

A QUASI - EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING POLYCYSTIC OVARIAN SYNDROME (PCOS) AMONG GNM 2ND YEAR STUDENTS IN SELECTED SCHOOLS OF NURSING IN MOGA , PUNJAB

By: Swapna Melchisedec* | Amanpreet Kaur**

*Professor, Principal, Baba Mangal Singh Nursing Training Institute, Moga, Punjab, India.

** Lecturer, Baba Mangal Singh Nursing Training Institute, Moga, Punjab, India.

ABSTRACT

Polycystic ovarian syndrome refers to multiple cysts in the ovaries. As adolescent girls are more prone to polycystic ovarian syndrome, GNM students are the future staff nurse. The present study is aimed to evaluate the effectiveness of structured teaching programme regarding polycystic ovarian syndrome among GNM 2nd Year students with the main objectives of assessing the pre-test and post-test knowledge, to compare the pre-test and post-test knowledge of GNM 2nd Year students with selected demographic variables. The quasi experimental research approach, two group pre-test and post-test design was used for the present study by taking 60 GNM 2nd Year students selected by purposive sampling. In this study the post-test mean knowledge score of GNM 2nd Year students regarding polycystic ovarian syndrome of experimental group was higher than the post-test mean knowledge score of control group at $p < 0.05$ level. The knowledge score of GNM 2nd Year students regarding polycystic ovarian syndrome was average and below average before imparting the structured teaching but knowledge score of GNM 2nd Year students was good and average after imparting structured teaching. There was statistically significant effect of variables like age in years, Source of information and Family monthly income on pre-test and post-test knowledge score GNM 2nd Year students in experimental group except education of father, education of mother, type of family, occupation of mother, place of residence and dietary habits.

Key words: Quasi experimental study, knowledge, Polycystic Ovarian Syndrome.

About Authors



The author Mrs. Swapna Melchisedec is working as a Professor and Principal in Baba Mangal Singh Nursing Training Institute, Moga. She has 16 years of total Professional experience. Her area of specialisation is Psychiatric Nursing. She has attended many workshops and seminars.



The author Mrs. Amanpreet Kaur is an M.Sc (Nursing), working as a Lecturer in Baba Mangal Singh, Nursing Training Institute, Moga. She has attended many workshops and seminars. She has specialised in the field of Obstetrics and Gynaecology.

INTRODUCTION

Wilson E.E (2011): Ovulation means ovaries, where a woman's eggs are produced, have tiny fluid-filled sacs called follicles or cysts. As the egg grows, the follicle builds up fluid. When the egg matures, the follicle breaks open, the egg is released, and the egg travels through the fallopian tube to the uterus (womb) for fertilisation.

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NEED OF THE STUDY

Disease Control and Prevention (CDC 2011): Many providers are finding increased numbers of obese adolescents having polycystic ovarian syndrome when glucose and insulin levels are tested and insulin resistance is revealed. Polycystic ovarian syndrome cannot only be on the radar of family and adult healthcare providers. There is growing evidence that Polycystic ovarian syndrome is also a paediatric syndrome. Because some females reach menarche as early as 8-9 years old, PCOS needs to be a topic of concern for health care providers early in a child's or adolescent's reproductive health.

PURPOSE

The purpose was to assess the knowledge and to impart the health information to GNM 2nd Year Students regarding polycystic ovarian syndrome so as to prevent the disease and reduce morbidity and mortality rate regarding polycystic ovarian syndrome.

OBJECTIVES

1. To assess the pre-test knowledge regarding polycystic ovarian syndrome among GNM 2nd year students.
2. To assess the post-test knowledge regarding polycystic ovarian syndrome among GNM 2nd year students.
3. To compare the pre-test and post-test knowledge regarding polycystic ovarian syndrome among GNM 2nd year students.
4. To find out the relationship between knowledge with selected demographic variables such as age in years, educational status of father, educational status of mother, occupation of mother, family monthly income in Rupees, type of family, place of residence and source of information, dietary habits and previous history of PCOS.

HYPOTHESIS:

H₁: The mean post-test knowledge score of experimental group, after structured teaching programme regarding Polycystic Ovarian Syndrome, will be significantly higher than the mean pre-test knowledge score at p<0.05 level of significance.

REVIEW OF LITERATURE

The review of literature was arranged under the following headings:

- I Review of literature related to prevalence of PCOS.
- II Review of literature related to effects of PCOS.
- III Review of literature related to knowledge of students regarding PCOS.

MATERIALS AND METHODS

Research Design

A non equivalent quasi-experimental design was used for the study.

Experimental	O1	X	O2
Control	O2		O2

Independent Variables:

Independent variables were - Age in years, Education of mother, Education of father, Occupation of mother, Family monthly income, Religion, Type of family , Area of Residence, Source of Information, Previous history of PCOS and Structured teaching Programme is included in Independent Variables.

Dependent Variables:

The dependent variables were knowledge level of GNM 2nd year students regarding Polycystic Ovarian Syndrome.

Selection and Description of field for the study:

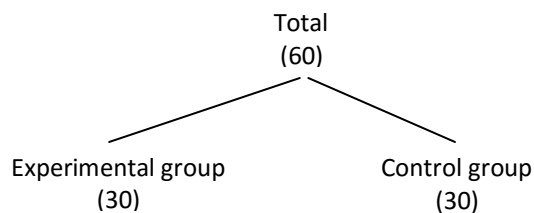
The study was conducted at Dr Shyam Lal Thapar School of Nursing Moga and Shiraz School of Nursing Moga, Punjab

Population

The target population of the study was GNM 2nd Year students of Dr Shyam Lal Thapar School of Nursing and Shiraz School of Nursing.

Sample Size and Sampling Technique

A sample of 60 GNM 2nd Year students, 30 for experimental and 30 for control group, by using purposive sampling method was selected.



The sample was selected from Shiraz School of Nursing and Dr Shyam Lal Thapar School of Nursing by using purposive sampling. GNM 2nd year students of Shiraz school of Nursing were taken as Experimental group and GNM 2nd year students of Dr Shyam Lal Thapar School of Nursing were taken as control group .

Inclusion Criteria:

1. The GNM 2nd year students in selected Schools of Nursing in Moga, Punjab.
2. The GNM 2nd year students who were willing to participate in the study
3. The GNM 2nd year students who were able to understand Punjabi and English.

Exclusion Criteria:

1. The GNM 2nd year students who were not willing to participate in the study.
2. GNM 2nd year students who were not present at the time of data collection.

Development of the Tool

A self structured multiple choice questionnaire was prepared to assess the knowledge regarding Polycystic Ovarian Syndrome among GNM 2nd Year students.

Description of the Tool

The tool consists of following parts:-

Part 1- Sample Characteristics

The part consists of items for obtaining personal information about subjects such as Age in years, Education of mother, Education of father, Occupation of mother, Family monthly income, Type of family, Area of residence, Source of Information, Previous History of PCOS.

Part II- A self structured Questionnaire to assess the knowledge of GNM 2nd year students regarding polycystic ovarian syndrome

This part consists of multiple choice questions regarding polycystic ovarian syndrome. A total of 30 questions are included and each question has a score of one mark. Each question had four responses out of which the respondent had to choose the correct one. So, the maximum score was 30 and minimum score was 0.

Criterion Measure:

Part 1- Sample Characteristics

It consists of items for obtaining personal information which were not included in scoring

Part II- A self structured Questionnaire to assess the knowledge of GNM 2nd year students regarding polycystic ovarian syndrome

It consists of multiple choice questions regarding polycystic ovarian syndrome. A total of 30 questions were included and each question had a score of one mark.

Level of Knowledge	Percentage	Score
Good	76 - 100%	23 – 30
Average	51 - 75%	16 – 22
Below Average	≤ 50%	≤ 15

Pilot Study

The pilot study was conducted in the month of January 2014 to ensure the reliability of the tool and feasibility of the study.

Comparison of Mean Pre-test and Post-test Knowledge score among GNM 2nd Year students regarding Polycystic ovarian syndrome in Experimental and Control Group

N= 60

Knowledge Score								
Pre test				Post test				
Group	n	Mean	SD	n	Mean	SD	df	t
Experimental	30	14	3.842	30	22.33	2.869	29	11.306***
Control	30	14.73	3.016	30	14.20	2.809	29	0.40 ^{NS}
	df		t		df		t	
	58		0.414 ^{NS}		58		11.096***	

Maximum Score 30

Minimum Score 0

NS –Non-Significant

*Significant at p<0.05

*** Significant at p<0.001

In experimental group mean pre-test knowledge score was (14) and post-test knowledge score was (22.33). The difference between mean pre-test knowledge score and post-test knowledge score was highly significant at $p < 0.001$ level.

In control group mean pre-test knowledge score was (14.73) and post-test knowledge score was (14.20).

Hence, null hypothesis H_0 i.e. there will be no significant difference between mean post-test knowledge score of experimental group after the planned structured teaching programme regarding Polycystic Ovarian Syndrome as evident from structured questionnaire, at $p < 0.05$ level of significance was rejected and H_1 i.e. mean post-test knowledge score of experimental group after the planned structured teaching programme regarding Polycystic Ovarian Syndrome was significantly higher than their mean pre-test knowledge at $p < 0.05$ level of significance was accepted.

DISCUSSION:

Analysis of the pre-test and post-test knowledge score reveals that post-test mean knowledge score regarding Polycystic Ovarian Syndrome among the experimental group was higher than that of control group. The difference was significant at $p < 0.001$ levels and findings indicated that structured teaching programme regarding Polycystic Ovarian Syndrome was effective to increase knowledge score of students in experimental group.

Maximum number of GNM 2nd year students (76.6%) was in the age group of 21-22 years both in experimental and control group. Maximum number of GNM 2nd year students' fathers' (63.3%) education was Secondary in experimental group. Maximum number of GNM 2nd year students' mothers' (100%) occupation was Housewife in control group. Maximum number of GNM 2nd year students (86.7%) lived in Nuclear Family in experimental and control group. Maximum number of GNM 2nd year students (73.3%) was Vegetarian in experimental and control group. In experimental and control groups 33.3% and 36.7% respectively had average knowledge and 66.6% and 63.3% of students respectively had below average knowledge in Pre-test.

CONCLUSION:

The post-test mean knowledge score of GNM 2nd Year students regarding polycystic ovarian syndrome of experimental group was higher than and post-test mean knowledge score of control group at $p < 0.05$ level. This indicates that structured teaching programme was effective.

1. The knowledge score of GNM 2nd Year students regarding polycystic ovarian syndrome was average and below average before imparting the structured teaching programme but knowledge score of GNM 2nd Year students was Good, Average after imparting the structured teaching programme.
2. There were statistically significant effects of variables. In the present study there was statistically significant effect of variables like age in years, Educational status of father, Educational status of mother, Occupation of mother, Family Monthly Income in rupees, Type of family, Place of residence, Source of Information, Dietary Habits, Previous History of P.C.O.S.

Implications

The findings of the study had several nursing implications which can be discussed in the following areas:

1) Nursing education:

The study has proved that improving the knowledge of GNM 2nd Year students brings about better awareness in young adults. Nurses must be abreast with new technologies, new approaches and techniques. Findings should be included in the nursing curriculum, and then only there is an abundant opportunity for nursing professionals to educate the adolescent girls, mothers and school teachers.

2) Nursing Practice:

“Prevention is better than cure” and the health promotion is valued much. Nurses scattered in different fields have common primary concern to promote health to every individual. Nurses are moving towards an era of science based practice in nursing that incorporates the latest findings from the behavioural and biological sciences to practice, to assist people of varying cultural background, to adopt healthy lifestyles. Nursing professional working in various units of hospitals will be able to find opportunities to teach and improve the knowledge on polycystic ovarian syndrome. The study findings signify the

importance of formulating and implementing structured teaching programme by nursing personnel. Since there is a gross inadequacy in knowledge regarding polycystic ovarian syndrome, they should equip themselves with proper advanced knowledge based on education.

3) Nursing Research:

Research helps the health care provider to develop a systematic problem solving approach to improve and develop strategies for the GNM 2nd Year students to gain knowledge regarding polycystic ovarian syndrome. Structured teaching programme is fast emerging because of its factual and substantive results. These studies yield fruitful outcomes that are of great help in addressing problems that arise. The nurse researcher may effectively use the result of these studies and develop clear knowledge on polycystic ovarian syndrome in promoting health of GNM 2nd Year students and a way of preventing polycystic ovarian syndrome and promoting health. Thus, nurses can acquire more knowledge.

Recommendations

1. The study can be replicated on a larger sample; thereby findings can be generalised for a larger population.
2. A self instructional module can be prepared to enhance the knowledge on prevention of Polycystic Ovarian Syndrome among GNM 2nd Year students.
3. A similar study can be undertaken in different settings.
4. Same study can be improvised based on the needs of the subjects.
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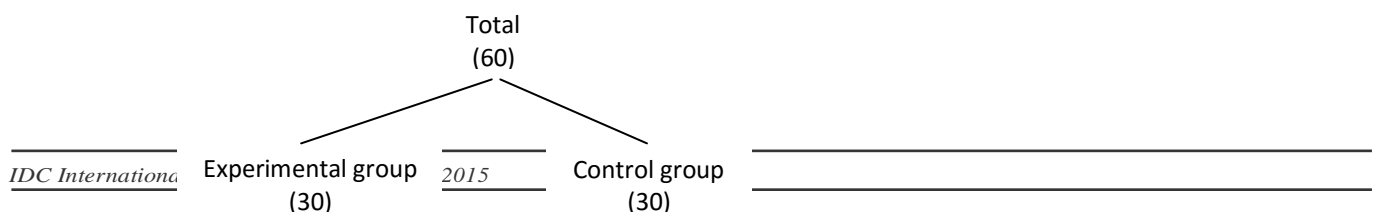
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