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Assess the Knowledge on TORCH Infection among Antenatal Mothers at Selected Antenatal Clinics in Villupuram District with a View to Develop Information Booklet Regarding TORCH Infection

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ABSTRACT

Aim: to assess the knowledge on Torch Infection among Antenatal Mothers at selected antenatal clinics in Villupuram district with a view to develop information booklet regarding torch infection.
Objectives: (i) To assess the knowledge on TORCH infection among antenatal mothers. (ii) To find out the association between the level of knowledge on TORCH infection among antenatal mothers with their selected demographical variables.
Methods & Material: A quantitative research approach & descriptive research design was adopted. 50 antenatal women were selected by non-probability convenient sampling technique. Data was collected by using structured knowledge questionnaire to assess the knowledge regarding TORCH infection. The data was analyzed by using descriptive and inferential statistics
Results: The level of knowledge shows that majority 70% of the sample had moderately adequate knowledge, 20% had adequate knowledge and only 10% had inadequate knowledge. The Mean score of the sample is 16.64 and Standard deviation is 4.93. There is significant between the level of knowledge among antenatal mothers with demographic variables showing occupation of the mother, dietary pattern, previous knowledge about TORCH infection at P<0.05.
Conclusion: The study concluded that, most of the antenatal mothers are having moderate knowledge regarding the TORCH Infection. For improving the Knowledge regarding TORCH Infection among Antenatal Mothers the Researchers Prepared and distributed the Self-instructional module regarding prevention of TORCH Infection.

Keys words: TORCH Infection & Antenatal Mothers

INTRODUCTION

TORCH syndrome refers to infection of a developing fetus (or) newborn by any of a group of infections agents.' TORCH 'is an acronym meaning toxoplasmosis, other agents (Rubella also known as germen measles cytomegalovirus, herpes simplex infection with any of these agents (Ex. Toxoplasmosis Gondi, rubella virus, cytomegalovirus herpes simplex) may cause a constellation of similar symptoms in affected newborn. These may include fever, difficulty feeding, small areas of bleedings under the skin, causing the appearance of small reddish purplish spots, enlargement of the liver and spleen (Hepato-splenomegaly), yellowish discoloration of skin, whites of the eye, and mucous membrane (jaundice) hearing impairment, abnormalities of the eye or and other symptoms and findings. Each infectious agent may also result in additional abnormalities that maybe variable, depending upon a number of factors (ex: stage of fetal development)

CLASSIFICATION
- T-Toxoplasmosis
- O- Others (syphilis parvovirus HIV)
- R- Rubella
- C- Cytomegalovirus
- H- Herpes simplex virus

TOXOPLASMOSIS

Toxoplasmosis is a protozoa infection caused by toxoplasma Gondi. In adult infection is transmitted by encysted organism by infected raw or hate required across the placenta. Tran placental infection to the fetus occurs during Paracythemia.

Virulence of fetal infection is greatest, when maternal infection is acquired early in pregnancy. The affected baby may develop hydrocephalus, cerebral calcification, macro cephalic and mental retardation.

If current infection is confirmed amniocentesis and cardiocentesis or done for detection of IgM antibody in the amniotic fluid and fetal blood. Ultrasonography done at 20-22 weeks for ventricular dilation spinoincy are given orally.

Prevention include advising women about proper hand washing and washing of kitchen surface following contact with uncooked meat unpasteurized milk and contact with cat and dog litter to be avoided.

SYPHILIS

Syphilis infection is caused by the spirochete treponema palladium and it transmitted by sexual contact or by maternal fetal transmission. The infant may contract the disease through the placenta (or) from the birth canal; there are 50% canges of a mother with primary (or) secondary syphilis infecting her fetus during pregnancy.

Infants with congenital syphilis may be asymptomatic at birth(or) present with serious abnormalities symptoms may include maculopapular rash, enlarged liver and spleen, jaundice, skin lesion, deformed nail, alopecia chronic retinitis and pseudo paralysis, late congenital syphilis can also involve the CNS, bones, teeth and skin,

intravenous (or) intramuscular antibiotic treatment is recommended immediately of diagnosis with the infant isolated for the first 24 hours.

RUBELLA

Rubella (or) germen measles virus causes mild and insignificant illness in the mother, but can have serious consequences for the fetus. The virus is transmitted by respiratory droplet exposure. Fetal affection is Tran placental route throughout pregnancy. Risk of major Anomalies is about 80% infection occurs in the first 12 week of pregnancy. Early infection may result in spontaneous abortion. The mother may also be advised termination of pregnancy.

Surviving infants can have cardiac defects, hearing problems, cataracts and very significant developmental delays. Infants born with congenital rubella are highly infection and should be isolate from other infants and pregnant women for up to one years after birth

Active immunity can be conferred in on-immune individuals by giving rubella vaccine (live, attenuated, rubella virus) preferably during adolescent girl. It is not recommended in pregnant women. When given during child bearing period, pregnancy should be prevented for 3 months.

CYTOMEGALO VIRUS INFECTION

Cytomegalovirus and the herpes also that is harbored in leukocytes and transmitted by saliva, semen, urine, cervical secretion and blood. Transmission may also occur by respiratory droplet (or) Tran placental route in about 30%-40% of cases.

Infection in the mother may be primary (or) secondary. A primary infection in the mother during the first 20 week of pregnancy can result in spontaneous abortion, intrauterine growth retardation and premature birth of the infant. Infants with CMV may suffer from enlarged liver and spleen, jaundice, developmental delay, blindness, epilepsy and hearing loss most

congenitally infected babies are asymptomatic at birth with only 1% showing adverse clinical disease. However, they should be following up for 5-7 because of the possibility of long-term neurological problems.

Infection can be confirmed by viral culture of urine and nasopharyngeal secretion. At this time no specific anti-viral treatment is effective against congenital CMV infection.

HERPES SIMPLEX VIRUS

Infection with herpes simplex virus (HSV) is associated with genital herpes in the mother. Neonatal infection is more likely with a primary maternal infection during pregnancy and result in high morbidity and mortality. The infection may be acquired through the placenta (or) from an infected birth canal. The risk of intrapartum infection is about 50% when the mother has primary genital herpes lesion at the time of birth. Prolonged rupture of the membranes and the use of scalp electrodes both of increase the risk neonatal infection. therefore, when active maternal infection is present the baby should be delivered by cesarean section.

Signs of neonatal infection can be non-specific at birth. A herpes rash is usually but not always seen by the end of the 1st week of life.

The virus is present in vesicles, urine and cerebrospinal fluids (CSF). An exposed infant should be isolated with the mother for care.

PARVO VIRUS B14

Parvo virus b14 (or) erythrocyte virus B14 was the first known human virus in the family parvoviridae genus. Parvovirus B14 is a single standard DNA virus of the family parvoviridae. It is also known's as 5th diseases (or) erythematic infection.

Fetal is by transplacental route. Fetal infection occurs in 33% cases following maternal infection. Infection is characterized by facial rash. It mainly affects elytroid precursor cell resulting in anemia. Diagnosis is made by detection of virus specific IgM. PCR Implications of viral DNA from fetal and maternal blood more sensitive then IgM antibody. USG should be performed 10 weeks after maternal illness to detect any fetal hydrous.

Fetal middle cerebral artery peak Doppler velocity can be studied to any significant fetal anemia before hydro's develops. Intrauterine transfusion may improve the fetal outcome Nearly 33% of fetal hydro's resolve spontaneously. Otherwise mortality rate is about 30%.

Statement of the Problem

"A study to assess the knowledge regarding TORCH infection among antenatal mothers at selected antenatal clinics in Villupuram district with a view to develop information booklet on TORCH infection

Objectives of the Study
➢ To assess the knowledge on TORCH infection among antenatal mothers.
➢ To find out the association between the level of knowledge on TORCH infection among antenatal mothers with their selected demographical variables.

ASSUMPTIONS
1. The Antenatal mothers may have inadequate knowledge regarding TORCH infection.
2. The antenatal mothers may not aware about the prevention on TORCH infection
3. There may be a significant association between the level of knowledge with selected demographic variables.

MATERIAL AND METHODS

A quantitative research approach & descriptive research design was adopted. 50 antenatal women were selected by non probability convenient sampling technique. Data was collected by using structured knowledge questionnaire to assess the knowledge regarding TORCH infection

RESULT AND DISCUSSION

Level of knowledge regarding TORCH infection among antenatal mother attending antenatal clinic.

Table 4.1: Level of knowledge regarding TORCH infection among antenatal mother attending antenatal clinic   N=50

Level of Knowledge	Frequency	Percentage
Adequate Knowledge	10	20%
Moderately Adequate Knowledge	35	70%
Inadequate Knowledge	5	10%

The above table shows that majority 70% of the sample had moderately adequate knowledge, 20% had adequate knowledge and only 10% had inadequate knowledge

Figure shows distribution of level of knowledge on torch infection among antenatal mothers
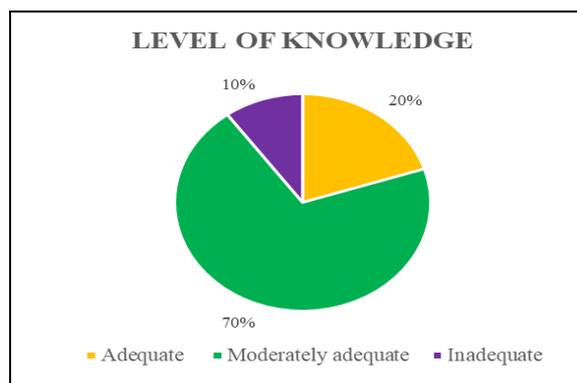

LEVEL OF KNOWLEDGE

■ Adequate   ■ Moderately adequate   ■ Inadequate

Table 4.2:   Mean and Standard deviation of Level of Knowledge N=50

Mean	16.64
Standard deviation	4.93

The Table shows that the Mean score of the sample is 16.64 and Standard deviation is 4.93.

Association of Knowledge Scores with Selected Demographic Variables

Table 4.3: Association of knowledge scores of the sample regarding TORCH infection with their selected demographic variables N= 50

S.No	Demographic data	Knowledge score			Chi-square value	DF	P-Value
		Adequate	Moderately Adequate	Inadequate			
1	**Age**				4.1	6	0.650 NS
	a)<20years	2	1	1			
	b)21-30years	8	34	4			
	c)31-40years	0	0	0			
	d)>40years	0	0	0			
2	**Gravida**				11.4	2	0.600 NS
	a)primi para	4	9	2			
	b)multi para	6	26	3			
3	**Parity**				4.8	2	0.129 NS
	a)primi parity	5	12	4			
	b)multi parity	5	23	1			
4	**Educational status**				5.7	6	0.456 NS
	a)no formal education	2	3	2			
	b)primary education	1	9	1			
	c)secondary education	5	12	1			
	d)graduate and above	2	11	1			
5	**Type of Marriage**				1.2	2	0.535 NS
	a)consanguineous marriage	4	12	3			
	b)non-consanguineous	6	23	2			
6	**Income of the family/month**				3.3	6	0.76 NS
	a)_<5,000	4	10	2			
	b)5001-10,000	2	13	1			
	c)10,000-15,000	3	6	2			
	d)>15,000	1	6	0			
7	**Occupation of the mother**				13.1	6	0.041 S*
	a)housewife	5	30	2			
	b)self employed	2	2	0			
	c)daily wages	1	2	1			
	d)private/government job	2	1	2			
8	**Residence**				1.7	4	0.078 NS
	a)rural area	8	32	5			
	b)urban area	2	3	0			
	c)slum area	0	0	0			
9	**Dietary pattern**				17.1	4	0.001 S*
	a)vegetarian	5	1	0			
	b)non-vegetarian	5	34	5			
	c)eggetarian	0	0	0			
10	**Previous knowledge about TORCH infection**				11.4	2	0.003 S*
	a)yes	3	2	3			
	b)no	7	33	2			

*Significant at p<0.05

The above table shows that, there is significant association between the level of knowledge among antenatal mothers with demographic variables showing occupation of the mother, dietary pattern, previous knowledge about TORCH infection at P<0.05 and there is no significant association between the level of knowledge with age, gravid, parity, educational status, type of marriage, income of the family per month and residence.

DISCUSSION

The first objective of the study is to assess the knowledge on TORCH infection among antenatal mothers.

The findings show that level of knowledge majority of mothers 35(70%) had moderately adequate knowledge and 10(20%) had adequate knowledge and 5(10%) only having inadequate knowledge regarding TORCH infection.

The findings of the study supported by the study Dravbathai et al (2015) a study to evaluate the knowledge regarding prevention of TORCH infection during the pregnancy among antenatal mother in Erode district. The research design adopted for the study was true experimental design and research approach adopted for this was to evaluative the educative approach. The size was 60 mothers, In this 30 month a selected for experimental group and 30 for control group by convenient sampling method. The finding of the experimental group of mothers for this pre test knowledge score was 27(90%) level of knowledge was inadequate 1(3%) level of knowledge was moderately adequate 2(7%) level of knowledge was adequate.

The second objective of the study to find the association between the level of knowledge on TORCH infection among antenatal mothers with their selected demographical variables

The finding of the study shows that there is significant association between the level of knowledge among antenatal mothers with demographic variables showing occupation of the mother, dietary pattern, previous knowledge about TORCH infection at P<0.05 and there is no significant association between the level of knowledge with age, gravid, parity, educational status, type of marriage, income of the family per month and residence.

CONCLUSION

The study shows that the level of knowledge regarding TORCH Infection among antenatal Mothers are 10(20%) of them had adequate knowledge, 35(70%) of them had moderately adequate knowledge and 5(10%) of them had inadequate level of knowledge. It shows most of the antenatal mothers are having moderate knowledge regarding the TORCH Infection. For improving the Knowledge regarding TORCH Infection among Antenatal Mothers the Researchers Prepared and distributed the Self-instructional module regarding prevention of TORCH Infection.

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