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## A study to assess the effectiveness of planned teaching programme on knowledge regarding assisted reproductive technology among women of reproductive at selected village of Rohtas, Bihar

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### Abstract

The researcher conducted study to assess the effectiveness of planned teaching program on knowledge regarding assisted reproductive technique among women of reproductive age at selected village of Rohtas, Bihar.

**Aims and Objectives:** To assess the knowledge of reproductive age women regarding ART before and after administration of planned teaching program. To evaluate the effectiveness of planned teaching program by comparing pre-test and post-test knowledge score of reproductive age women. To associate the pre-test level of knowledge of reproductive age women regarding ART with selected demographic variables.

**Methodology:** quantitative research design with quasi experimental research design was chosen for the study, conducted at selected village of Rohtas Bihar sampling and change agents were selected as purposive sampling technique. A planned teaching program on assisted reproductive technique was conducted. The pre-test and post-test level of knowledge on ART was assessed using self structured questionnaire.

**Result:** The analysis of the study findings revealed that knowledge on ART in regards to the pre-test mean score was 8.2 and SD 2.626 and the post-test mean score of knowledge was 15.15 and SD 3.063.

**Keywords:** ART, Reproductive age women, planned teaching

### Introduction

Assisted reproductive technology is defined as the technology used to achieve pregnancy in procedures such as artificial insemination, in vitro fertilization and surrogacy. Fertility therapies where eggs and sperm are manipulated. Involve surgically removing eggs from women and combining them with sperm in the laboratory. In 1981, shortly after the birth of Elizabeth Carr, the first in vitro fertilization (IVF) child born in united state. Methods of Assisted Reproductive Technology: In vitro Fertilization (IVF), Intra cytoplasmic sperm Injection (ICSI), Gamete intra fallopian transfer (GIFT), Zygote intra fallopian transfer (ZIFT), Surrogacy. Assisted reproductive technique treats infertility and the treatment involves both a men sperms and women's egg. The procedure begins by extracting eggs from a women body and then fusing it with the sperm to generate embryos. This embryo is then transferred back into the women body. The most commonly used ART technique which is most effective one is the In vitro fertilization or IVF which is based on this principle.

### Background of the study

The number of children born through assisted reproductive technology (ART) has increased markedly since 1978, when the first baby conceived through in- vitro fertilization (IVF). The reason to spread of ART is partly related to the postponement of parenthood in most developed countries. Infertility couple affects the couples life, work, health, personality, identity and quality of life. The aim of the study is to determine the attitude and acceptability of assisted reproductive technology among women of reproductive age at selected village of Rohtas.

**Need for the Study**

Assisted reproductive technology is surgically removing eggs from a woman’s ovaries, combining them with sperm in the laboratory, and returning them to the women’s body or donating them to another woman. They do not include treatments in only sperm are handled or procedures in which a woman takes medicine only to stimulate egg production without the intention of having eggs retrieved. According to world health organisation (WHO) studies from 1990 to 2021, globally infertility prevalence estimate was, approx. 1 in 6 people has experience infertility. In which 17.5 %estimated lifetime prevalence of infertility while 12.6%estimated period prevalence of infertility. Also, in 2002, study so that 7.3 million couples were affected by infertility now, it Increase to 48.5 million worldwide. next another study conducted in 2006, American society of reproductive medicine reported an incidence of infertility has continue rise over the last decade.

**Research Methodology**

A research design consisting of single group pre-test and post-test design was chosen for the study, conducted at selected village of Rohtas. Sampling and change agents were selected as purposive sampling technique. A planned health teaching programme on ART was conducted. ART knowledge level before and after testing were assessed using a self- administered questionnaire.

**Sampling Criteria**

**Inclusion Criteria**

**Study includes**

1. Those who are interested or available during the data collection.

**Exclusion Criteria**

**Study excludes**

1. Those who are not attend the puberty age.
2. Those who are attend the menopause

**Objectives of the Study**

1. To assess the knowledge of reproductive age women regarding assisted reproductive technology before administration of planned teaching program.
2. To assess the knowledge of reproductive age women regarding assisted reproductive technology after administration of planned teaching program.
3. To evaluate the effectiveness of planned teaching program by comparing pre-test and post-test knowledge score of reproductive age women.
4. To associate the pre-test level of knowledge of reproductive age women regarding assisted reproductive technology with selected demographic variables.

**Result**

The analysis of the study findings revealed that knowledge on ART in regards to the pre-test mean score was 8.2 and SD 2.626 and the post-test mean score of knowledge was 15.15 and SD 3.063. The calculated paired value of t= -

12.793 was found to be statistically significant at  $p < 0.001$  level. The data analysis and findings of the research shows educational programs helps reproductive age women to know more about ART.

**Data Analysis and Interpretation**

This chapter examines and interprets data collected from 60 reproductive age women in Rohtas village selected through a self-administered survey.

This study aims to evaluate the effectiveness of an educational program for the knowledge among reproductive age women at selected village of Rohtas.

**Organization of the Data**

The data collected from the reproductive age women were organized, analysed and presented under the following sections: -

- **Section 1:** Demographic variable of reproductive age women.
- **Section 2:** Assessment of pre-test level of knowledge.
- **Section 3:** Assessment of post- test level of knowledge.
- **Section 4:** Assessment of pre- test and post -test level of knowledge.
- **Section 5:** Association between level of knowledge with the demographic variables.

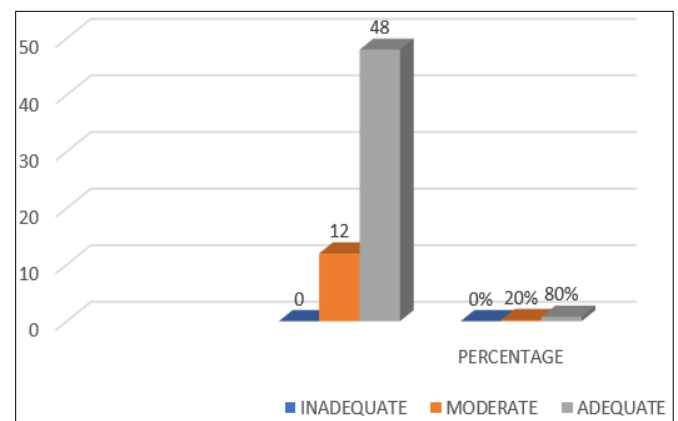
**Section II: Description of Pre-Test Level of Knowledge on Art**

Percentage of items related to ART experience and knowledge.

**Table 1:** Description of Pre-Test Level of Knowledge on Art

Knowledge Level	N	%
Inadequate Knowledge	24	40.0%
Moderate Knowledge	33	55.0%
Adequate Knowledge	3	5.0%

The data presenting in table shows that in pre-test maximum number of the study subjects 33(55.0%) have Moderate knowledge, 24(40.0%) had Inadequate knowledge, and 3(5.00%) had adequate knowledge.



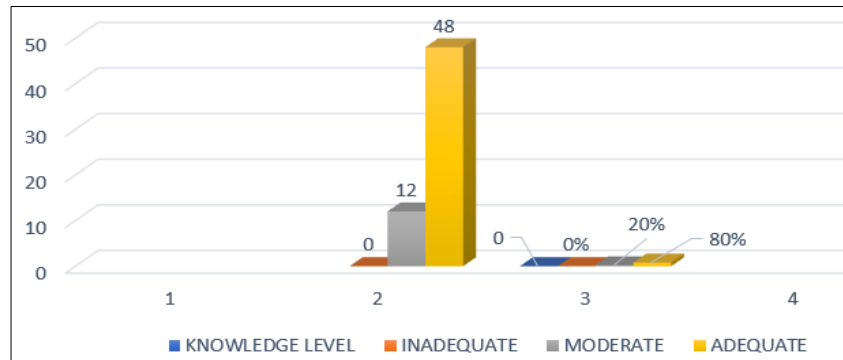
**Fig 1:** Representing percentage distribution of study subjects according to their pre - test knowledge level.

**Table 2:** Description of Post-Test Level of Knowledge on Art

Post-test knowledge level of study subject	N	%
Inadequate level of knowledge	0	0%
Moderate level of knowledge	12	20%
Adequate level of knowledge	48	80%

The data presented in table shows that in post-test majority of the study subjects had 48(80.00%) adequate knowledge

and 12(20.00%) had Moderate knowledge.



**Fig 2:** Representing percentage distribution of study subjects according to their post-test knowledge level.

**Table 3:** Comparison of pre-test knowledge score with post-test knowledge score regarding assisted reproductive technique among study subjects.

Pre-test and post-test knowledge level of the study subject	Pre-test		Post-test	
Inadequate	24	40%	0	0%
Moderate	33	55%	12	20%
Adequate	3	5%	48	80%

The data presented in table and figure shows that in pre-test maximum number of the study subjects 33(55.05) had moderate knowledge, 24(40.0%) had Inadequate knowledge and least i.e.,3(5.0%) had moderate knowledge regarding assisted reproductive technology and in post-test majority 48(80.0%) had adequate knowledge and least i.e., 12(20.0%) had Moderate knowledge.

**Conclusion**

Major findings of the study are maximum 60(100%) samples were in under 15-20 years age, 46(76.66%) were Hindu and 12(20%) were belong to Muslims, 37(61.66%) were nuclear family and 19(31.66%) were belong to joint family, 60(100%) of the reproductive age women having below 1 lakh, 60(100%) of the girl are Matriculation, 55% reproductive age women are Eggetarian, 56(93.33%) reproductive age women are belong to other occupation, 7 1.66% are from Rural area. In pre-test the only 3(5%) samples had adequate knowledge, but after administration of planned teaching programme the post test was showing that 48(80.0%) samples were had adequate knowledge. It shows that the planned teaching programme was effective in case of knowledge on assisted reproductive technique. There is significant association between pre-test and post-test knowledge scores as the calculated ‘t’ test was higher than the tabulated value at 0.05 level of significance. Therefore, the H1 is accepted.

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