

Effectiveness of Structured Teaching Program on Knowledge Regarding TORCH Infections During Pregnancy Among Antenatal Mothers at Telungupalayam Village, Coimbatore District

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Abstract

Aim: The present study aimed to determine the effectiveness of structured teaching program on knowledge regarding TORCH infection during pregnancy among antenatal mothers in Telungupalayam villages at Coimbatore.

Research design : The researcher design for this study was quasi-experimental one group pretest and post-test research design.

Objectives of the study

- Assess the pre-test and post test level of knowledge regarding TORCH infections during pregnancy among antenatal mothers.
- Determine the effectiveness of structured teaching program on knowledge regarding TORCH infections during pregnancy among antenatal mothers.
- Associate the pre-test level of knowledge regarding TORCH infections during pregnancy among antenatal mothers with their selected demographic variables.

Findings of the study: The analysis showed that the percentage of the pre-test level of knowledge regarding TORCH infections during pregnancy among antenatal mothers before in pre test 49(82%) of antenatal mothers had below average level of knowledge, 6(10%) of them had average knowledge and 5(8%) of them had above average level of knowledge and whereas in the post test majority 52(86%) showed above average level of knowledge, 5(9%) of them had average level of knowledge and 3(5%) often had below average level of knowledge.

The findings showed that the pre-test mean score of knowledge among antenatal mothers was 13.0 with S.D 6.19 and the post-test mean score of knowledge was 39.7 with S.D 5.1. The calculated paired 't' value of $t = 19.04$ was found to be statistically significant at $p < 0.05$ level.

Conclusion: This study indicates that after the administration of structured teaching program the post-test level of knowledge was considerably increased among antenatal mothers and this clearly indicates that the structured teaching program was found to be effective in improving the knowledge among antenatal mothers.

Introduction

Pregnancy is a period of great anabolic activity, when the most rapid of growth takes place. It is a condition in which the fetal growth is accompanied by extended changes in the maternal body

composition and metabolism. Reproduction through consideration to be a usual process in the life of a women, is stressful and can lead to the threats in reproductive age group women unless, appropriate measures are taken in time, it may reach its peak and endanger the life of mother. TORCH Syndrome refers to infection of a developing fetus or newborn by any of a group of infectious agents ‘‘TORCH’’ is toxoplasmosis, other agents’ rubella also known as German Measles, cytomegalovirus, and herpes Simplex During pregnancy the mother can transmit the infection to the fetus through the placenta, the organ that provides oxygen and nutrients from the mother to the developing fetus.

Global Statistics (2018) reported that the prevalence of TORCH infections cytomegalovirus (CMV) is ranging from 45% in developed countries to 100% in developing countries, whereas in India, recorded 80%–90% CMV IgG antibodies in women of child-bearing age. Where anti-IgG antibodies were observed in 88.8% pregnant women. IgG antibodies against CMV infection are in parallel with the reported 85.93% and 96.4% seropositivity from Indore, Madhya Pradesh, and Turkey, respectively. High seropositivity in the current study may be due to primary infection or reinfection of variant strain in this population. Hence, conducting prenatal CMV detection may help obstetrician regarding the status of infection and possible outcome of pregnancy. Thus, proper counselling and treatment of infected children may be considered timely to overcome the complications. Centers for Disease Control and Prevention also recommended prenatal counselling for pregnant women about hand washing, reducing exposure to body fluids of young children in preventive aspect.

Statement of the problem

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Objectives of the study

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Hypothesis

- **H₁** There is a significant difference between the pre-test and post-test level of knowledge regarding TORCH infections during pregnancy among antenatal mothers.
- **H₂** There is a significant association between the pre-test level of knowledge regarding TORCH infections among antenatal mothers with their selected demographic variables and obstetrical variables. It will be tested at >0.05 level of significant.

Methods and data analysis

Research design

The researcher design for this study was quasi-experimental one group pretest and post-test research design.

Method of data collection

The study was conducted in Telungupalayam village at Coimbatore after permission was obtained from the village administrative officer. Researcher utilized the convenience sampling technique to select the 60 antenatal mothers. Researcher personally visited each antenatal mother and introduced herself and explained the purpose of the study and ascertained the willingness of the participants, the respondents were assured anonymity and confidentiality of the information provided by them.

Pre-test was conducted for the antenatal mother by administering structured questionnaire to assess the knowledge on TORCH infections among the antenatal between the age group 18-35years. The data were collected from 10 mothers per day for the period of one week. Each antenatal mother took 10 minutes to fill the structured questionnaire.

After the pre- test on the same day, the researcher displayed Flash cards about TORCH infections during pregnancy and explains about the definition, symptoms, treatment and its preventions. After the teaching antenatal mothers encouraged asking doubts and the doubts were clarified by the researcher. Evaluation of structured teaching program was conducted by post-test after 7 days of implementation of intervention. The post test was taken from the same sample on one-to-one basis by using the same structured questionnaire.

Findings of the study

In the study group majority of samples 25 (42%) were in the age group of 26-30 years and religion 15 (25%) of the samples belongs to Muslim, coming to the family type 39 (65%) of the samples belongs to joint family. In education 21 (35%) of the samples had higher education. In occupation 21 (35%) of the samples having private job. In income 17 (28%) of the samples had the family monthly income of Rs. 10000-20000/-. 42 (70%) of the samples belongs to Rural. 22 (37%) of the samples are getting neighbors support. 36 (60%) of the samples were non vegetarian. 21 (35%) of the samples are primi mothers. In the obstetrical variables 25 (42%) of the samples are got married at the age of 25-29 years. 22 (36%) of the samples had no abortions. 36 (60%) of the samples had regular menstrual cycle. 24 (40%) of the samples having the gestational weeks of 13-28.

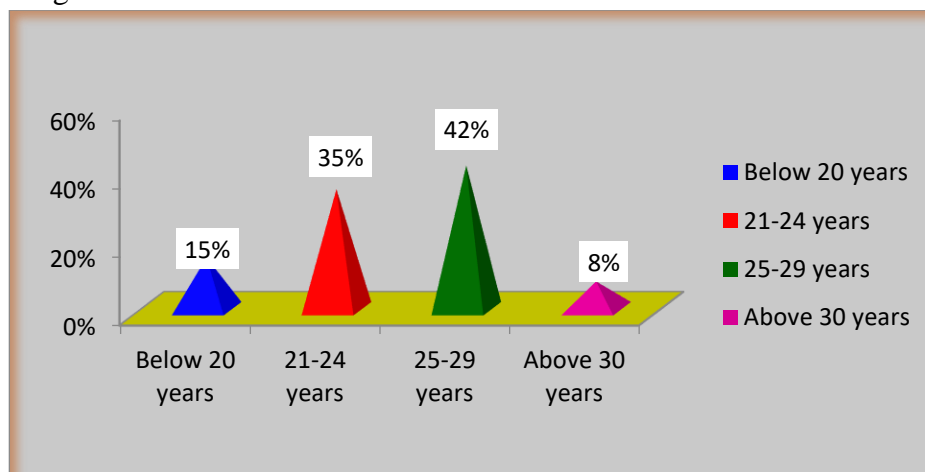


Figure 1: Frequency and percentage distribution according to age at marriage

The above figure showed that the percentage of the pretest level of knowledge regarding TORCH infections during pregnancy among antenatal mothers in pretest 49(82%) of antenatal mothers had below average level of knowledge, 6(10%) of them had average knowledge and 5(8%) of them had above average level of knowledge and whereas in the post test after the structured teaching program with

flash cards majority 52(86%) showed above average level of knowledge, 5(9%) of them had average level of knowledge and 3(5%) often had below average level of knowledge.

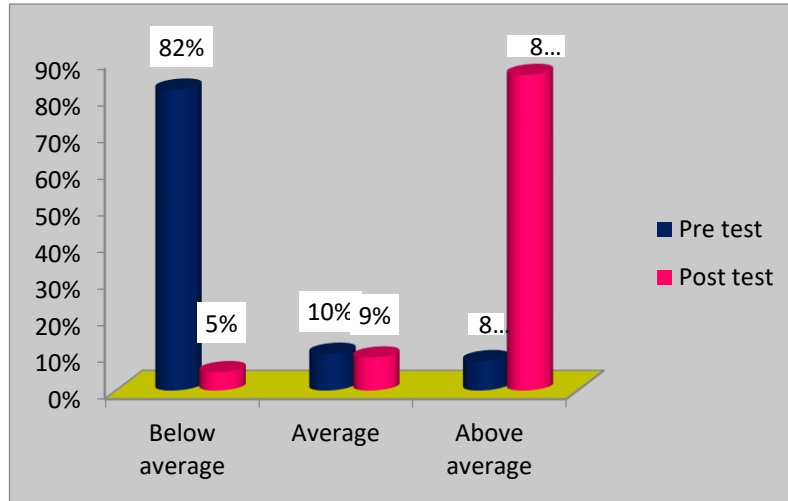


Figure: 2 the percentage of the pretest level of knowledge regarding TORCH infections during pregnancy among antenatal mothers

Table1: Comparison of pre-test and post-test level of knowledge scores regarding TORCH infections among antenatal mothers between the age group of 18-35 years.

N=60

Level of knowledge regarding TORCH infections	Mean	S.D	Mean difference	Paired “t” test	
				Calculated ‘t’ value	Table ‘t’ value
Pre test	13.0	6.19	26.7	19.04	2.00
Post test	39.7	5.1			

Table I showed that the pre-test mean score of knowledge among antenatal mothers was 13.0 with S.D 6.19 and the post-test mean score of knowledge was 39.7 with S.D 5.1. The calculated paired ‘t’ value of $t = 19.04$ was found to be statistically significant at $p < 0.05$ level. This clearly indicates that after the administration of structured teaching program the post-test level of knowledge was considerably increased among antenatal mothers and this clearly indicates that the structured teaching program was found to be effective in improving the knowledge among antenatal mothers. Hence the stated hypothesis (H_1) was accepted.

Implications of the research

The findings of the study can be incorporated in nursing education, practice and administration for quality management care.

Nursing practice

- Nurses should develop skill in implementing structured teaching program in clinicals.
- Nurses should create awareness and motivate others in the team to use this approach in improving the level of knowledge regarding TORCH infections during pregnancy among antenatal mothers.

- Teach the staff nurses about the effectiveness structured teaching program to improve the knowledge among antenatal mothers.

Nursing education

- A Continuing nursing education program can be arranged on TORCH infections during pregnancy.
- Structured teaching program is a non-pharmacological intervention that can be integrated with nursing curriculum.
- In service education can be given to staff Nurses and faculty members regarding TORCH infections in order to upgrade the cognitive and psychomotor skills.

Nursing research

- As a nurse researcher, promote more research on TORCH infections during pregnancy among antenatal mothers.
- Experimental studies are rare in nursing field. So, the Nurse researcher can conduct similar studies related to TORCH infections during pregnancy. This will help the Nurses to Evidence Based Practice in this aspect.

Recommendations

Based on findings of the study the investigator proposed the following recommendations,

- The same study can be done with large sample size so that the results can be generalized.
- Comparative study can be done to assess the structured teaching program on knowledge regarding TORCH infections during pregnancy among antenatal mothers at rural and urban.
- Experimental study can be done to assess the effectiveness of antiviral therapy with other non-pharmacological interventions for TORCH infections.

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