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# Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Risk Factor Associated with Infertility and It's Preventive Measures in Reproductive Age Group

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**Abstract**

**Introduction:** A person with infertility may become pregnant after trying to conceive for a year. The symptoms could include low testosterone levels, endometriosis, ovulatory problems, or an abnormally low sperm count.

**Techniques:** The research used a pre-experimental design and included 40 infertile couples selected by a simple sample procedure. They were located at Ray Hospital and Test Tube Baby Centre in Rourkela, Odisha. The research tool used in this study was a self-structured questionnaire. Using expert opinion and the test-retest approach, we can determine the tool's validity. A post-test was given seven days after the delivery of the pre-test structured education program. The data was analysed using both descriptive and inferential statistics.

**Result:** The primary analysis's results indicated that 16 (40%) of the participants had a moderate degree of pre-test awareness of the risk factors connected to infertility and its preventive measures. There were 24 (60%) who lacked adequate understanding, and none of them did. By giving the same group a test again, we found that 22 people (or 55% of the total) had retained adequate information. However, none of them had inadequate knowledge, and 18 (45%) had a moderate level. The mean pre-test knowledge score was lower than the mean post-test score, which was significant (p value <0.001).that mark With that, the study's premise was approved.

**conclusion:** Infertility is a very common problem all over the world. 5 The effects of infertility on men and women alike may be profound in societies that value procreation highly. The National Survey of Infertility found that 53% of women had logical challenges because to an inability to communicate their sentiments of guilt, worry, loneliness, sadness, or depression to their partners. Infertility has a very detrimental social influence on the lives of infertile couples.

**Keywords:** knowledge, risk factors, preventive measures, and a structured education program.

## Introduction

It is often referred to as gravidity when conception is not achieved following a period of harmonious, susceptible sexual effort. According to encyclopaedia estimates, 8 to 12 percent of marriages are affect-

ed.

The morbidity of pregnancy, which often requires complex, valuable remedies, is a major source of mental suffering, envy, and interpersonal conflict.

Preventing pregnancy and improving reproductive health are two sides of the same coin when it comes to lowering the burden of pregnancy. Worldwide, public health is improved by initiatives that prevent pregnancy by reducing modifiable risk factors linked to life, environmental exposures, and healthcare access.

The primary goals of health creation business include educating people on how to live a healthy life, how to preserve their fertility, and how to get fast medical care.

During the rich phase of a woman's menstrual cycle, there is a period of unanticipated non-generality with susceptible sexual exertion that is now identified as gestation. People all throughout the globe experience the tragic life-threatening condition known as gestation. A lot of mental anguish is inflicted upon those who get the opinion of gestation. More severe instances of sadness, anxiety, and pain are associated with infertility. Two types of gestation are feasible: primary and secondary. Primary gestational diabetes symptoms include infertility at each stage. The inability to conceive after a successful pregnancy in the past is called secondary gestation. To a culture that values female procreation so highly, gestation may be harmful to a woman's health. When gestation fails, they blame women—and sometimes even each other—for it. Through this investigator.Understanding the quality of life during pregnancy, the knowledge of assisted reproductive technology (ART) that may help individuals overcome it, and the support that families and society provide are the goals of this research.

**Epidemiology**

According to the World Health Organisation (WHO), around 17.5 percent of couples of childbearing age experience gravidity. This works out to almost one in six adults globally. Low- and middle-income countries (LMICs) were thought to have much higher rates of gravidity in the past because to variables including socioeconomic status and geographical location. new estimations, however, indicate little to no difference across nations and areas, with rates that are comparable. It is evident that gravidity affects a wide range of communities and poses a significant threat to world health. The prevalence of this illness is rather widespread; current reports indicate a frequency of 17.8 in high-income nations and 16.5 in low- and middle-income countries. Gravidity rates seem to be increasing in certain places, despite an overall downward trend in high-income and industrialised nations. "A combination of reduced reproductive aspirations and easier access to gravidity therapies in industrialised nations may be causing underreporting of this trend.

**NEED FOR THE STUDY**

In 2014, the rates of life gravidity and present primary gravidity were 2.1 and 6.4%, respectively, in Iran, necessitating the identification of the burden of gravidity and the variables that impact it.

The obtained study from South East Asia on 2023 indicates that, on average, 10-15% of all couples attempting to conceive end up failing and requiring significant medical assistance each time. Successful data prisoner by a medical professional or statistician with enough understanding on the topic might access valuable information about possible gravidity.

The World Health Organisation reports that 8–12 percent of couples worldwide deal with some kind of gravidity issue, 2–10 percent of couples are unable to conceive, and 10–25 percent have secondary

gravidity. Therefore, it is necessary to determine the highest point of gravidity. According to the National Family Health Survey (NFNS), factors that affect the rates of pregnancy and infertility include women's age, the age at which they were first married, the location of their home, their income level, their employment status, and the area in which they reside. Civic area women tend to have a higher gravidity rate since they marry later in life or for the first time at a later age. There may be a connection between this and the fact that there are constraints for achieving advanced forenamed factors, such as advanced marital age, civic status, and lifestyle choices.

**Objectives**

1. To Assess the pre test knowledge of Risk factors in Infertility among the Infertility couples.
2. To estimate the effectiveness of structure tutoring programme regarding the precautions measures in reproductive age group( 12- 46 yrs).
3. To Find the association with pre-test and post-test knowledge with named demographic area.

**OPERATIONAL DEFINITION-**

**Effectiveness:** The capacity to accomplish a desired outcome or task is what we mean when we talk about effectiveness. An apparently successful commodity either has an expected or planned expansion or makes a profound visual print. Using post-test scores as measured by a semi-structured questionnaire, this research relates to the change that the organised tutoring program aimed to bring about.

**Knowledge:** Knowledge, skills, and facts gained via formal education or work experience; inclusive of both theoretical and practical aspects of fields of study. Couples' knowledge of gravidity and its causes is defined in this research as their capacity to comprehend facts and information.

**Reproductive age:** The probability of women married aged 15 to 49 yrs who are now utilising or whose sexual match is using at least one ultramodern technique of contraception, regardless of system used.

**Infertility:** A woman is considered infertile if she is unable to have a child after a minimum of twelve months of trying to conceive via regulated sexual activity or therapeutic patron copulation. assessment and treatment may be necessary based on medical history and physical findings; for women who have given birth more than 35 times, this evaluation is warranted after 6 months.

**preventative Measures:** It includes all measures used to ensure the well-being of individuals and to forestall the occurrence of harmful health conditions, injuries, and premature deaths.

**Structured Teaching Programme:** A completely prepared instructional program that uses educational aids to provide knowledge is what it refers to. This research makes reference to a tutoring system that aims to educate students about pregnancies and their causes.

**Infertile couple:** Those couple are n't being suitable to get pregnant conceive after one time or( longer) vulnerable coitus.

**Methodology**

**RESEARCH APPROACH**: In this study, a quantitative research strategy was used.

**RESEARCH DESIGN**: The Research Design Applied for the study is pre- Experimental with one group pre-test post- test.

**RESEARCH SETTING**- The chosen infertility hospital in Rourkela, Sundargarh, is the location of this investigation.

**SAMPLING SIZE**- For the present study compromised of 40 couple is selected infertility hospital in Rourkela.

**SAMPLING TECHNIQUE**- This research used the convenience sampling approach for its sampling.

**VARIABLES**

**Independent Variables**: In this research, the presiding structure tutoring program that addresses the risk factors of pregnancy and how to avoid them served as the independent variable.

**Dependent Variables:** In this research, the knowledge of infertile couples about the risk factors of pregnancy and how to avoid them is the dependent variable.

**CRITERIA FOR SAMPLE SELECTION**

**Inclusion criteria**: · The couple who are willing to participate in the study. · Who are available at the time of study.· Age group(12-49)years.

**Exclusion criteria**: · The couple who are not interested to give data. · Who are not available at the time of data collection.· Not comfortable to sharing the data. · Language barriers · Medical condition · Genetic abnormalities · Substance abuse · Psychiatric disorders.

**Description and interpretation of the tool :**

**Section-I**

**Frequency and percentage of socioeconomic variables.**

**N=40**

| Variables | Option | Frequency | Percentage |
|---|---|---|---|
| AGE | 20-25 yrs. | 21 | 52.3% |
| | 26-30 yrs. | 12 | 30% |
| | 31-35 yrs. | 3 | 7.5% |
| | 36-49yrs. | 4 | 10% |
| | | | |
| Gender | Male | 16 | 40% |
| | Female | 23 | 56.5% |
| | Transgender | 1 | 2.5% |
| Religion | Hindu | 34 | 85% |
| | Muslim | 5 | 12.5% |
| | Christian | 1 | 2.5% |
| Education | Secondary education | 23 | 57.5% |
| | Higher secondary | 11 | 27.5% |
| | Graduate | 6 | 15% |
| | Post graduate | 0 | 0 |
| Duration of marriage | 1-2 yrs | 7 | 17.5% |
| | 2-5 yrs | 9 | 22.5% |
| | 5-10 yrs | 23 | 57.5% |
| | >10 yrs. | 1 | 2.5% |

Table 1 shows the distribution of infertile couple according to sociodemographic variables such as age, gender, religion, education, duration of marriage" .

**Section-II**
**N=40**

| KNOWLEDGE SCORE | PRE-TEST | | POST TEST | |
|---|---|---|---|---|
| | F | % | F | % |
| INADEQUATE KNOWLEDGE (0-8) | 16 | 40% | 0 | 0% |
| MODERATE KNOWLEDGE (9-16) | 24 | 60% | 11 | 27.5% |
| ADEQUATE KNOWLEDGE (17-25) | 0 | 0% | 29 | 72.5% |
| MAXIMUM=25,Minimum-0 | | | | |

Table 2 comparison of pre-test and post test level of knowledge on infertility associated with risk factor and its preventive measures.

**Section-III**

Effectiveness of structured teaching programme regarding risk factor associated with infertility and it's preventive measures. N=40

| Knowledge | Mean | Mean% | Mean diff. | SD | P value | T value at 0.05 | Result |
|---|---|---|---|---|---|---|---|
| Pretest | 6.25 | 25 | 8.97 | 3.11 | <0.001 | 2.00 | SIGNIFICANT |
| Post test | 15.2 | 60.8 | | 2.78 | | | |
| | | | | | | | |

**SECTION-IV**

Association of pretest knowledge score with selected socio-demographic variables .
N=40

| Sociodemographic Variable | Chi- square | Df | Table value | Result |
|---|---|---|---|---|
| Age | 14.5 | 6 | 12.59 | NS |
| Gender | 8.10 | 2 | 5.99 | S |
| Religion | 15.57 | 6 | 12.59 | NS |
| Education | 13.8 | 6 | 12.59 | NS |
| Duration of marriage | 7.91 | 6 | 12.59 | NS |

**CONCLUSION:**

A total of 29 students (72.5%) demonstrated adequate position knowledge, 11 students (27.5%) demonstrated moderate position knowledge, and zero students had shy position knowledge, indicating that the organised tutoring program was helpful in improving post-test scores. The results of this research showed that the reproductive age group's awareness of gravidity significantly improved when a systematic tutoring program was administered.

**Recommendation**

Grounded on the result of study following recommendations are made

1. In order to confirm and generalise the study's findings, it can be repeated with a larger sample.

2. It is possible to carry out similar investigations in alternative contexts, such as communities.
3. To determine whether an organised tutoring program improves pregnant awareness, a quasi-experimental study might be undertaken.
4. To compare the level of knowledge about pregnancy between public and private hospitals, a comparative research might be carried out.

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