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RESEARCH ARTICLE

THE EFFECTIVENESS OF HEALTH AWARENESS PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF URINARY TRACT INFECTION AMONG ANTENATAL WOMEN IN GOVT. DOON MEDICAL COLLEGE HOSPITAL

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Abstract

Background: Pregnancy is a most beautiful journey filled with ups and downs, and it's only natural to feel overwhelmed at times. While being pregnant can be the most beautiful experience for women, it brings along a whole load of worries as well such as medications, exercises and personal hygiene. In which Urinary tract infection is frequently experienced during pregnancy and it is associated with adverse maternal, fetal and neonatal effects. UTI is common cause of serious infection in pregnant women. In pregnancy UTI cause changes in the urinary tract, that makes women likely to get infection. This study focused on the enhancement ofknowledge and practice regarding prevention of UTI among antenatal women during pregnancy.

Objectives: To evaluate the effectiveness of health awareness program on knowledge and practice regarding prevention of UTI during pregnancy among antenatal women.

Material and Methods: Pre-experimental research design was used in the study.Convenient sampling technique was used to collect to data from antenatal women of government doon medical college and hospital, the sample size was 60.

Result: There was statistically significance effect was seen with mean value and SD of knowledge (17.58 ± 1.825) and practice (7.70 ± 1.183) with t value of knowledge (29.382) and practice (15.413) at p value 0.001.It was found significant.

Conclusion: This study concluded that health awareness programme on knowledge andpractice regarding prevention of urinary tract infection among antenatal women was effective.

Introduction:-

Pregnancy is the most beautiful phase in a women life. It brings about emotional, physiological, biochemical and endocrine changes which are essential to maintain the nourishment to the developing fetus and extra demand on the body. Women may find it difficult but adapt to these normal changes in the body during pregnancy and cope well.

Urinary tract infections (UTIs) are bacterial infections with a global annual incidence of approximately 150 million cases per year. The estimated economic burden is more than 6 billion U.S. dollars.About 40% of women and 12% of

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men experience at least one symptomatic UTI during their lifetime, and as many as 40% of affected women show recurrent UTI.UTIs are one of the most common medical complications of pregnancy. Increased incidence of UTI during pregnancy is due to the morphological and the physiological changes that take place in the genitourinary tract during pregnancy.The prevalence of UTI (including both asymptomatic bacteriuria and symptomatic infection) in pregnant women in India is reported to range from 3% to 24%.

It may also pose a serious health risk to a pregnant woman and developing fetus and cause of antepartum intensive care unit admission. It is associated with different maternal and neonatal adverse outcomes such as low birth weight, premature labor and prematurity, still birth, preeclampsia, maternal anemia and sepsis, and amnionitis. In addition, it is also associated with premature rapture of membrane and low Apgar score. This may lead to increased maternal and perinatal morbidity and mortality. Furthermore, UTI during pregnancy is independently associated with intrauterine growth restriction, preeclampsia, preterm delivery, and cesarean delivery.

Asymptomatic bacteriuria occurs in 4% to 8% of all pregnancies. Pyelonephritis occurs in 1% to 2% of pregnancies. 1% of pregnant women will have acute cystitis. Untreated UTI can lead to preterm labor, preeclampsia, abortion, still birth, low birth weight baby and rarely kidney failure.

Studies have suggested that if urinary tract infections are untreated it can lead to complications to mother and fetus both. So, thorough knowledge regarding urinary tract infection is needed to be given antenatal women

Material and Methodology:-

In this pre-experimental study 60 antenatal women enrolled at Govt Doon medical college and hospital, Dehradun were selected by Cochrane's sample size formula and convenient sampling technique. The inclusion criteria for the study were antenatal women who were available, willing and knew to read and write Hindi or English to participate at the time of study. Self-Structured knowledge and practice questionnaire were used. Then pretest was taken and intervention was given and after that post-test was conducted.

Instrument/ Tool

Tool consists of Section A, B and C, section A consist of sociodemographic data such as age, education, religion, parity, area of residence, type of family, gestational age, previous knowledge regarding UTI, socioeconomic status. Section B consists of self-structured questionnaire on knowledge, it contains 24 questions, for each question, four options were given and only one of them is correct. For each correct answer score is one, if answer is wrong then the score is zero. The highest score was 24. Section C consists of self-structured questionnaire to assess the practice regarding prevention of urinary tract infection among antenatal women, it contains total 10 items with yes or no response.

Statistical Analysis

Frequency and percentage distribution were used to analysed the socio demographic variables and level of knowledge, mean and standard deviation calculated**.** Paired 't' test was used to assess the effectiveness of health awareness program. Chi square [$\chi 2$] test was used for measuring the association between selected sample characteristics and knowledge.

Table No.1:- Frequency and percentage distribution of sociodemographic variables among the antenatal women. N=60

S.NO	Variables	Frequency	Percentage
1	**AGE (in years)**		
	19-22	17	28.3
	23-26	29	48.3
	27-30	7	11.7
	Above 30	7	11.7

2	**EDUCATION**		
	No formal education	17	28.3
	Primary	25	41.7
	Secondary	12	20
	Graduate and above	06	10
3	**RELIGION**		
	Hindu	31	51.7
	Muslim	27	45
	Sikh	2	3.3
4	**GRAVIDA**		
	Primi gravida	42	70
	Multi gravida	18	30
5	**RESIDENCE**		
	Rural	35	58.3
	Urban	25	41.7
6	**TYPE OF FAMILY**		
	Nuclear	28	46.7
	Joint	22	36.7
	Extended	10	16.6
7	**Gestational Age**		
	Upto 12 weeks	21	35
	13 -28 weeks	25	41.7
	29-40 weeks	14	23.3
8	**Previous knowledge regarding UTI**		
	Yes		
	No	24	40
		36	60
9	**Socio economic status**		
	Upper middle	10	16.7
	Lower middle	21	35
	Upper lower	26	43.3
	Lower	03	05

Table no.1 shows that Age wise majority of 29 (48.3%) women belonged to 23-26 years age group. 17 (28.3%) women was 19-22 years age group and 7 (11.7%) women belonged to 27-30 age years and above 30 years age group in this study.According to Education Qualification status, that the majority of 25 (41.7%) women had primary education. 17 (28.3%) women had no formal education, 12 (20%) women had secondary education and 6 (10%) women had graduate & above education in this study.According to Religion, that the majority of 31 (51.7%) women was Hindu religion. 27 (45%) women was Muslim religion and 2 (3.3%) women was Sikh religion in this study. According to Gravida, that the majority of 42 (70%) women had primigravida and 18 (30%) women had multi gravida in this study.According to Residence area, that the majority of 35 (58.3%) women belonged to rural area and 25 (41.7%) women belonged to urban area in this study. According to type of family, the majority of 28 (46.7%) women belonged to nuclear family. 22 (36.7%) women belonged to joint family and 10 (16.6%) women belonged to Extended family in this study.According to Gestational age, that the majority of 25 (41.7%) women belonged to 13-28 weeks gestational age. 21 (35%) women belonged to up-to 12 weeks gestational age and 14 (23.3%) women belonged to 29-40 weeks gestational age in this study.According to Previous knowledge regarding UTI, that the 24 (40%) women had previous knowledge regarding UTI and 36 (60%) women had no knowledge regarding UTIin this study.According to Socioeconomic status, that the 26 (43.3%) women had majority in upper lower socio-economic

status; 21 (35%) women belonged to lower middle economic class; 10 (16.7%) women had upper middle economical class, and 3 (5%) women belonged to lower economical class in this study.

Table No.2:- Changes in pre and post knowledge and practice score regarding prevention of UTI during pregnancy among antenatal women **N=60**

Scale	Mean ± SD		t-test value	df	P-value	Result
	Pre test	Post test				
Knowledge	9.20 ± 2.550	17.58 ± 1.825	29.382	59	0.001	Sig.
General Awareness	2.03 ± 0.901	3.92 ± 0.334	21.775	59	0.001	Sig.
Causes and sign &symptoms	3.12 ± 1.519	5.82 ± 1.214	16.143	59	0.001	Sig.
Prevention and management	4.05 ± 1.466	7.97 ± 1.841	16.745	59	0.001	Sig.
Practice	3.27 ± 1.876	7.70 ± 1.183	15.413	59	0.001	Sig.

Table no. 2 shows that comparison between pre and post knowledge score regarding prevention of UTI during pregnancy among antenatal women. There was statistically significance comparison or effect between pre-test and post-test of knowledge (P=0.001) regarding prevention of UTI. Comparison between pre and post practice score regarding prevention of UTI during pregnancy among antenatal women. There was statistically significance comparison or effect between pre-test and post-test of practice (P=0.001) regarding prevention of UTI. It shows that the antenatal women improved knowledgeand practice about UTI.

Discussion:-

This study aimed to deliver an intervention that would enhance the knowledge and practice on prevention of UTI among antenatal women. However, result showed that health awareness programme was found effective in enhancing the knowledge and practice regarding prevention of UTI with t value of knowledge (29.382) and practice (15.413) at p value 0.001. A similar study conducted by Adhikari S,to assess the knowledge on UTI among primigravida women. The study findings revealed that 24.39% of women had poor knowledge, 65.05% had average knowledge and 10.56% of respondents had good level of knowledge regarding UTI.In the aspect of practice, the pre-test score and SD of antenatal women were 3.27 ± 1.876. The mean post-test practice score and SD obtained was 7.70 ± 1.183. The findings suggested that the practice regarding prevention of UTI among antenatal women improved after administration of planned health awareness programme.

Conflict Of Interest
None.

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References:-

1-Mythily S. study to assess the knowledge of antenatal mothers regarding selected minor disorders affecting pregnancy. IJISRT. 2018;3(7). Available from: https://ijisrt.com/wp-content/uploads/2018/07.
2-Mireles-Flores Ana.L,WalkerN.Jennifer, Caparon Michael and Hultgren Scott J., Urinary tract infections: epidemiology, mechanisms of infection and treatment optionsNaturereviews.Microbology.2015;13(5):269-284.Availablefrom: https://doi.org/10.1038/nrmicro3432
3-Jayalakshmi J, Jayaram VS. Evaluation of various screening tests to detect asymptomatic bacteriuria in pregnant women. Indian J PatholMicrobiol. 2008 Jul-Sep;51(3):379-81. Available from: https://doi: 10.4103/0377-4929.42516
4-Kant S, Lohiya A, Kapil A, Gupta SK. Urinary tract infection among pregnant women at a secondary level hospital in Northern India. Indian Journal of Public Health. 2017; 61(2): 118-123. Available from: https://doi:10.4103/IJPH_293_15
5-Michelim Lessandra, Bosi Guilherme and Comparsi Eduardo. Urinary tract infection in Pregnancy. Journal of clinical Nephrology and Research. 2016; 3(1): 1030. Available from: https//www.jscimedcentral.com
6-Adhikari S, Dhakal R. Knowledge on urinary tract infection among primigravida women. Int J Health Sci Res. 2015; 5(10):200-205. Available from: https//www.ijhsr.org

7- Platte Raisa O. Urinary tract infection in Pregnancy. Medscape. 2021. Available from: https://emedicine.medscape.com/article/452604
8-O. Storme, J. Tiran Saucedo, A. Garcia-Mora, M. Dehesa-Dávila, and K. G. Naber. Risk factors and predisposing conditions for urinary tract infection. TAU. 2019; (11): Available from: https://doi.org/10.1177/1756287218814382
9- T. M. Hooton. Uncomplicated urinary tract infection.New England Journal of Medicine. 2012: 366 (11): 1028–1037. Available from: https//doi:10.1056/NEJMcp1104429
10- Getaneh Temesgen, Negesse Ayenew, Dessie Getenet, Desta Melaku, TigabuAgimasie. Prevalence of Urinary Tract Infection and Its Associated Factors among Pregnant Women. BMRI. 2021; vol.2021. 12.Available from: https://doi.org/10.1155/2021/6551526
11-Xavier Linda, Lokeshwari B, Pavithra S, Assess the knowledge regarding urinary tract infection among antenatal mothers. Indian Journal of Research. 2020; 9 (10) Available from: https://www. DOI: 10.36106/paripex
12.Gilbert Nicole M, Brien Valerie, Macones George, Levis Warran G & Levis Amanda L.Urinary tract infection as a preventable cause of pregnancy complications. GAHM. 2013; 2(5): 59–69. Available from: https://www.doi: 10.7453/gahmj.2013.061.