

Original Research Paper

Nursing

KNOWLEDGE REGARDING TORCH INFECTION AMONG WOMEN BETWEEN RURAL AND URBAN AREA: COMPARATIVE STUDY.

Akoijam Mamata Devi	Professor, HOD of Obstetric & Gynecological Nursing, Faculty of Nursing, SGT University, Gurugram		
Jaspreet Kaur*	 B.Sc. Nursing Interns, Faculty of Nursing, SGT University, Gurugram *Corresponding Author B.Sc. Nursing Interns, Faculty of Nursing, SGT University, Gurugram 		
Ishwar Swami			
Hemant Sehrawat	B.Sc. Nursing Interns, Faculty of Nursing, SGT University, Gurugram		
Ms. Shalu Sharma	Lecturer, Faculty of Nursing, SGT University, Gurugram		

ABSTRACT Introduction: TORCH is common in all socio-economic groups but congenital infections with significant impairment is seen at highest rate in population in which women in child bearing age have highest risk of acquiring primary infections. In addition to placental route, TORCH can be transmitted at delivery via the maternal genital tract, during the post partum period in breast milk and transfused blood products.

Material & Method: A comparative study to assess knowledge regarding TORCH infection among women between Rural and Urban area in Gurugram. The objectives of the study were to assess and compare the level of knowledge on TORCH infection among women between rural and urban area. The main data collection procedure was carried out in the month May 2017. The sample was taken from the community area (Rural and Urban) Farrukhnagar and Garhi harsuru. Sample consists of 100 in Farrukhnagar and 100 in Garhi Harsaru. The tool consists of demographic variables, which was to collect personal information about the subject and by using the Structured Knowledge Questionnaire to check the level of women knowledge regarding TORCH infection. At the time of data collection researcher first introduced herself or himself, explained the purpose of the study.

Results: The study result shows that the woman's of urban area have 27% poor knowledge,68% average knowledge and 5% of good knowledge regarding TORCH infection and it also shows that women's of rural area have 80% have poor knowledge,19% have average knowledge and 1% of good knowledge regarding torch infection. Hence we conclude that women's of rural area have poor knowledge and urban areas have average knowledge regarding the TORCH infection.

In Urban area the knowledge score was 1.21 ± 0.433 and in rural area knowledge score was 1.26 ± 0.525 . Hence, it was concluded that there is no significant association between Rural and Urban Area on knowledge score regarding TORCH Infection among women. In Urban area knowledge score was significantly associated with family income 0.039 at p<0.05 level, previous knowledge .000 at p<0.05 level. No association was found between knowledge and other demographic variables like Age in years, educational qualification, marital status and No. of children. In Rural area knowledge score was significantly associated with Age in years, educational qualification and family income at p<0.05 level. No association was found between knowledge and other demographic variables like marital status, No. of children and Previous knowledge.

KEYWORDS : TORCH, congenital infections, women in child bearing, maternal genital tract, post partum period.

INTRODUCTION

Pregnancy is biologically, physiologically and psychologically stressful, even for healthy women. Problems like, bleeding hyperemesis gravidarum, Hypertensive disorders, Anaemia, Diabetes Mellitus, Preventive measures of UTI in pregnancy, infections like toxoplasmosis, rubella, group B streptococcus, urinary tract infection, TORCH infection etc. will complicate the pregnancy.¹

The maternal infections that are transmissible in utero at several stages of the pregnancy can be caused by many organism of which the members of the TORCH complex, namely Toxoplasma gondii, Rubella, Cytomegalovirus (CMV), the Herpes simplex virus (HSV) occupy prominent position².

In India, pregnant women belonging to low socio-economic group may be exposed to a variety of infection due to poor environment and hygiene. Maternal infection because of Toxoplasma, Rubella, CMV, and HSV have been considered as significant factors for poor pregnancy³

Methodology:

Research Approach: Quantitative Research approach.

Research Design: A comparative research design was used to assess the knowledge regarding TORCH infection in women between rural and urban area.

Setting of The Study : The study was conducted in selected Garhi Harsaru village and Farrukh Nagar.

Sample and Population Sampling Technique: Garhi Harsharu and Farrukh Nagar were the sample of the study.

Sample Size - A target of 100 urban and 100 rural samples were decided on sample availability.

Criteria for selection of sample :

Inclusion criteria- The sample who were willing to participate in the study.

Exclusion criteria- The samples who were not interested in study.

Sampling Technique

Development of tool - Based on objectives, structured questionnaire was prepared to assess the knowledge of women's regarding TORCH Infection.

Hypothesis

- H1: There will be significant difference in level of knowledge between rural and urban among women regarding TORCH infection.
- H2: There will be significant association between level of knowledge between rural and urban area with selected demographic variables.

Assumptions

Women may have knowledge regarding TORCH Infection. The investigator assumes that this study will improve the knowledge among women about TORCH infection

Development of tool

The tool consist of 2 sections;-Section A – Demographic variables Section B- Structured questionnaire

Results:

Major findings:

- The women of Urban Area in age category of 18-25 years were 38%, 26-30 were 32% and 31-45 were 30%. Educational qualification middle school was 22%, higher school was 51% and graduated were 27%. The women from the marital status of married were 90%, unmarried were 5% and divorcy were 5%. The women family income of 10,000-15,000 was 30%, 16,000-20,000 were 39% and above 20,000 were 31%. No. of children of women one child were 46%, two children were 33% and more than two 15%.
- The women with the knowledge regarding TORCH infections were yes were 17% and no were 83% in Urban area(Table I). The women of Rural Area in age category of 18-25 years were 35%, 26-30 were 28% and 26-30 were 37%. The women from the educational qualification middle school were 31%, higher school were 54% and graduated were 15%. The women from the marital status of married were 49%, un married were 26% and divorcy were 25%. The women family income of 10,000-15,000 were 37%,16,000-20,000 were 38% and above 20,000 were 25% . No. of children of women one child were 29%, two children were 45% and more than two 26%. The women with the knowledge regarding TORCH infection was yes were 26% and no were 74% in Rural Area.
- The women of urban area have 27% poor knowledge,68% average knowledge and 5% of good knowledge regarding torch infection and women of rural area have 80% have poor knowledge,19% have average knowledge and 1% of good knowledge regarding torch infection. Hence, it was concluded that women's of rural area have poor knowledge and urban areas have average knowledge regarding the TORCH infection(Fig 1).
- In Urban area knowledge score was significantly associated with family income 0.039 at p<0.05 level, previous knowledge .000 at p<0.05 level. No association was found between knowledge and other demographic variables like Age in years, educational qualification, marital status and No. of children.
- In Rural area knowledge score was significantly associated with Age in years, educational qualification and family income at p<0.05 level. No association was found between knowledge and other demographic variables like marital status, No. of children and Previous knowledge.

Discussion:

In this study, we have analyzed the level of knowledge on TORCH infection among women. This study is carried out in rural and urban area of Gurugram Haryana. The women of urban area have 27% poor knowledge,68% average knowledge and 5% of good knowledge regarding torch infection and women of rural area have 80% have poor knowledge,19% have average knowledge and 1% of good knowledge regarding torch infection. Pereboom MTR et al studies observed out of the 1,097 respondents (response 66.0%), 75.3% had heard, read or seen information about toxoplasmosis, 61.7% about listeriosis and 12.5% about CMV. The majority reported having heard about these infections from their care providers or read about these in printed media or on the Internet. Respondents showed limited knowledge about preventive practices for toxoplasmosis, listeriosis or CMV infection.

It has been already emphasized that knowing the epidemiology of the TORCH infections, it is important aspect in the development of strategies for the prevention of congenital infection. In conclusion, serological screening before pregnancy is important to diminish morbidity and mortality in both mother and child.

Conclusion:

Pregnant women should be educated during antenatal visits regarding TORCH infections and on their prevention. Population based studies and prenatal screening programmes for TORCH infections over a period of time could be fruitful in decreasing perinatal morbidity and mortality. Many pregnant women are appropriately avoiding risk behaviour, without knowing what they are avoiding. Advising pregnant women about behaviours and lifestyle habits to prevent infectious diseases remains important and information about preventive practices need to be complete and adequate. However, it may be less important to give pregnant women specific infectious diseases information. More attention towardsTORCH Infection is necessary.

SECTION - A

Sample characteristics TABLE -1 Percentage distribution of sample characteristics of Urban area

n=100

Characteristics	f	Percentage (%)	
Age (in years)			
18-25	38	38%	
26-30	32	32%	
31-45	30	30%	
Educational qualification			
Middle school	22	22%	
Higher school	51	51%	
Graduation	27	27%	
Marital status			
Married	90	90%	
Un married	05	05%	
Divorcy	05	05%	
Family income			
10,000-15,000	30	30%	
16,000-20,000	39	39%	
Above 20,000	31	31%	
Community			
Urban	100	100%	
No. of children			
One	46	46%	
Two	33	33%	
More	15	15%	
Do you have previous knowledge			
Yes	17	17%	
No	83	83%	
If yes then how			
in yes then now			

Urban Area







Fig. 2:Mean knowledge score of Rural Area regarding TORCH infection

Reference:

- 1. Davidson R. Michele, London L. Maricia. Et, al. OLDS Maternal Newborn Nursing and Women's Health Across the lifespan. New Jersey; Pearson Prentice Hall, 2008.
- Shrivastava G, Bhatambare G S, Patel K B. Seroprevalance of toxoplasma, rubella, CMV and HSV infection in pregnant women in central India. Int J Health Sys Disaster Manage.2014.Jul-Sep; 2 (3):166-169.
 McGregor JA, French JJ. Chlamydia trachomatis infection during pregnancy. Am J
- McGregor JA, French JI. Chlamydia trachomatis infection during pregnancy. Am J Obstet Gynecol 1991;164:1782-9.
- Rajakumari A, Soli TK. Assess to evaluate the effectiveness of education Programme regarding Prevention of TORCH infections during pregnancy among Antenatal mothers. Int J Advan Res. 2015; 3(5):234-241.
- Foxman B. The epidemiology of vulvo vaginal candid risk factors. American Journal of Public Health. 1990; 80(3): 329 – 331.
- Suryawanshi R, Deo S, Suryawanshi M. Serological Study Of Torch Infections In Women With High Delivery Risk Factors. J of Evolution of Med and Dent Sci.2014Sep;3(40):10194-10201
- The Nursing Journal of India. 2000 Mar; LXXXX1(3). WHO; 50-59.
 C. Berkely, A Hand Book Of Midwifery for nurses and midwives. published by
- N.R.brother.Indore.ledition.1991;85-88. 9. Pradhan SV. Epidemiological and serological profiles of TORCH infection in
- pregnancy. Journal of Pathology of Nepal. 2015; 5:705-708. 10. Remington, JS and Klein, JO. Infectious Diseases of the Fetus & Newborn Infant. W.B. Saunders Company. Philadelphia, PA. I. 1995.
- Thapliyal N, Shukla PK, Kumar B, Upadhyay S, Jain G. TORCH infection in women with bad obstetric history--a pilot study in Kumaon region. Indian J Pathol Microbiol. 2005 Oct:48(4):551-3.
- Kaur R, Gupta N, Nair D, Kakkar M, Mathur MD. Screening for TORCH infections in pregnant women: a report from Delhi. Southeast Asian J Trop Med Public Health. 1999 Jun;30(2):284-6.
- Shrivastava G,Bhatambare GS, Patel KB. Seroprevalance of toxoplasma, rubella,CMV and HSV infection in pregnantwomen in central India. Int Health System Disaster Mang.2014 Jul-Sep;2(3):166-169.
- Nellimarla K, Kumari RL. Seroprevalence of TORCH Infections in Pregnant Women with Bad Obstetric History in and around Kakinada Town, India. Int J Curr Microbiol App Sci. 2017;6(4): 1899-1906.
- Mini P S, Arora S, Das A, Mishra B, Ratho RK.Congenital rubella and cytomegalovirus infections in and around Chandigarh. Indian J Path Micro. 2009 Jan-Mar; 52 (1):46-48.
- Abbas IM, Hasan RT. Assessment of University Students' Knowledge's concerning German measles And Its Effect on Pregnancy And its Outcomes. J Nur Health Sci. 2016 Jan – Feb;5(1):63-68.