A study to assess the knowledge regarding mother to child transmission of HIV among antenatal mothers at MCH Centre, Tirupati.

B.Sunitha, Dr. C. Usha kiran and Mrs. K. Varalakshmi

Corresponding Author: B.Sunitha

Abstract

Background: HIV/AIDS has been described as the most dangerous and deadly disease of the millennium. Women are sexually, economically and biologically more vulnerable to HIV infection and AIDS. Lack of knowledge about HIV/AIDS is one of the main reasons why the transmission rate is so severe.

Aim: To assess the knowledge regarding mother to child transmission of HIV among antenatal mothers.

Method: Descriptive design was utilized. A total sample of 100 antenatal mothers was recruited in the study. The study was conducted at MCH centre, Tirupati. Data was collected through structured questionnaire on knowledge regarding mother to child transmission of HIV.

Results: The results revealed that, out of 100 antenatal mothers, nearly 3/4th of the respondents 74(74%) had moderate knowledge, 16(16%) had adequate knowledge and 10(10%) had inadequate knowledge on mother to child transmission of HIV.

Conclusion and recommendations: It was concluded that knowledge of mother to child transmission of HIV, modes of transmission, diagnosis and its management was moderate. So, there is a need to educate the antenatal mothers to increase awareness about mother to child transmission of HIV.

Key words: HIV/AIDS, Mother to child transmission of HIV, Antenatal mothers.

I. Introduction:

Human Immuno Deficiency virus/Acquired Immuno Deficiency Syndrome (HIV/AIDS) is a terrible disease condition caused by a tiny germ called Human Immuno Deficiency Virus (HIV). HIV/AIDS has been described as the most dangerous and deadly disease of the millennium.

Human Immuno deficiency virus/Acquired Immuno Deficiency Syndrome virus first reported in 1981 has since evolved into a global pandemic with devastating public health and economic consequences. HIV/AIDS has become the leading cause of death among women of reproductive age and also contributes to the death of infants and children.

Mother to child transmission (MTCT) of Human Immuno Deficiency Virus (HIV) infection is the transmission of the virus from an HIV infected mother to her child during pregnancy, labor, delivery or breast feeding.

HIV can be transmitted under specific conditions that allow contact with infected body fluids, including blood, semen, vaginal secretions and breast milk. Transmission of HIV occurs through sexual intercourse with an infected partner, exposure to HIV infected blood or blood products. HIV is not spread casually. The virus cannot be transmitted through hugging, dry kissing, shaking hands, sharing eating utensils, using toilet seats or attending school or working with an HIV infected person.

There are two types of HIV namely HIV-1 and HIV-2. HIV-1 is more common infects people worldwide and causes AIDS. HIV-2 is less aggressive and found mainly in West Africa causes a similar illness. Mothers with HIV can transmit the virus to their infants during pregnancy, child birth and breast feeding. The risk of transmission is 30-35% during pregnancy and child birth and about 10-15% during breast feeding. Around 15 to 30% of babies born to HIV (Human Immunodeficiency Virus) infected women are prone to HIV infection during pregnancy and delivery in case of lack of treatment and 5 to 20% can also become infected through breast feeding.

Women are sexually economically and biologically more vulnerable to HIV infection and AIDS. Lack of knowledge about HIV/AIDS is one of the main reasons why the transmission rate is so severe.

HIV/AIDS is not only a health problem, but also a social, economic, cultural and political problem. About 33,400,000 people globally live with HIV/AIDS including nearly 2 million children below 15 years. It is reported that as many as 16,000 people become infected with HIV every day (one person for every ten seconds, 6-10 persons per minute and 7 million new infections each year).
India has the third largest HIV epidemic in the world. In 2016, HIV prevalence in India was estimated as 0.3%. This figure is small compared to most other middle-income countries but because of India's huge population (1.324 billion) this equates to 2.1 million people living with HIV. In the same year, an estimated 62,000 people died from AIDS-related illnesses. In India there are 9.27 crores of peoples living with HIV/AIDS and adults 3.80 crores, women 1.90 crores and 30,000 children are affected and highly prevalent states in India are Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Mizoram and Nagaland.

The highest prevalence in ANC mothers was recorded in Nagaland (0.88%), followed by Mizoram (0.68%), Manipur (0.64%), Andhra Pradesh (0.59%) and Karnataka (0.53%).

In Tamil Nadu new infections were estimated at 3000-4000 and the prevalence of HIV infections at 0.26% in 2015. Sixty percent of women with HIV infection knew about parent to child transmission in Tamil Nadu.

Young adults are high risk group and they are more vulnerable to sexually transmitted diseases. Because of increased prevalence of mother to child transmission of HIV among young adults there is a need to assess the level of knowledge among antenatal mothers. This made the investigator to conduct study on mother to child transmission of HIV.

OBJECTIVES OF THE STUDY
1. To assess the knowledge regarding mother to child transmission of HIV among antenatal mothers.
2. To determine the association between the knowledge on mother to child transmission of HIV among antenatal mothers with demographic variables.
3. To develop an informational booklet regarding mother to child transmission of HIV.

RESEARCH HYPOTHESIS

H₀: There will be inadequate knowledge on mother to child transmission of HIV among antenatal mothers.
H₁: There will be significant association between knowledge scores on mother regarding Mother to child transmission of HIV among antenatal mothers with their selected demographic variables.

II. Material and methods
A descriptive design was adopted. 100 antenatal mothers were selected by using convenient sampling technique on the basis of inclusive criteria to assess the knowledge regarding mother to child transmission of HIV among antenatal mothers by using structured questionnaire.

<table>
<thead>
<tr>
<th>Aspects of Knowledge</th>
<th>Knowledge Scores</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Knowledge on mother to child transmission of HIV</td>
<td>Inadequate</td>
<td>Moderate</td>
<td>Adequate</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Overall</td>
<td>10</td>
<td>10.0</td>
<td>74</td>
<td>74.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>KNOWLEDGE SCORES</th>
<th>MEAN</th>
<th>N</th>
<th>Std. Deviation</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of knowledge</td>
<td>31.18</td>
<td>100</td>
<td>3.32</td>
<td>93.849</td>
<td>**</td>
</tr>
</tbody>
</table>

III. Results:
In this study, out of 100 antenatal mothers, nearly 3/4th of the respondents 74(74%) had moderate knowledge, 16(16%) had adequate knowledge and 10(10%) had inadequate knowledge on mother to child transmission of HIV. Nearly 3/4th of the respondents had moderate knowledge regarding mother to child transmission of HIV. Hence research hypothesis (H₀) was accepted. The knowledge scores of antenatal mothers related to mother to child transmission of HIV had mean score of 31.18 with standard deviation of 3.32 and t-value 93.849. Hence knowledge was significant with p value at 0.01 level. The association between the demographic variables such as age in years, religion, residence, educational status, occupation, parity, duration of present pregnancy, current antenatal visit and source of information with the knowledge on mother to child transmission of HIV among antenatal mothers at p<0.05 level and the other variables were not significant with mother to child transmission of HIV among antenatal mothers. The researcher was identified that there was significant association between demographic variables and knowledge regarding mother to child transmission of HIV. Hence research hypothesis (H₁) was accepted.
IV. Conclusion:

The present study revealed that, knowledge regarding mother to child transmission of HIV, signs and symptoms, diagnosis, management and its prevention was moderate. So, there is a need to educate the antenatal mothers about mother to child transmission of HIV. Intensive enlightenment of population using mass media by trained personnel is recommended.

IMPLICATIONS:
The findings of the study have implications in various areas of nursing profession i.e., nursing service, nursing education, nursing administration and nursing research.

NURSING PRACTICE:
- The expanded role of professional nurse emphasizes the activities which promote health.
- All the team members should be made aware of the need of observing, supervising, teaching and improving the knowledge on mother to child transmission of HIV among antenatal mothers.
- Nurses working in hospital and community should impart the health education as an integral component of nursing practice to highlight the antenatal mothers regarding mother to child transmission of HIV.
- In service education sessions need to be organized to train health team members regarding mother to child transmission of HIV.

NURSING EDUCATION
- The students must be under adequate supervision and guidance while rendering the knowledge adequately to provide health education to the antenatal mothers in community in prevention of mother to child transmission of HIV.
- Workshop must be conducted on various preventive methods in reducing mother to child transmission of HIV which may helps to improve our knowledge in that particular aspect.
- The holistic health care approach should pay more attention on training of nursing students regarding screening because they can impart appropriate knowledge to antenatal mothers.

NURSING ADMINISTRATION
- Administrative department of nursing at various levels like institutional, local, state and national level should take measures to improve public awareness regarding mother to child transmission of HIV.
- It is of health administration, to make education department aware of existing health problems of the antenatal mothers.
- Promotion of healthy behavior such as preventive measures regarding mother to child transmission of HIV can be done through media, newspaper, internet, TV, magazines etc.
- Administrative support should be provided to activities which encourage public education for prevention of mother to child transmission of HIV.

NURSING RESEARCH:
- The findings of the study serves as a basis for the professional and the student nurses to conduct further studies on mother to child transmission of HIV.
- The study will motivate the beginning researchers to conduct same study with different variables and on large scale.

RECOMMENDATIONS
- A descriptive study can be conducted on knowledge about prevention of mother to child transmission of HIV among large population for generalization.
- A comparative study can be conducted to assess the knowledge about prevention of mother to child transmission of HIV between urban and rural antenatal mothers.
- A study may be conducted by the student nurses with more elaborate planned teaching programmes.
- A study can be done to assess the effectiveness of STP on knowledge regarding mother to child transmission of HIV among antenatal mothers.
- Regular health educational programmes should be conducted by health professional regarding prevention of mother to child transmission of HIV among antenatal mothers.

References