Knowledge, attitude and practice towards HIV infection and prevention of mother to child transmission among pregnant women’s who are attending antenatal clinic of Gyne OPD at JNU hospital JNUIMSRC, Jaipur

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Abstract
Background: Knowledge, attitudes and practices (KAPs) regarding HIV/AIDS is one of the corner stones in the fight against the disease. This study was conducted to determine whether antenatal mothers in Jaipur Rajasthan have adequate knowledge and awareness, attitude, and preventive practices about HIV infection. Pregnant women possess higher risk. Thus, evaluating their KAPs will help in designing appropriate prevention strategies (PPTCT). This study was aimed at assessing the KAPs of women attending antenatal clinic at JNU Medical College and Hospital, Jaipur.

Methods: Cross-sectional study using structured questionnaire. 235 Antenatal mothers attending the outpatient department of JNU Hospital, Jaipur were taken for the study. Questionnaire form filled by pregnant women during their first antenatal visit was the source of data for this study. Systematic sampling technique was used where every pregnant women registering for ANC visit were voluntarily recruited for the study.

Results: Highest (43.4%) response was from the age group 20-24 years, Hindu population constituted the major part of the study population i.e. 70.2%. Women with parity 2 constituted major part of study population 31.5%, 77.4% of the antenatal women have heard about HIV. Only 21.8% of the women knew about drug to prevent mother to child transmission. Regarding the measures to reduce the transmission 53.5% of respondents were taking ART, 18.6% exclusive breast feeding while 11.6% had no knowledge concerning the measures.

Conclusions: The current study revealed high levels of knowledge, positive attitude, and preventive practices regarding HIV; however, this population lacked knowledge about MTCT and its prevention.

Keywords: Antenatal HIV transmission, human immune deficiency virus (HIV), prevention services, mother-to-child transmission (MTCT)

Introduction
India has third-highest number of estimated people living with HIV in the world. According to the HIV estimations in 2015, the estimated number of people living with HIV/AIDS in India was 21.17 lakh, with an estimated adult (15-49 age group) HIV prevalence is 0.26% 2015. (13) Mother-to-child transmission (MTCT) of human immune deficiency virus (HIV) infection is the transmission of the virus from an HIV-infected mother to her child during pregnancy, delivery, or breastfeeding, during labor. Mother-to-child transmission (MTCT), accounts for the vast majority of infections in children (0-14 years). NACO, 2003a) Hence voluntary counseling and HIV testing in pregnancy is the only gateway for the prevention of transmission of infection to the newborn as this global epidemic is now worldwide and having major detrimental impact on maternal & child health. Targeted testing of pregnant women at high risk is not recommended now because it fails to identify major portion of HIV +ve pregnant women. So Universal screening for all pregnant women with pretest & post test counseling is cost effective and has clearly demonstrated reduction in maternal-fetal transmission even in low prevalence setting.

The prevention of Parent to Child Transmission of HIV/AIDS (PPTCT programme) was launched in the country in the year 2002. The PPTCT program aims to prevent the perinatal transmission of HIV from an HIV-infected pregnant mother to her newborn baby. Without any intervention, 20-50% of infants would be infected; 5-10% during pregnancy, 10-20% during...
labor and delivery and 5-20% through breastfeeding. By implementing the PMTCT program, the overall risk can be reduced to less than 2%. NFHS –3 overview report showed that in whole India, awareness of the existence of AIDS disease among females, is only around 30%. Now rapid changes are underway.

The earlier voluntary counseling and testing centers (VCTC) and facilities providing prevention of parent to child Transmission of HIV / AIDS (PPTCT) services are now remodeled as a hub to deliver integrated services to all clients under one roof and renamed as “Integrated Counseling and Testing Centers” (ICTC).

Objectives of the study
1. To assess the knowledge, attitude, and preventive practices among antenatal women regarding HIV infections.
2. To determine the knowledge about PMTCT of HIV infection among antenatal women.

Framework and methods for a proposed Research project
1. Study area- The study will be conducted in the Antenatal clinic, JNU Hospital & Medical College, Jaipur. (Rajasthan). Antenatal women who attending the outpatient department of OBG will be taken for the study.
2. Study design- An institutional-based cross-sectional study
3. Inclusion and Exclusion criteria

Inclusion criteria: Pregnant women attending ANC clinic over two months by systematic random sampling.
Exclusion criteria: Severely ill (those who couldn’t talk) pregnant women and those not willing to enroll for study.

Data collection and analysis
Data was collected through a pre-tested structured based questionnaire to access the knowledge, attitude, and practice towards HIV infection and knowledge about PMTCT services in pregnant females. The appropriate statistical analysis was done to get the results.

Relevance of the proposed study
Basic knowledge about HIV and its prevention strategies as well as the attitude of mothers in accessing PMTCT services are vital to the success of the PPTCT program. Baseline information among pregnant women would help healthcare institutions to recognize mothers’ knowledge, attitude, and utilization of PMTCT services and hence benefit them by providing accurate information on the risk of MTCT, availability of preventive options, the effect of HIV on pregnancy outcomes, and involvement and screening of partner.

Proposed Budget
Not Applicable

Results and Discussion
Sociodemographic profile

![Graph 1: Age-Wise response on HIV of pregnant female](image)

Graph no 1 shows that 43.4% of the response was from the age group 20-24 years, 35.3% was the from age group 25-29 years while the lowest response was 3.4% from the age group 15-19 years.
Graph 2: Religion wise awareness of HIV in pregnant females

Graph no 2 shows that the Hindu population constituted the major part of the study population i.e 70.2% while 29.8% were Muslim. The reason being the state of Rajasthan was a majority of Hindu population.

Graph 3: Distribution of study population according to parity

Graph 3 shows the distribution of study population according to parity. Women with parity 2 constituted major part of study population 31.5% while unmarried women constituted only 0.9% of the study population.

Graph 4: The distribution of responses from participants on HIV
Graph no 4 depicts the distribution of responses from participants. The response rates of “yes” were 77.4% to the question “have you ever heard about HIV/AIDS” while that of “no” were 22.6%. Singh and Rathor (2012) "undertook a study to know awareness of reproductive health among rural and urban adolescent girls of Varanasi city. The majority of rural (76%) and urban (96%) girls knew the full form of AIDS, its transmission, and the protection of AIDS. The majority of urban girls (90%) and rural girls (84%) knew biological symptoms.

The response rates to ‘yes’ were 21.8% while the response rate to “no” was higher to the question “have you ever heard of any drug that can prevent transmission of HIV from mother to fetus?” Parmar, M., Aherwar, R., & Jawade, S. (2017) conducted a descriptive study on Awareness, knowledge, and prevention of mother to child transmission of human immunodeficiency virus in pregnant women. Amongst the respondents, 84% had heard of HIV and in 79% of them, the source of information was through mass media. 54.8% were aware of sexual intercourse as a mode of transmission of HIV while 43% knew that sharing sharp objects and infected blood products can spread HIV. 66% of respondents were aware of MTCT and 33.6% heard of antiretroviral therapy as a method of prevention of MTCT. 74% were aware of contracting the infection by sexual contact with an infected partner. The majority of them (77.4) were the aware of increased risk of contracting HIV/AIDS by relationships with multiple partners. 74% of females were aware that HIV/AIDS is preventable. 59.6% of women were aware of the availability of ART for AIDS treatment. 72.5% of the study population was aware that the use of a condom can protect against HIV transmission. Although awareness of HIV and MTCT is increased as compared to previous studies, to achieve a global plan to reduce MTCT by 90% there is still a need to promote programs targeting the antenatal population with emphasis on MTCT and its various methods of prevention.

Regarding the measures to reduce the transmission 53.5% of respondents were taking ART, 18.6% exclusive breast feeding while 11.6% had no knowledge concerning the measures. Moses AE, Chama C, Udo SM, and Omotora BA. (2009) assessed the Knowledge, attitude, and practice of antenatal attendees toward the prevention of mother to child transmission.
(PMTCT) of HIV infection, through a structured questionnaire concerning PMTCT. The survey revealed a high level of knowledge on modes of transmission, risk behaviors, and prevention of HIV and other sexually transmitted infections among pregnant women. However, the use of breast milk substitute (BMS) (24.4%) by HIV-positive nursing mothers and the use of condoms during sexual intercourse (33.7%) did not receive very encouraging responses. The major reason for breastfeeding was the community belief that breast milk is superior to BMS. condom use 28 (48.3%), the practice was against their religious beliefs while a few believe withdrawal before ejaculation and use of antibiotics after sex can equally prevent HIV infection. The pregnant women accepted PMTCT as a veritable means of preventing infants from HIV infection as well as an opportunity to know one’s HIV status through voluntary testing. Staff training, awareness creation, and community mobilization were identified as key to the success of PMTCT programs. Fight against stigma and discrimination.

Mukhtar, Mohsina & Quansar, Ruqia & Bhat, Suhail & Khan, S. M. Salim. (2020). Knowledge, attitude and practice regarding mother-to-child transmission of HIV, its prevention, and associated factors among antenatal women attending a health care facility in district Srinagar, North India. A cross-sectional hospital-based study was conducted. Among the study participants, 95.9% of women had heard about HIV/AIDS, 314 (85.8%) were aware of sexual transmission as a mode of transmission and more than half of the subjects (68.3%) were aware that the transmission of HIV infection can occur during pregnancy.

References