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RESEARCH ARTICLE

AWARENESS, KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN TOWARDS HIV/AIDS IN TERTIARY CARE HOSPITAL: A COMMUNITY BASED STUDY.

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Abstract

Background- Prevalence of HIV/AIDS is highest among young people. HIV related stigma make people hesitant to get test done, thereby increasing risk of transmission of infection from pregnant mother to child.

Objective- This study aims to determine awareness, knowledge, attitude and misconceptions about HIV /AIDS in antenatal women.

Methods: A cross-sectional community based study was conducted on 904 pregnant women attending ANC clinic at GSVM Medical College, Kanpur U.P. from Jan 2016 - July 2016. Study tool consisted of a self-developed, pretest questionnaire.

Results: Out of total 904 women only 496 (54.9%) of them had heard of AIDS and level of awareness regarding HIV/AIDS was lower in women aged less than 20 years, illiterate, women resident of rural area and of low socio-economic status. Main source of information was media (51.6%). Sexual intercourse was identified as major route of transmission (72.9%) and mother to child transmission(MTCT) as least common known method (56%). There were many misconceptions also. 401 women (80.8%) realized AIDS as threat to human.

Conclusion: Although 54.9% pregnant women had heard of HIV/AIDS but level of complete knowledge about infection and MTCT was low. This is time to strengthen PMTCT program and to increase awareness of HIV/AIDS.

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Introduction:-

HIV/AIDS is spreading worldwide at an alarming rate and become global pandemic. There are an estimated 21.17 lakhs people living with HIV/AIDS of which 6.54% are children (<15 years) with an adult prevalence of 0.26% in 2015.¹ Prevalence of HIV is highest among productive young people between the ages of 20 and 29 years; with 60% of new infection occurring in the 15-25 years age group^{2,3}. Heterosexual transmissions account for 84% of cases In India and HIV is spreading rapidly in married women, who were previously considered to be at low risk⁴. It causes

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increase risk of transmission of infection from pregnant mother to child. So, prevention of mother to child transmission (PMTCT) program was launched to reduce the transmission of HIV infection from HIV infected mother to their offspring⁵.

HIV related stigma and discrimination remains an important barrier in effective fighting against HIV and AIDS epidemic. It results in people living with HIV/AIDS (PLWHA) being shunned by family and the community; stigmatization would make people hesitant to get test done, therefore more PLWHA are unaware that they are suffering from HIV/AIDS, and putting his/her sexual partners at risk of getting infection, due to lack of precautionary measures⁶.

Various government and non government agencies all working to raise awareness among people regarding HIV/AIDS. To stop the spread of HIV/AIDS, first phase of National AIDS control Programme (NACP-I) was launched by Government of India in 1992, Now NACP - IV is running. In spite of lot of efforts, awareness and knowledge about HIV /AIDS is still inadequate among women; because they are not comfortable for talking about HIV, awareness programmes are not able to reach up to them and inaccurate information about the modes of transmission of HIV due to cultural and religious beliefs or lack of education.

However, treatment is available to delay progression of disease, yet there is no cure. Thus it is necessary to educate young people so that they can prevent themselves from getting infected. It is seen that pregnant women are much more receptive on health matters and assessment of awareness level in pregnant women is important because it helps to determine their knowledge and the impact of previous awareness and prevention efforts made by the government. Thus, with this background, the present study aims to determine awareness, knowledge and misconception about HIV /AIDS in antenatal women attending ANC clinic in tertiary care hospital.

Material & Methods:-

A cross-sectional community based study was conducted on pregnant women attending ANC clinic at GSVM Medical College, Kanpur U.P. from Jan 2016 - July 2016. Study tool consisted of a self-developed, pretest questionnaire. Total pregnant women attended ANC clinic out of which 904 women were randomly selected, during their first antenatal visit at OPD in given period of study. Questionnaire included demographic information, awareness on HIV/AIDS, knowledge on mode of transmission, source of information and misconceptions about HIV /AIDS apart from routine history and examination only after explaining the purpose of the study and informed consent. The participants were not forced to answer any questions and they were free not to respond or partially respond to any question. Interview was conducted privately.

Observations:-

In this study, most of the women belonged to age group between 20-30 years (80.1%) and had low literacy rates. Majority of women were Hindu, housewife by occupation, of lower socio economic status and resident of urban area.

In the present study, out of total 904 patients only 496 (54.9%) of them had heard of AIDS and level of awareness regarding HIV/AIDS was lower in women aged less than 20 years, illiterate, housewife by occupation, women resident of rural area and belonging to low socio-economic status. Main source of information was media (51.6%) followed by friends.

In current study sexual intercourse was identified as main route of transmission (72.9%) followed by blood transfusion (70.1%) and sharing needle (61.3%). Mother to child transmission remained the least common known method of mode of transmission (56%). There are many misconceptions regarding mode of transmission and taking food with HIV infected person found to be most common method of transmission. Although 368 women (74.2%) knew that it could be prevented. Even 401 women (80.8%) thought AIDS as threat to human. 62.9% wanted to check and 54.83% women wanted to discuss it with husband. Most women did not want to have more children and wanted to shorten breast feeding. 151 women (30.4%) felt sympathetic to women suffering from HIV/AIDS although 7.6% women thought that women infected with AIDS should be isolated from society.

Discussion:-

Awareness is the key to prevention of HIV/AIDS. Like our study, Shrotri A et al⁷ and Bhalge U et al⁸ also reported that majority of antenatal women were literates, housewife and belongs to age group 20-30 years.

Out of total 904 patients only 496 (54.9%) of them had heard of AIDS. According to NFHS-3, 45% of women have heard of HIV/AIDS in Uttar Pradesh and only 16% women had comprehensive knowledge of HIV prevention and transmission⁹. Singh et al¹⁰ showed in their study that about 40% of pregnant women had heard of AIDS. In other studies done in rural Maharashtra¹¹ and Tamilnadu¹², it was observed that percentage of women who had heard of HIV/AIDS was 92.4% and 72% respectively. In recent study of pregnant women in South Indian nearly all had heard of HIV/AIDS and one-third had general knowledge of the disease¹³.

In the present study, level of awareness regarding HIV/AIDS was lower in women aged less than 20 years, illiterate and housewife by occupation which is comparable to study done by SolatS et al¹⁴. According to NFHS-3 also, illiterate women had less awareness about HIV/AIDS in UP and maximum awareness was found in age group of 15-24 years (52.7%)⁹. In current study, women resident of rural area and belonging to low socio-economic status were having less awareness regarding HIV/ AIDS, which is comparable to study done by Shree V et al¹⁵. Similarly in study done by D. Balki, S. Lahiri in 13 State of India¹⁶, low level of knowledge and awareness were reported more among rural and illiterate women. Similarly in other studies also carried out in different part of India, higher education and socio-economic status associated with increase in awareness towards AIDS^{17,18,19}. The statistically significant relationship between the level of education and knowledge of HIV/AIDS was also found in study by Bassey et al⁵.

This may be due to fact that women are hesitant to discuss about HIV/AIDS and this might be the reason behind some of them avoiding to answer the question about HIV/AIDS. Similarly study by D. Balki, S. Lahiri in 13 state of India it was observed that AIDS knowledge was more among those older than 20 years. In their study main source of information was media as it had played an important role in making people aware of HIV/AIDS with television rated as most popular media for awareness generation²⁰. In NFHS-3 also, media specially television was main sources of information,⁹ (as 81% women had heard of HIV/AIDS from TV). Bhalge U et al⁸ and Shrotri A et al⁷ also reported television as main source of information. In study done in Maharashtra, Tamilnadu, Chandigarh also it was seen that major source of information about HIV AIDS was mass media^{11,12,21}.

In current study sexual intercourse was identified as main route of transmission (72.9%) followed by blood transfusion (70.1%) and sharing needle (61.3%). Similarly Shree V et al¹⁵ (68%), Bhalge U et al⁸ (84%) and Lal P et al²² (48.2%) also mentioned sexual contact as major cause. This agrees with a worldwide trend in which sexual intercourse is the route of transmission mostly known to respondents.

In Sevanan Murarjan et al study²³, commercial sex workers were the main reason for transmission of HIV/AIDS followed by blood transfusion. In Shrotri A et al study⁷, knowledge of primary transmission and use of unsterile needle was over 75%. Mother to child transmission of HIV was known by 56% women which is comparable to study done by Vijay Shree et al (60%) and Bhalge U et al(58.6%)^{15,8}. Bhalge et al also found knowledge of mother to child transmission and sharing of needle and syringe as mode of transmission is still low⁸. Breast feeding was least known mode of transmission (41.5%) while in study done by Vijay Shree et al, 53% respondents identified breast feeding as route of transmission¹⁵. In study by Bhalge et al, a large number of pregnant women did not know that breast feeding is associated with risk of transmission of HIV⁸.

It is important to note that number of women incorrectly stated that disease spreads through hugging/kissing in cheek (11.8%), living (9.3%) and sharing food with HIV infected person (5.2%), by mosquito bite (4.8%) and by sharing public toilets (3.6%). There are also some misconception such as HIV could be transmitted by a mosquito bite and sharing meal with an infected person noted by Bhalge et al⁸. Vijay Shree et al also reported that some women mentioned mosquito bite and sharing of food and clothes as mode of HIV/AIDS transmission¹⁵. According to Malleshappa et al also, some women incorrectly shared that the disease spreads through mosquito bites (17%), public toilets (11%) physical contact (kissing on cheeks 20%)²⁴. In study done by Negi et al, 32% respondent thought hugging, kissing or wearing clothes of HIV/AIDS positive person; 36% believe that sharing food with a HIV infected person and even 56% thought bites of mosquito and bed bug can transmit infection of HIV/AIDS. 74.2% women noted that it could be prevented²⁵.

The present study reveal that 368 (74.2%) had knowledge of at least one method as mean of prevention. Most common method known was condom use, followed by monogamous relationship and safe injection practices. In Shrotri et al study⁷, 53% women was asked to mention at least one method of prevention. SevananMurajan et al studied that avoid commercial sex worker and multiple sex partner are the main measure to prevent HIV/AIDS

followed by use of condom, avoid blood transfusion from HIV patients and infected needle played third risk²³. Bhalge et al also reported that majority of women had knowledge about condom (72.66%) as mean of protection followed by safe blood (29.34%)⁸.

In current study 80.8% women realised AIDS as threat to human which is comparable to study by Negi et al (73.6%)²⁵. Singh et al¹⁰ and Ambati et al²⁶ had also revealed similar findings among educated pregnant women. 62.9% women agreed for compulsory testing of HIV in pregnancy while in study by Solat S et al¹⁴, only 3.87% subjects found its mandatory to both the partner for HIV testing before marriage and 4.2% found it necessary to test each individual for HIV infection. 77.4% women don't want to have more children when they found HIV positive while in study by Solat S et al, 37.15% women believed that HIV infected females should never get conceived¹⁴. In study by Malleshappa et al, only 12% subjects are willing to get tested for HIV. In current study, 30.4% feel sympathetic to PLHA and 7.7% women believed that HIV/AIDS infected person should be isolated while 72.6% women did not think so. Malleshappa et al observed in his study that AIDS patients should be isolated from the society, whereas about 26% of the respondents felt sympathetic towards PLHA²⁴.

Conclusion:-

The level of complete knowledge about HIV/AIDS is very low although 54.9% pregnant women had heard about HIV/AIDS but still knowledge about MTCT was very sparse. Since awareness is the only key to the prevention of HIV/AIDS there is urgent need to increase awareness and knowledge about mode of transmission and prevention of HIV/AIDS, specially among the illiterate, rural and women belonging to low SES for which mass media can play an important role. It is time to strengthen PMTCT program to reduce the transmission of infection from infected mother to their offsprings as well as decrease the progression of disease. It is worthwhile to eliminate misconception and necessary to create suitable environment at community level to stimulate fear and guilt free discussion on the issue of HIV/AIDS & condom.

Table1:-Correlation of socio-demographic parameters with awareness of HIV (n=904).

Characteristics		Awareness		
1	Age	Number 904	Yes 496(54.9%)	No 408 (45.1%)
	<20 years	64 (7.1%)	15 (23.4%)	49 (76.6%)
	21-30 years	724 (80.1%)	430(59.4%)	294 (40.6%)
	>30 years	116 (12.8%)	51(43.9%)	65(56%)
2	Education Status			
	Illiterate	480 (53.1%)	161 (33.5%)	319 (66.5%)
	Primary	218 (24.1%)	149 (68.3%)	69 (31.7%)
	High School	106 (11.7%)	93(87.7%)	13(12.3%)
	Secondary	59 (6.5%)	52 (88.1%)	07 (11.9%)
	Graduate	41 (4.6%)	41(100%)	0 (0%)
3	Occupation			
	Housewife	768(84.9%)	382 (49.7%)	386 (50.3%)
	Skilled	56 (6.2%)	44 (78.6%)	12 (21.4%)
	Unskilled	44(4.9%)	34(77.3%)	10(22.7%)
	Professional	36 (3.9%)	36(100%)	0
4	Habitat			
	Rural	358 (39.6%)	130 (36.3%)	228 (63.7%)
	Urban	546 (60.4%)	366 (67.0%)	180 (33%)
5	Socio-economic status			
	Upper	0	0	0
	Middle	8 (0.8%)	8 (100%)	0
	Lower Middle	102 (11.3%)	78 (76.5%)	24 (23.5%)
	Upper lower	342 (37.8%)	174 (50.9%)	168 (49.1%)
	Lower	452 (50.0%)	236 (52.2%)	216 (47.8%)
6	Religion			
	Hindu	792 (87.6%)	434 (54.8%)	358 (45.2%)

	Muslim	96 (10.6%)	54 (56.3%)	42 (43.7%)
	Others	16 (1.8%)	8 (50%)	8 (50%)

Table 2:- Knowledge about HIV / AIDS (n=496).

1. Source of information			
• Media	256	51.6%	
• Friends / Relative	162	32.7%	
• Medical Professional	78	15.7%	
2. Knowledge regarding mode of transmission			
• Sexual intercourse	362	72.9%	
• Blood transfusion	348	70.1%	
• Sharing needle/syringe	304	61.3%	
• Mother to child transmission	278	56.0%	
Pregnancy	246	49.6%	
Delivery	278	56.0%	
Breast feeding	206	41.5%	
3. Misconceptions regarding mode of transmission			
• Living with HIV infected person	46	9.3%	
• Taking food with HIV infected person	26	5.2%	
• Hugging / kissing on cheek	59	11.8%	
• mosquito bite	24	4.8%	
• Sharing utensils	18	3.6%	
• Sharing public toilets	18	3.6%	
4. Knowledge regarding preventive measures			
• Can HIV be prevented			
Yes	368	74.2%	
No	58	11.7%	
Don't know	70	14.1%	
• Monogamous relationship	360	72.6%	
• Use of Condoms	362	73.0%	
• Safe injection practices	60	12.1%	
• Safe blood transfusion	52	10.5%	
• Avoid pregnancy	58	11.7%	
5. Knowledge regarding health services			
• Availability of HIV testing facilities	372	75.0%	
• Necessity of HIV testing in pregnant women	298	60.0%	
• Availability of HIV treatment facilities	324	65.3%	

Table 3:-Attitudes Towards HIV/AIDS & PLWHA.

Do you think AIDS is threat to humans	401	80.8%
Do you wish to check	312	62.9%
Yes	102	20.6%
No	82	16.5%
Don't know		
If HIV+, discuss with		
Husband	272	54.8%
Family member	98	19.8%
Doctor	78	15.7%
No-one	48	9.7%
If you know HIV in your blood wants more children		
Yes	48	9.7%
No	384	77.4%
Don't know	64	12.9%

If you found HIV is your blood shorten breast feeding		
Yes	282	56.9%
No	136	27.4%
Don't know	78	15.7%
Persons who have AIDS Should be isolated from society		
Yes	38	7.7%
No	360	72.6%
Don't know	98	19.8%
Feel sympathetic to PLWHA		
Yes	151	30.4%
No	38	7.6%
Don't know	307	61.9%

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