



A study to evaluate the effectiveness of information booklet on knowledge regarding pelvic inflammatory disease among early adult women in S.C.P.M hospital, Gonda

Nisha Abraham¹, Harshitha Mishra²

¹ Professor, Department of Medical Surgical Nursing, S.C.P.M College of Nursing and Paramedical Sciences, Gonda, Uttar Pradesh, India

² MSc, Nursing student, S.C.P.M College of Nursing and Paramedical Sciences, Gonda, Uttar Pradesh, India

Abstract

Pelvic inflammatory disease (PID) is an inflammatory condition of the pelvic cavity that may begin with cervicitis and may involve the uterus (Endometritis), fallopian tubes (Salpingitis), ovaries (Oophoritis), pelvic peritoneum, or pelvic vascular system. About 1 million women are diagnosed with PID each year in the United States; most are younger than 25 years of age, and one fourth of them have serious sequelae¹. Education and counseling tailored for adolescents. All adolescents should be educated about their risks of acquiring an STD and its relation to PID. Adolescents often fail to recognize the dangers of high-risk sex behaviors and do not seek medical advice about such behavior. Age-appropriate and developmentally appropriate counseling strategies are needed. To provide adolescents with directed educational messages, careful risk assessment is also needed. A history of STD or PID is a valuable risk marker identifying early adolescent women at risk of having PID. Early and effective intervention for adolescents will reduce their likelihood of acquiring STD and, consequently, should diminish PID and other complications of STD¹¹.

Keywords: evaluate; effectiveness, knowledge; informational booklet; pelvic inflammatory disease; early adult women

Introduction

Pelvic inflammatory disease (PID) continues to pose great risk to the reproductive health of women worldwide^[2]. Early adulthood is a key period in the lifecycle both in terms of the health of the person themselves also for their future life as an adult and even for the health of next generation^[3]. Risk factors associated with PID include young age at first intercourse, high frequency of intercourse, number of sexual partners, promiscuous partner. It is rare in postmenopausal women and in those who had tubal ligation. Women suffering from this infection are at higher risk of chronic pelvic pain, ectopic pregnancy, infertility and unexpected hospital visits^[4]. It is said to occur in 1% of the 15-25-year age group of young adults around the world, 24-32% of women in India and around 8% in Pakistan are estimated to be affected. In developed countries, the annual incidence is estimated to be 10-13 per 1000 women, with 20 per 1000 women being in the age group of 20-24 years. However, there are not many studies which would give an insight to the magnitude and determinants of this disease. Number of risk factors has been associated with this disease, such as age, previous sexually transmitted infection, previous PID, multiple sexual partners, or an intrauterine contraceptive device. Several microbial infections such as that with Chlamydia trachomatis and Neisseria gonorrhoeae have also been associated with this condition⁵

Statement of the problem

A study to evaluate the effectiveness of information booklet on knowledge regarding pelvic inflammatory disease among early adult women in s.c.p.m hospital, Gonda.

Objectives of the Study

1. To assess the existing knowledge among early adult women regarding prevention of pelvic inflammatory disease.
2. To evaluate the effectiveness of the information booklet on knowledge regarding pelvic inflammatory disease among early adult women by comparing pre-test and post-test knowledge score.
3. To find out the associations between pre-test knowledge and the selected demographic variables.

Hypothesis

H1:- there will be a significant difference between pre and post-test knowledge scores on pelvic inflammatory disease after administering information booklet.

H2:- there will be a significant association between the pre-test level of knowledge and selected demographic variables.

Operational Definition

1. **Evaluate:** it refers to evaluation or estimation of informational booklet on knowledge on pelvic inflammatory disease.
2. **Effectiveness:** it refers to the desired changes that can be brought through informational booklet.
3. **Information booklet:** it is a systematically prepared educational tool regarding pelvic inflammatory disease which will be distributed to the participants.

4. **Knowledge:** the ability of early adult women's to respond for the questionnaire on prevention of pelvic inflammatory disease.
5. **Pelvic inflammatory disease:** it refers to infection in the pelvic cavity which may involve cervix, uterus, fallopian tube and ovaries.
6. **Early adult women:** In this study it refers to women in the age group of 18-40 years.

Research Methodology

Research methodology is a systematic procedure in which the researcher states the initial identification of the problem to its final conclusions. It refers to the investigations and the way of obtaining, organizing and analyzing data. Methodology studies address the development, validation and evaluation of research tools or methods. This chapter includes research approach, research design, setting of the study, population sample, sample size, sampling technique, sampling criteria, instrument, validity and reliability, pilot study, method of data collection, plan for data analysis and interpretation and ethical implications in the study.

Research Approach

Research approach is the basic procedure for conducting the study. In the analysis of data, the difference of the initial and the terminal measurement represents the effect of the independent variables. In view of the nature of the problem selected for the study and the objectives to be accomplished, an evaluative research approach was used for the present study.

Research Design

Research design is an investigators overall plan for collecting and analysing data, including specifications for enhancing the internal and external validity of the study. For the present study "one group pre-test post-test study design" is adopted.

Variables Under Study

A variable is a characteristic or attribute of a person or object that varies within the population under study.

Independent variable

The independent variable in this study is the information booklet on pelvic inflammatory disease.

Dependent variable

The dependent variable in this study is the knowledge of early adult women regarding pelvic inflammatory disease.

Demographic variable/ Attribute variables

The demographic variables of this study includes age, religion, education, occupation, type of family and source of information.

Settings of the Study

The setting is a location where a study is conducted. The investigator selected S.C.P.M Hospital in Gonda as the setting for the present study.

Because of feasibility the investigator has selected this area to conduct research study.

Population

The population refers to the entire set of individuals or objects having some common characteristics. Population of present study comprises of all early adult women visiting S.C.P.M Hospital of Gonda.

Sample and Sample Size

Sample is a subset of a population selected to participate in a research study. The samples for this research study are early adult women in S.C.P.M Hospital of Gonda. The sample size taken for this study is 60 early adult women.

Sampling Technique

Sampling defines the process of selecting a group of people or other elements with which to conduct a study. In this study, non-probability convenient sampling technique is used for selecting the samples.

Criteria for Sample Selection

Inclusion criteria

1. The early adult women who are willing to participate in the study.
2. The early adult women who are in the age group of 18-39 years.
3. The early adult women who can understand English.

Exclusion criteria

1. Early adult women to who are not willing to participate in study.
2. Early adult women who are not available at the period of study.

Development of the Tool

After an extensive review of literature, discussion with the guide and various experts in the field of Medical Surgical Nursing and based on investigators personal experience, the structured knowledge questionnaire on knowledge of early adult women regarding pelvic inflammatory disease was developed.

A blue print of 36 items was prepared to assess the knowledge of early adult women, the content was based on four domains namely knowledge, applications, analysis and evaluation.

Description of the Tool In the present study the tool consist of two parts.

Tool consists of two parts.

Part-1: Demographic Profile

Part-2: Structured Questionnaire for knowledge.

Part 1: Demographic Data

This part consists of structured questionnaire to collect the demographic data. It consists of 07 items which includes age, religion, education, occupation, Area of residence, type of family and source of information.

Part 2: Structured Knowledge Questionnaire 1

This part consists of 36 structured questionnaires to assess the knowledge of early adult women.

In the structured questionnaire for each question only one correct response is supposed to be given. For each correct answer, the score given was 1 and for the wrong answer the score given was 0. The highest score was 36.

Based on the percentage gained by the early adult women, the knowledge of the respondent was arbitrarily categorized in the following groups.

Table 1

| | | |
|----|-------------------------------|--------------------|
| 1. | Inadequate knowledge | : Below 50% |
| 2. | Moderately adequate knowledge | : 51% - 75% |
| 3. | Adequate knowledge | : Above 75% |

Development of Information Booklet

The first draft of the information booklet on pelvic inflammatory disease was developed based on the objectives of the study and was given to ten experts along with objectives and the criteria rating scale. Based on their suggestions and recommendation the final draft was developed.

Content Validity

Content validity refers to the degree to which an instrument measures what it is intended to measure. The tool and the content for the information booklet along with the statement of the problem, objectives, scoring key and criteria rating scale were submitted for validation to experts from the department of medical surgical nursing, physicians and statistician. Based on the experts opinion, some of the questions were modified and some of the questions have been deleted. Arrangement of the options was done in a proper way according to the suggestions given by the experts. The tool was presented and finalized by the research committee of S.C.P.M College of Nursing.

Reliability of the Tool

Reliability is defined as the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure.

After validation, the tool was subjected to test for its reliability. The structured questionnaire was administered to 6 early adult women in SCPM Hospital of Gonda. In order to establish reliability of the tool, the technique called split half method was used. The reliability coefficient of the whole test was estimated by Spearman-Brown prophecy formula and it was found to be $r = 0.88$, which indicated that the tool was highly reliable.

Pilot Study

After obtaining formal permission from the authorities, the pilot study was conducted. The pilot study was conducted to find out the feasibility of the tool and the investigator selected 6 early adult women from the total population using convenient sampling technique. The pre-test was conducted by using self-administered structured questionnaire followed by the administration of information booklet on pelvic inflammatory disease. The post test was conducted after seven days, by using the same self-administered structured questionnaire for evaluating the effectiveness of the information booklet. The time taken for conducting pre-test and post-test was 60 minutes.

Data Collection Procedure

After obtaining formal permission from the concerned authorities, the pre-test was conducted by convenient sampling technique, the investigator gave self-introduction, explained the purpose of the study and the subjects willingness to participate in the study was ascertained. The subjects were assured anonymity and confidentiality of information provided by them and a written informed consent was obtained. The information booklet was administered at the end of the pre-test and the post-test was carried out seven days later using the same tool as that of the pre-test. The data collection procedure was carried out for a period of one month.

Plan for Data Analysis

The data analysis and interpretation was planned to include descriptive and inferential statistics.

Descriptive Statistics

Percentage, mean, mean percentage and standard deviation was used to explain demographic variables and compute pre-test and post- test knowledge scores.

Inferential Statistics

Parametric test: Paired- t , test was used to compare pre-test and post-test knowledge scores.

Non-parametric test: Chi-square (χ^2) test was used to study the association between pre-test knowledge scores with selected demographic variables. The significant findings are expressed in the form of tables and figures.

Results

The first objective of the study was to assess the knowledge regarding pelvic

Inflammatory disease among early adult women.

The mean knowledge in the post test is 22.82 whereas the mean in the pre-test is 16.77. The variation is decreased in post-test when compared to pre-test. SD in the post-test is 2.016 and in the pre-test is 1.367.

The second objective was to evaluate the effectiveness of information booklet on the knowledge regarding prevention of pelvic inflammatory disease among early adult women.

The mean knowledge score is increased in the post test. The mean in the post test is 22.82 whereas the mean in the pre-test is 16.77. The variation is decreased in post-test when compared to pre-test. SD in the post-test is 2.016 and in the pre-test is 1.367. The mean improvement is 6.05.

Though it was seen that the post-test knowledge score was more than the pre-test knowledge score, it is essential to put it under statistical significance. So suitably the paired „ t “-test was chosen and worked out. The calculated t -value is 21.56 which are highly significant.

The result undoubtedly confirms that the information booklet significantly was effective in improving the knowledge regarding pelvic inflammatory disease among early adult women.

The third objective was to determine the association between knowledge regarding Pelvic inflammatory disease among early adult women with selected demographic Variables.

The result of association between knowledge of early adult women regarding prevention of pelvic inflammatory disease and selected demographic variables are, the chi-square test was resulted to be significant at $p < 0.05$, so there is a statistical association between age, education, occupation, type of family and source of information and pre-test knowledge scores.

Conclusion

The study was conducted with the objective of assessing the effectiveness of information booklet regarding pelvic inflammatory disease among early adult women.

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

1. Present study did found level of knowledge regarding pelvic inflammatory disease among early adult women.
2. Present study did found significant association between the knowledge scores among the early adult women and the demographic variables.

Nursing Implications

The findings of the study have implications in the field of nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice

Nursing service has a direct, significant impact on human health. The findings implies the need for clinical nurse to keep abreast with the knowledge by undergoing continuing education and in-service education and training to upgrade skills and learning and be well versed with newer advancements in diagnosis and management skills. The expanded role of a nurse emphasizes on those activities which promote health. Health promotion without the active involvement of communities doesn't bring about sustainable knowledge changes. Nurses in their educative role among students are in a better position to mould the health related behaviours. Health education can be imparted in wards, OPDs and in community settings through various methods like lectures, mass media, pamphlets, information booklet, self-instructional module etc. Any strategy which is simple, clear and attractive provides interest to the learner to follow the instructions safely. Nurses have to involve themselves in all areas of health care practices to help people lead a healthy lifestyle.

Nursing Education

To impact the knowledge of people, the nursing personal need to be equipped with adequate knowledge regarding pelvic inflammatory disease.

Nursing Administration

Nurse administrators are the back bone for providing facilities to improve knowledge on health aspects. Post graduate nurses should take part in health administration. Nurse administrators can organize continuing nursing education and in service education programs to update the knowledge regarding pelvic

inflammatory disease among early adult women.

The nursing administrator should take an initiative in creating health policy and developing protocols in providing education in promotion of health.

Nursing Research

It is essential to identify the need for assessing the knowledge on pelvic inflammatory disease to know the need for quality of health care services. Extensive research must be conducted in this area to assess the knowledge and use effective methods of education. This study also brings about the fact that more studies used to be done at different setting, with culturally accepted education strategies.

Recommendation

On the basis of present study, the following recommendations are formed for future study:

1. A study can be replicated on a large population.
2. A future study can be conducted with more variables.
3. A study can be conducted by using experimental and control group.
4. A comparative study can be carried out on sample's knowledge.

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