

Awareness Regarding HIV / AIDS in ANC Client in Tribal District Of Central India

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Abstract: **Introduction:** HIV causes morbidity and mortality in infants and children, pertaining to its mother-to-child transmission (MTCT) risk. MTCT which occur during pregnancy, labour and breastfeeding, is responsible for 90% childhood HIV infection. The main objective of the prevention of mother-to-child transmission (PMTCT) is to reduce the transmission of HIV infection from HIV infected mothers to their off springs. **AIM:** Our objective was to determine the level of HIV/AIDS knowledge of pregnant women. **Methods:** This study was done on pregnant mother at the antenatal clinic at Shri Vasant Rao Naik Government Medical College & hospital (SVNGMC). One hundred and fifty mothers were interviewed at the antenatal clinics. It is non-experimental, cross-sectional type of study. **Statistical Analysis:** Comparison of categorical data with education and occupation was done using the Chi-Square test. **Results:** Out of 150, most of the women belongs to 21-25yrs age group (54.00 %), 55.34 % were housewife. 95.34 % were literate. Television & radio were more strongly related to knowledge of HIV/AIDS. 77.34 % mother knew that it is transmitted by sexual route and 22.66 % mother did not know the transmission of HIV/AIDS. **CONCLUSION:** Education and correct scientific information are urgently needed to pregnant women to avoid myths and misconception on HIV/AIDS.

Keywords: - HIV/AIDS, Awareness, Pregnant women.

I. Introduction

Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) is a terrible disease condition caused by a tiny germ called Human Immune-deficiency Virus (HIV). HIV/AIDS has been described as the most dangerous and deadly disease of the millennium. The scourge poses global threat to human existence and it has no regard for race, class or creed.¹ Human Immune Deficiency Virus/Acquired Immune Deficiency Syndrome (Slim Disease)² first reported in 1981 has since evolved into a global pandemic with devastating public health and economic consequences, the major brunt of which is borne by sub-Saharan Africa.² HIV and STIs are common in developing countries and are interdependent. Similar behaviors, like frequent unprotected intercourse with different partners, place people at high risk of both infections, and there is clear evidence that conventional STIs increase the likelihood of HIV transmission.³

The epidemic began in high-risk groups such as female sex workers and their clients. However, married monogamous women have been identified as populations at increasing risk for HIV in India.⁴ Women are now considered the face of HIV infection accounting for half of all infections worldwide and 57% of infections in sub-Saharan Africa. Heterosexual transmission accounts for 84% of cases in India and HIV is spreading rapidly in married women, who were previously considered to be at low risk.⁵ It causes morbidity and mortality of infants and children, pertaining to its mother-to-child transmission (MTCT) risk. MTCT which occur during pregnancy, labour and breastfeeding, is responsible for 90% childhood HIV infection. The main objective of the prevention of mother-to-child transmission (PMTCT) is to reduce the transmission of HIV infection from HIV infected mothers to their off springs. However, it is to be noted that the most important public health measures against MTCT remain to be the prevention of infections in women of childbearing age and the prevention of unwanted pregnancies through adequate family planning.⁶ Prevention Of Mother To Child Transmission (PMTCT) is a commonly used term for program and interventions designed to reduce the risk of mother to child transmission (MTCT) of HIV/AIDS.⁷

The PPTCT programme aims to prevent peri-natal transmission of HIV from an HIV infected pregnant mother to her newborn baby. The program entails counseling and testing of pregnant women in the Integrated Counseling and Testing Centre (ICTCs). Pregnant women found to be HIV-positive are given a single dose of

nevirapine tablet at the time of labor; their newborn babies also get a single dose of nevirapine syrup within 72 hours after birth s to prevent transmission of HIV from mother to child.⁸

The purpose of this study is therefore to assess the awareness, knowledge and misconceptions to HIV/AIDS among women attending in antenatal clinic at Shri Vasant Rao Naik Government Medical College (SVNGMC) and Hospital Yavatmal, India.

II. Materials And Methods

Our study has focused on pregnant mothers attending ANC clinic at SVNGMC and Hospital. The permission from Institutional Ethical Committee was taken. The study carried out during the period March 2012 to June 2012. We conducted interviews with randomly selected women during their ANC visit. Initially pilot study was carried out on 25 ANC mother. Depending upon the findings of the pilot study, suitable corrections were made in the proforma and thus pretested proforma was used for data collection purpose. The study instrument has been interviewing the pregnant mothers with pretested proforma on awareness of MTCT of HIV infections, its mode of transmission and prevention.

There were questionnaires structured to every attendee, identifying the mothers by their clinical record, age, occupation and address of residence. The mothers were requested to voluntarily participate in the interview and none of them refused to be interviewed. There was 100 % inclusion. The interview was conducted before the start of the routine antenatal clinics and each mother was interviewed privately and assured on the confidentiality of the interview.

The antenatal follow-up card of the interviewed mothers was marked to avoid repetition, and there were none repeated or missed cases in the study period. The filled pretested proforma were collected every day and the results analyzed after completion of the study according to different variables in the proforma. The interview included the assessment of the knowledge of the mothers on transmission of HIV infection from mother to child, through breastfeeding and physical contact.

Respondent's level of general knowledge of HIV/AIDS and MTCT were computed by judging their answers to questions on modes of transmission of HIV/AIDS and MTCT. One mark awarded for every correct response and no mark awarded for incorrect responses. Respondents were assessed as having good knowledge if they scored 7-10, average if scored 4-6 and poor if scored 0-3 out of ten.

Statistical Analysis

Comparison of categorical data with education and occupation was done using the Chi-Square test. The corresponding p value of <0.05 was used as criterion for statistical significance.⁹

III. Results

Table No. 1 revealed that majority 81(54.00%) of ANC belongs to age group of 21-25 years and 24(16.00%) belongs to 26 and above years age group. Out of 150 ANC clients 83(55.34%) were housewife and remaining 67(44.66%) were involved in some or other occupation.

In the present study, out of 150 ANC client 143(95.34%) were literate and 07(4.66%) were illiterate. The incomes of the respondents were classified into 3 categories. Out of 150 women 03(02.00%) belongs less than RS 2000 category, 94(62.66%) belongs to RS 2000-3000 category, 53 (35.34%) are more than RS 3000 group. It could be seen from the Table no. 1 that sources of information about HIV \ AIDS were television 63(42.00%) is the main sources of information about HIV /AIDS , followed by radio 67(44.66%) , followed by teacher and doctor 44(29.34%).

Table no. 1 shows that 126 (84.00%) could name sexual route while 88 (58.66%) mention mother to baby transmission as route of transmission, 76 (50.66%) mention sharing of needles and syringes as mode of transmission, 34 (22.66%) doesn't mention any route of transmission. 109 (72.66%) had knowledge about condom as means of protection, 44 (29.34%) had knowledge about of safe blood transfusion and 31 (20.67%) doesn't mention any method of prevention against HIV/AIDS.

It could be seen from the Table no. 2 about misconceptions on HIV/AIDS, 09 (06.00%) respondents mention that a mosquito bite could transmit HIV/AIDS, 01(00.66%) did not know that the use of condoms were protective, while 16(10.66%) respondents said that HIV/AIDS could be transmitted by sharing a meal with an HIV infected person .42(28.00%) did not know that antiretroviral medication could reduce risk of MTCT and 58 (38.66%) of them know that breastfeeding carried a risk of MTCT. Table no.3 shows that majority of the respondents 78 (52.00%) had good knowledge of HIV/AIDS and correctly answered most of the questions on the virus and its modes of transmission while 39 (26.00%) respondents were assessed as having a poor knowledge of HIV/AIDS.

There was a significant association (Table no. 3) between knowledge of HIV/AIDS and the educational status of the respondents. 66 (44%) respondents with secondary education and above had good knowledge of HIV/AIDS ($\chi^2=14.15$, $p<0.05$).

There was no significant association (Table no. 4) between knowledge of HIV/AIDS and the occupation of the respondents ($\chi^2=0.677$, $p>0.05$).

IV. Discussion

The study reveals that the awareness of HIV/AIDS among the antenatal client is high. In the present study 45(30.00%) women belongs to 18-20 years age group, 81(54.00%) belongs to 21-25 years age group and 24(16.00%) belongs to 26 and above years age group. The present study were comparable with Shrotri A et al (2003)¹⁰ i.e. 270(38%) women belongs 18-20 years age group, 339(48%) belongs to 21-25 years age group and 98(14%) belongs to 26yrs and above age group. Out of 150 ANC clients 83(55.34%) were housewife and 67(44.66%) were belongs to other occupation. In Shrotri A et al (2003)¹⁰ out of total 707 women 584 (83%) belongs to housewife and 123(17%) belongs to other occupations.

In the present study out of 150 ANC client 30(20.00%) were having education up to Primary school, 99(66.00%) studied up to Secondary school, 14(9.34%) studied up to Higher secondary above and 07(4.66%) were illiterate. The finding were similar with Shrotri A et al (2003)¹⁰ out of 707 230(33%) were educated up to illiterate/primary, 477 (67%) were educated up to secondary and above.

As reported by Bassey et al (2009)⁷ Out of 263 31 (11.8%) studied up to primary education, 116(44.1%) studied up to secondary education, 113 (42.9%) studied up to higher education and above 2(0.8%) were illiterate. The finding not similar may be due to different study set up.

The income of the respondent classified into 3 categories. Out of 150 women 03(02.00%) belongs less than RS 2000 category, 94(62.66%) belongs to RS 2000-3000 category, 53 (35.34%) are more than RS 3000 group. In Sevanan Murajan et al (2010)¹¹ study 77(26%) belongs to less than Rs.2000 category, 55(18%) belongs to rs.2000-3000 category, 36(12%) are more than Rs.3000 group and 132(44%) are in nil income group. This may be due the reason that the study carried out in different places.

In our study television 67(44.66%) and Radio 64 (42.66%) were the main sources of information about HIV /AIDS. In Sevanan Murajan et al (2010)¹¹ 194(64.6%) television was the main source of information about HIV /AIDS. Shrotri A et al (2003)¹⁰ television 537(76%) is the main source of information about HIV/AIDS followed by Bill board /poster 359(50.00%) the radio 342(48.00%) newspaper 265(38.00%). A substantial number of women also reported having had conversation with others about HIV/AIDS most frequently with friends (30.00%) but also with health and education professional (24.00%) and immediate relatives (23.00%). Lal P et al(2008)¹² studied 79.6% mentioned television and radio were the main sources of information to them. Television is mass media cover large number of population.

In the present study 126(84.00%) could name sexual route while 88(58.66%) name mother to baby transmission as route of transmission. 76(50.66%) name sharing of needles and syringes as mode of transmission and 34(22.66%) doesn't mention any route of transmission. In Sevanan Murajan et al (2010)¹¹ study commercial sex workers (CSW) were the main reason for transmission of HIV/AIDS, followed by blood transmission. In Lal p et al (2008)¹² only 48.2% could name sexual route while 44.4% mention sharing of needles and syringes as mode of transmission. Only 31.1% and 23.4% cited blood transfusion and mother to baby transmission as route of transmission respectively. In Shrotri A et al(2003)¹⁰ study knowledge of primary transmission such as sexual contact and use of unsterile needle was over 75%. It is found that knowledge of mother to child transmission and sharing of needles and syringes as mode of transmission is still low.

The present study reveals that 109 (72.66%) had knowledge about condom as means of protection, 44 (29.34%) had knowledge about of safe blood and 31 (20.67%) doesn't mention any method of prevention against HIV/AIDS. In Shrotri et al (2003)¹⁰ study 53% women were able to mention at least one method of prevention. In Sevanan Murajan et al(2010)¹¹ studied that avoid CSW and multiple sex partners are the main measure to prevent HIV/AIDS followed by use of condom, avoid blood transfusion from HIV patient and infected needles placed 3rd rank. Awareness about condom as method of prevention is high than other method. In a recent study of pregnant women in South India, nearly all had heard of HIV/AIDS and one-third had general knowledge of the disease.¹³

Majority of the respondents has good knowledge of HIV/AIDS and correctly answered most of the questions on the virus and its modes of transmission. A large number of respondents did not know that breast feeding is associated with risk of transmission of from mother to child (MTCT) or antiretroviral medication reduced the risk of MTCT. There are some misconception such as HIV could be transmitted by a mosquito bite and sharing meal with an infected person. These figures were less than what was reported in Bassey et al (2009)⁷ study. Such misconceptions create discrimination and stigmatization of people living with HIV/AIDS.

The statistically significant relationship between the level of education and knowledge of HIV/AIDS was also found in Bassey et al (2009)⁷ and could partly be explained by the fact that highly educated people usually have more access to information of all types including that on HIV/AIDS.

If the level of knowledge of Indian people and their awareness about HIV/AIDS do not improve fast, there is a risk of having the same trend of development like in Africa. Since there is no governmental agency that is in charge of all HIV testing and many people in the high risk groups simply do not go for testing it is of greatest importance that HIV programmes make the people of India understand the necessity of this. At least it would be desirable with mandatory HIV tests for pregnant women.¹⁴

V. Conclusion

The result from the study shows that the general level of awareness regarding HIV/AIDS is still low.

Recommendation

ANC mother should be given awareness about HIV/AIDS. Government should provide adequate funding for information education and communication of HIV/AIDS.

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RESULTS

Table NO.1: Demographic Characteristics of Pregnant Women attending hospital

Characteristics	Number	%
Age group		
18-20 yrs	45	30.00%
21-25 yrs	81	54.00%
26 yrs and above	24	16.00%
Occupation		
Housewife	83	55.34%
Other	67	44.66%
Education		
Class 1-5 th	46	30.66%
Class 6-10 th	83	55.34%
Above 10 th class	14	09.34%
Illiterate	07	04.66%
Income		
<2000Rs	03	02.00%
2000-3000Rs	94	62.66%
>3000Rs	53	35.34%
Total	150	100.00%
Sources On HIV/AIDS		
Television	67	44.66%

Radio	64	42.66%
Teacher and Doctors	44	29.34%
Friends and Relatives	31	20.66%
Newspaper	08	05.34%
Poster	01	00.66%
Routes of Transmission		
Sexual transmission	126	84.00%
Mother to baby	88	58.66%
Sharing needle and Syringes	76	50.66%
Blood Transfusion	44	29.34%
Do not know	34	22.66%
Method of Prevention		
Condom	109	72.66%
Safe blood	44	29.34%
Disposable syringes	36	24.00%
Do not know	31	20.67%

Table NO.2: Knowledge of HIV/AIDS

Questions	YES (%)	NO (%)	DO NOT KNOW (%)	NO RESPONSE (%)
Can sharing meal with infected person transmit HIV	16 (10.66%)	95 (63.33%)	29 (19.34%)	10 (6.67%)
Can sharing of needles transmits HIV	76 (50.66%)	07 (04.66%)	54 (36.00%)	13 (08.67%)
Can a healthy looking person be infected	75 (50.00%)	44 (29.33%)	26 (17.33%)	05 (03.33%)
Can infected person transmit HIV by sexual contact	126 (84.00%)	03 (02.00%)	14 (09.34%)	07 (04.66%)
Can mosquito bite transmits HIV	09 (06.00%)	63 (40.66%)	70 (46.66%)	08 (5.34%)
Can staying in the same room transmits HIV from infected to healthy person.	30 (20.00%)	61 (40.66%)	42 (28.00%)	17 (11.33%)
Can a pregnant infected women transmit HIV to her unborn child.	88 (58.66%)	08 (5.34%)	42 (28.00%)	12 (08.00%)
Can antiretroviral medication reduces risk of transmission	85 (56.67%)	00 (0.00%)	42 (28.00%)	23 (15.33%)
Can an infected women transmit the virus to her new born child by breast feeding	58 (38.66%)	07 (04.66%)	71 (47.33%)	14 (09.34%)
Does correct use of condoms protect from HIV	109 (72.66%)	01 (00.66%)	11 (07.34%)	29 (19.34%)

Table NO.3: Relationship of educational status and knowledge of HIV/AIDS

Educational status	Group knowledge of HIV			Total
	Good	Average	poor	
Illiterate	01	03	03	07
Primary	11	05	14	30
Secondary	59	22	18	99
Higher secondary and above	07	03	04	14
Total	78	33	39	150

$\chi^2=14.15$, df6, p<0.05

Table NO.4: Relationship of Occupational status and knowledge of HIV/AIDS

Occupational status	Group knowledge of HIV			Total
	Good	Average	Poor	

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Housewife	39	21	23	83
Other occupation	36	15	16	67
Total	75	36	39	150

$\chi^2=0.677$ df2, $p>0.05$