Awareness of HIV/AIDS in Pregnant Women

SOFIA TABASSAM, AMNA KHANUM, SALMAN JAVED
Services Hospital Lahore (SIMS)
Correspondence: sofiatabassam@gmail.com

SUMMARY
Introduction: The human immunodeficiency virus/Acquired immunodeficiency syndrome (HIV/AIDS) pandemic continues its deadly assault in different parts of the world. Over 20 million people have died since the first case of AIDS was identified in 1981.
Objectives: Aim of this study was to determine the increase in percentage of cases having correct response regarding knowledge of HIV/AIDS after counseling session. It was conducted in Services Hospital Lahore (SIMS), Gynaecology Unit 2, antenatal clinic in 6 months of period.
Results: Most of the patients between 26-30 years i.e. 38% (n=114), mean, frequency of pre-counseling knowledge of HIV/AIDS was in 22.33% (n=67) and after counseling session knowledge of HIV/AIDS was again evaluated which was recorded in 88% (n=264) while frequency of increase percentage of cases having correct response regarding HIV/AIDS after counseling was recorded 62.33% (n=197) by subtracting 88% (n=264) after counseling session from 22.33% (n=67) pre-counseling knowledge.
Conclusion: It was concluded that after counseling session regarding knowledge of HIV/AIDS, a significant increase in percentage of cases having correct response is achieved and this type of counseling at antenatal clinic is useful for the protection from morbidity.

Key Words: HIV/AIDS, knowledge, counseling session, correct response

INTRODUCTION
Acquired immunodeficiency syndrome (AIDS) is one of the leading infectious causes of adult death in the world. Untreated disease caused by Human Immunodeficiency Virus (HIV) has a case fatality.1 In China the estimated number of HIV/AIDS positives in 2007 was 700,000.2 HIV infection results from one of two similar retroviruses (HIV I and HIV II) that destroy CD4+ lymphocytes and impair cell mediated immunity, increasing risk of certain infections and cancers.1 According to UNAIDS estimates, prevalence of HIV/AIDS among population of men and women aged 15-24 yrs in Pakistan is about 0.1%.3
As HIV/AIDS is spreading very rapidly and especially the females have poor knowledge regarding HIV/AIDS, which can affect their health, their families and the community as well, but if they would have knowledge regarding this, it all can be prevented, resulting in a healthy community. If counseling gives good results in increasing the knowledge of these women then knowledge regarding HIV/AIDS should be given in routine to all women visiting antenatal clinic. The prevalence levels of HIV are much lower in Asia than Africa, the population size of the area accounts for 8.3 million cases, with 520,000 deaths in 2005. Indonesia, Vietnam, Pakistan, and Malaysia all have epidemics among intravenous drug abusers and sex workers that could quickly establish in the general population. While a small minority of Asian men frequent sex workers, the intersection is substantial enough to readily start epidemics in the general population. Cambodia has been successful in promoting behavioral change, predominantly condom use that led to a drop in the national seroprevalence by one third.4 Thailand is considered to be successful in controlling an epidemic, although recently a reversion to previous risky behavioral tendencies has occurred.
Various risk factors have been found to be connected with risky HIV-related behaviors in youth. The reasons for behavior are complex and multi determined. The most notable and influential factors are those that simultaneously have the power to control these behaviors and transform them into health behaviors: the individual's personal characteristics, family, and community.5 HIV is transmitted through direct contact of a mucous membrane or the bloodstream with a bodily fluid containing HIV, such as blood, semen, vaginal fluid, presemenal fluid, and breast milk. This transmission can involve anal, vaginal or oral sex, blood transfusion, contaminated hypodermic needles, exchange between mother and baby during pregnancy, childbirth, breastfeeding or other
exposure to one of the above body fluids (also called as vertical transmission).

A variety of symptoms and signs may be seen in association with acute HIV infection. Published series consistently report that the most common findings are fever, lymphadenopathy, sore throat, rash, myalgia/arthritis, and headache. None of these findings is specific, but several features, especially prolonged duration of symptoms and the presence of mucocutaneous ulcers, are suggestive of the diagnosis.

A number of nonspecific laboratory findings are associated with primary HIV infection. Initially, there is a fall in the total white blood cell count. The total leukocyte count begins to recover due to an expansion of lymphocytes. CD8+ lymphocytes increase at a faster rate than CD4+ T cells, resulting in a persistent inversion of the normal CD4+CD8+ ratio to less than 1.0. Elevation of liver associated enzymes, mild anemia and thrombocytopenia have all been reported in association with primary HIV infection.

Counseling for HIV and AIDS, however, is more complicated since HIV-positive people face difficulties arising from the nature of the disease, the way it progressively affects and consumes the biological self, and the difficulties that arise from the social perception of the illness and the people affected by it. As well, it causes strains in social relationships.

The objective of this study was to determine the increase in percentage of cases having correct response regarding knowledge of HIV/AIDS after counseling session.

**MATERIALS AND METHODS**

The study was conducted in Services Hospital Lahore (SIMS), Gynaecology Unit 2, antenatal clinic in six months of period (From 28.06.2011 to 27.12.2011). It was a Quasi experimental study and sampling technique was Non probability purposive sampling. Three hundred cases was calculated with 95% confidence level, 5.5% margin of error and taking expected percentage of increase in correct response i.e. 67.4% regarding knowledge/awareness of HIV/AIDS after counseling session. All pregnant females, attending antenatal clinic in Services Hospital Lahore, with education level of matric or below were included. Known cases of HIV/AIDS were excluded from this study.

Verbal consent was taken from them after explaining them the study, its benefits and ethical issues in the study. After taking their demographic history, they were requested to answer the questionnaire by giving them proforma no.1. Scoring was done, 1 mark was given for each correct answer (as mentioned in key) and percentage of correct response was recorded. After this the patients were counseled regarding HIV/AIDS, as mentioned in operational definition. The same patient was evaluated again by giving them another new proforma of same type after one week to determine the percentage of correct response.

All the discussion was conducted in a way that it is comprehensible to the patient and use of medical terminology was avoided. Bias was controlled with the help of exclusion criteria and conduction of session by a single person. Data was analyzed into SPSS no.11 and analyzed through its statistical program.

**RESULTS**

A total of to 300 participants fulfilling the inclusion/exclusion criteria were enrolled to determine the increase in percentage of cases having correct response regarding knowledge of HIV/AIDS after counseling session.

<table>
<thead>
<tr>
<th>Age (in years)</th>
<th>No. of patients (n=300)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25</td>
<td>87</td>
<td>29</td>
</tr>
<tr>
<td>26-30</td>
<td>114</td>
<td>38</td>
</tr>
<tr>
<td>31-35</td>
<td>65</td>
<td>21.67</td>
</tr>
<tr>
<td>&gt;35</td>
<td>34</td>
<td>11.33</td>
</tr>
<tr>
<td>Mean and SD</td>
<td>28.76+5.21</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Knowledge of HIV/AIDS</th>
<th>No. of patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>67</td>
<td>22.33</td>
</tr>
<tr>
<td>No</td>
<td>233</td>
<td>77.67</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100</td>
</tr>
</tbody>
</table>

Age distribution: most of the patients were recorded between 26-30 years i.e. 38% (n=114), 29% (n=87) between 20-25 years, 21.67% (n=65) between 31-35 years, 11.33% (n=34) had >35 years of age, mean and SD was calculated as 28.76+5.21 years. (Table No. 1). Frequency of pre-
counseling knowledge of HIV/AIDS was recorded in 22.33% (n=67) while 77.67% (n=233) were unaware (Table No. 2). After counseling session knowledge of HIV/AIDS was again evaluated which was recorded in 88% (n=264) while 12% (n=36) were still having limited knowledge (Table No. 3). Frequency of increase percentage of cases having correct response regarding HIV/AIDS after counseling was recorded 62.33% (n=197) by subtracting 88%(n=264) after counseling session from 22.33% (n=67) pre-counseling knowledge (Table No. 4).

Table 3: Frequency of After-Counseling Knowledge of HIV/Aids

<table>
<thead>
<tr>
<th>Knowledge of HIV/AIDS</th>
<th>No. of patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>264</td>
<td>88</td>
</tr>
<tr>
<td>No</td>
<td>36</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 4: Frequency of Increase Percentage of Cases Having Correct Response Regarding Knowledge of HIV/AIDS after Counseling

<table>
<thead>
<tr>
<th>Knowledge of HIV/AIDS</th>
<th>No. of patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre counseling</td>
<td>67</td>
<td>22.33</td>
</tr>
<tr>
<td>After counseling</td>
<td>264</td>
<td>88</td>
</tr>
<tr>
<td>Increase percentage</td>
<td>197</td>
<td>62.33</td>
</tr>
</tbody>
</table>

DISCUSSION

The human immunodeficiency virus/Acquired immunodeficiency syndrome (HIV/AIDS) pandemic continues its deadly assault in different parts of the world. Over 20 million people have died since the first case of AIDS was identified in 1981. In 2005, there were 5 million new infections and the number of people living with HIV globally reached to highest level with an estimated 40.3 million people.8

There is low literacy rate among the general public specially women, which increases the calamity many fold. A significant section of Pakistani society is still largely unaware of the presence of HIV/AIDS 9-10 Because of these factors, Pakistan has to take rigorous and sustained action to prevent a generalized HIV/AIDS epidemic.

Similarly, in our clinical practice, majority of patients coming to Services Hospital Lahore are poor and uneducated so we planned this study to check the awareness of HIV/AIDS in pregnant women and to assess the effectiveness of counseling regarding knowledge of HIV/AIDS so that vertical transmission could be prevented. It was assumed that if counseling gives good results in increasing the knowledge of these women then knowledge regarding HIV/AIDS would be given in routine to all women visiting antenatal clinic.

The statistics of the current study reveals most of the patients between 26-30 years i.e. 38%(n=114), mean and SD was as 28.76+5.21 years, frequency of pre-counseling knowledge of HIV/AIDS was in 22.33%(n=67) and after counseling session knowledge of HIV/AIDS was again evaluated which was recorded in 88%(n=264) while frequency of increase percentage of cases having correct response regarding HIV/AIDS after counseling was recorded 62.33%(n=197) by subtracting 88%(n=264) after counseling session from 22.33%(n=67) pre-counseling knowledge.

The results of the current study, regarding post-counseling knowledge of HIV/AIDS, showed median percent of correct response increased from 26.4% (pre counseling ) to 93.8% (post counseling) awareness of HIV among pregnant women. A high significant improvement in such knowledge (P <0.0001) was observed with rate of acceptance of education to within less then + 1.0 percent (95% confidence).11

Counseling can benefit pregnant women—or women wanting to become pregnant—who are either HIV-positive or unaware of their HIV status. It facilitates their making informed decisions about whether to become pregnant if HIV-infected; whether to take a test before pregnancy; and, if pregnant, whether to terminate the pregnancy, where abortion is legally available.

For those already pregnant, counseling can also discuss the use of zidovudine (ZDV, also known as AZT), where available, to reduce the risk of transmitting HIV to the unborn child, and breastfeeding and other infant feeding options.

Where possible, and when the woman agrees, it is advantageous to involve her male partner in the counseling sessions. Ideally, women should have counseling available to them before they become pregnant.

Candidates for a counseling training must be given a job description that specifies that they can provide counseling. They must have the necessary agreed professional background—this may be as a social worker, health worker, teacher, community
worker, or a volunteer from a group of people living with HIV/AIDS.

Considering the result of the current study as a “pilot study”, we may further enhance the counseling sessions for increasing the knowledge of these women and the knowledge regarding HIV/AIDS may be given in routine to all women visiting antenatal clinic.

CONCLUSION
We concluded that after counseling session regarding knowledge of HIV/AIDS a significant increase in percentage of cases having correct response is achieved and this type of counseling at antenatal clinic is useful for the protection of the morbidity.

REFERENCES