

## Original Research Article

## Knowledge, attitude and awareness of HIV-AIDS among pregnant females at a tertiary care hospital in central India

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### Abstract

**Background:** HIV/AIDS is spreading worldwide at an alarming rate and has become a global pandemic. There are an estimated 21.17 lakhs people living with HIV/AIDS of which 6.54% are children. The present study was conducted to assess knowledge, attitude and awareness of HIV/AIDS among pregnant females. **Materials & Methods:** 500 pregnant women of age range 18-30 years were included. Knowledge on mode of transmission, source of information and misconceptions about HIV/AIDS was recorded. **Results:** 465 (93%) had heard about HIV/AIDS. 445 were aware that HIV/AIDS is a sexually transmitted disease. 370 (74%) replied that pregnant females also get affected by HIV/AIDS. 385 (77%) understood that HIV/AIDS can be transmitted from mother to foetus. 330 (66%) replied that HIV/AIDS can be tested using blood sample. 315 women agreed that all pregnant females should be tested for HIV/AIDS. 60 pregnant females were aware that report of HIV/AIDS is confidential while 270 did not know. 410 (82%) were ready to get tested for HIV/AIDS and 40 were not. 310 were ready to get their husband/ sex partner tested for HIV/AIDS while 55 were not. 240 of them were ready to take care of HIV/AIDS patients whereas 90 were not comfortable with it. The difference was significant ( $P < 0.05$ ). **Conclusion:** Pregnant women had sufficient knowledge and awareness regarding HIV/AIDS.

**Keywords:** Awareness, Knowledge, HIV

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### Introduction

HIV/AIDS is spreading worldwide at an alarming rate and has become a global pandemic. There are an estimated 21.17 lakhs people living with HIV/AIDS of which 6.54% are children. There is an increased 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 offspring.<sup>1</sup> HIV related stigma and discrimination remains an important barrier in an effective fight 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, putting their sexual partners at risk of getting infection, due to lack of precautionary measures[2].

The transmission of HIV from mother to child is the second most common route of transmission of HIV. The risk of HIV transmission from mother to child is approximately 45% if no safety measures have been taken. With early HIV testing, special precautions during delivery, prophylactic treatment, and shortened breast feeding, the risk can be reduced to only a few percent[3].

Vertical transmission of HIV occurs when an infected mother's blood mixes with that of the baby during vaginal delivery. Exclusive breast feeding should be promoted and supported for six months for women who are known to be infected and whose HIV status is unknown[4]. Since the discovery that HIV type 1 can be transmitted through breastfeeding, several policy recommendations have been developed which are expected to have a global impact on the maternal and infant health[3].

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The present study was conducted to assess knowledge, attitude and awareness of HIV/AIDS among pregnant females attending antenatal out-patient department at a tertiary care centre in Central India.

### Materials & Methods

The present study comprised of 500 pregnant women of age range 18-30 years. A consent for participation in the study was obtained from all.

A well-structured protested questionnaire which comprised of information about sociodemographic characteristics, knowledge about HIV/AIDS and sexual practices was utilised for the study. Knowledge on mode of transmission, source of information and misconceptions about HIV/AIDS apart from routine history and examination were also recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

### Results

**Table 1: Heard of HIV/AIDS?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 465    | 93%            | 0.01    |
| No         | 15     | 3%             |         |
| Don't Know | 20     | 4%             |         |

Table I shows that 465 (93%) had heard about HIV/AIDS. The difference was significant ( $P < 0.05$ ).

**Table 2:HIV/AIDS is sexually transmitted?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 445    | 89%            | 0.02    |
| No         | 5      | 1%             |         |
| Don't Know | 50     | 10%            |         |

Table II shows that 445 were aware that HIV/AIDS is a sexually transmitted disease. The difference was statistically significant ( $P < 0.05$ ).

**Table 3:Pregnant females also affected by HIV/AIDS?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 370    | 74%            | 0.05    |
| No         | 45     | 9%             |         |
| Don't Know | 85     | 17%            |         |

Table 3 shows that 370 (74%) replied that pregnant females also get affected by HIV/AIDS. The difference was significant ( $P < 0.05$ ).

**Table 4: HIV/AIDS can be transmitted from mother to foetus?**

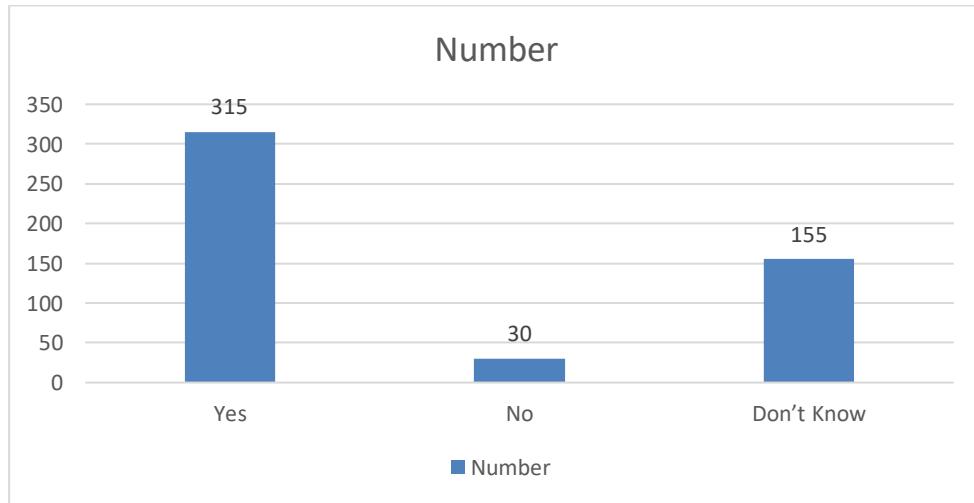
| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 385    | 77%            | 0.05    |
| No         | 45     | 9%             |         |
| Don't Know | 70     | 14%            |         |

Table IV shows that 385 (77%) knew the fact that HIV/AIDS can be transmitted from mother to foetus. The difference was significant ( $P < 0.05$ ).

**Table 5:HIV/AIDS tested using blood sample?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 330    | 66%            | 0.05    |
| No         | 50     | 10%            |         |
| Don't Know | 120    | 24%            |         |

Table V shows that 330 (66%) replied that HIV/AIDS can be tested using blood sample. The difference was significant ( $P < 0.05$ ).

**Fig 1:Do you think all pregnant females should be tested for HIV/AIDS?**

Graph I shows that 315 women replied that all pregnant females should be tested for HIV/AIDS. The difference was significant ( $P < 0.05$ ).

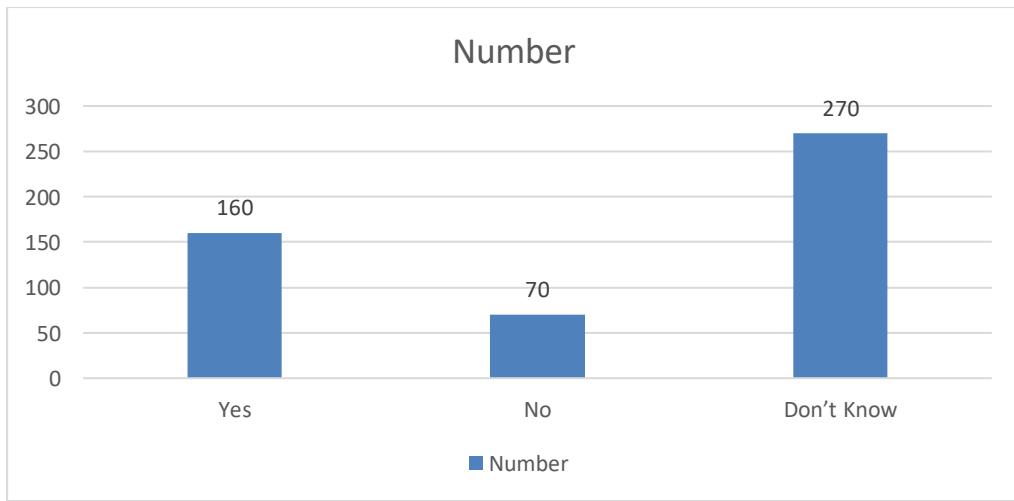
**Fig 2:Do you know that report of HIV/AIDS is confidential?**

Fig II shows that 160 replied that report of HIV/AIDS is confidential, 70 thought that report is not confidential and 270 did not have any knowledge about it. The difference was significant ( $P < 0.05$ ).

**Table 6:Are you ready to get tested for HIV/AIDS?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 410    | 82%            | <0.05   |
| No         | 45     | 9%             |         |
| Don't Know | 45     | 9%             |         |

Table VI shows that 410 (82%) were ready to get tested for HIV/AIDS, 45 were not and 45 were ignorant about it. The difference was significant ( $P < 0.05$ ).

**Table 7:Are you ready to get your husband/ sex partner tested for HIV/AIDS?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 310    | 62%            | 0.04    |
| No         | 55     | 11%            |         |
| Don't Know | 135    | 27%            |         |

Table VII shows that 310 were ready to get their husband/ sex partner tested for HIV/AIDS but 55 did not agree to this. The difference was significant ( $P < 0.05$ ).

**Table 8:Are you ready to take care of HIV/AIDS patients?**

| Response   | Number | Percentage (%) | P value |
|------------|--------|----------------|---------|
| Yes        | 240    | 48%            | 0.04    |
| No         | 90     | 18%            |         |
| Don't Know | 170    | 34%            |         |

Table VIII shows that 240 were ready to take care of HIV/AIDS patients, 90 were not and 170 did not know anything about it. The difference was significant ( $P < 0.05$ ).

## Discussion

Various government and non-government agencies are 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[6]. Inspite of lot of efforts, awareness and knowledge about HIV /AIDS is still inadequate among women; because they are not comfortable in talking about HIV. Awareness programmes are not able to reach up to them and there is inaccurate information about the modes of transmission of HIV due to cultural and religious beliefs or lack of education[7]. 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[8]. The present study was conducted to assess knowledge, attitude and awareness of HIV/AIDS among pregnant females. We found that 465 (93%) had heard about HIV/AIDS. 445 were aware that HIV/AIDS is a sexually transmitted disease. 370 (74%) replied that pregnant females also get affected by HIV/AIDS. 385 (77%) replied that HIV/AIDS can be transmitted from mother to foetus. Ojieabu et al[9]assessed HIV/AIDS related knowledge, attitude and risk perception among pregnant women. A 43- item self- administered questionnaire, pretested and administered to 403 pregnant women during ante-natal clinic sessions. High HIV/AIDS awareness level (97%) was recorded, 77.7% had correct knowledge of the cause of the disease but knowledge on the modes of vertical transmission during pregnancy (57.5%) and prevention during breast-feeding (62.3%) was not encouraging. A lot of misconceptions about the cause of the HIV/AIDS, modes of contact, transmission, prevention and anti-retroviral therapy were recorded.

We found that 330 (66%) replied that HIV/AIDS can be tested using blood sample. 315 women replied that all pregnant females should be tested for HIV/AIDS. In our study, 160 pregnant women knew that report of HIV/AIDS is confidential, 70 thought it is not confidential and 270 did not know about this aspect. Xuerf et al[10] found that 62.1% women could express knowledge of at least one appropriate mode of protection against the disease. Radio and other mass media represented the most frequent source of information. 31.3% of women strongly discriminated against patients with HIV/AIDS. There was no

significant relationship between knowledge of the means of protection against HIV-AIDS and the different biomarkers of STIs obtained. 81.7% of women were condom users, but only 5.4% used it as a method of contraception outside the desired period of pregnancy. Low-educated women from the South West appeared to be particularly at risk because of unawareness about HIV, and would require the implementation of appropriate information programs.

We found that 410 (82%) were ready to get tested for HIV/AIDS, 45 were not and 45 did not have knowledge about testing. 310 of them were ready to get their husband/ sex partner tested for HIV/AIDS while 55 were not . 240 were ready to take care of HIV/AIDS patients, 90 were not and 170 were ignorant about this. Jahan et al[11] found that 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. 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. Vijay Shree et al[12] reported that some women mentioned mosquito bite and sharing of food and clothes as mode of HIV/AIDS transmission.

## Conclusion

Authors found that pregnant women had sufficient knowledge and awareness regarding HIV/AIDS.

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