> year BSc. Nursing students regarding Polycystic Ovarian disease.

According post knowledge score 18.3% found with good knowledge and 81.6% found with excellent knowledge and no one has below average knowledge which was higher than pretest knowledge score range. According to pretest that 0%, were having knowledge level as below average, while 78.3% had found with average knowledge level and other 21.6% found with good knowledge and 0% were having with excellent knowledge.

The mean post -test knowledge score (25.63) also was higher than the mean pretest score (11.85).

There was significance difference in knowledge score regarding polycystic ovarian disease among 2<sup>nd</sup> year B.SC Nursing students Army College of Nursing, Deepnagar, Jalandhar Cantt, Punjab. Thus H1 is accepted.

### RECOMMENDATIONS

The study can be replicated in large sample for better generalization.

- A similar study can be conducted with different teaching strategies like structured teaching programme.
- A similar study can be done in attitude and practice regarding Polycystic Ovarian disease among 2<sup>nd</sup> year B.SC Nursing students.
- This study will be reference for research scholars.

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IAL AND METHOD.

- Study adopted a quantative approach with pre-experimental (one group pretest post test design).
  - Population included the college girls aged between 18-24 years of Jalandhar Cantt were selected using convient sampling technique.
  - Various tools were constructed based on the literature review and opinions from experts.
  - Tool consists of 2 sections:
    1. Section: A :socio demographic variable (08 items)
    2. Section:B: structured knowledge questionnaire on the PCOD. (30 data is computed)
  - Demographic data is analyzed in term of frequency and percentage.
  - Paired T test was calculated to find significant difference between the mean pretest and post test knowledge
  - Chi square test was applied to find the association between socio demographic variable and knowledge of college girl.
- Results:**

