HIGH RISK BEHAVIOURS FOR SEXUALLY TRANSMITTED DISEASES IN FEMALE PSYCHIATRIC OUTPATIENTS IN TURKEY

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INTRODUCTION

Psychiatric patients are at risk for Sexually Transmitted Diseases (STDs) since they lack knowledge about contraception methods and may make poorer decisions regarding sexual behaviour (1,2). Mentally ill patients tend to have a higher rate of HIV infection compared to the general population (3,4).

In studies about risky behaviours concerning AIDS, a significant number of female patients with a chronic psychiatric disorder were found to have unsafe sex; multiple heterosexual partners; a history of being forced to have sexual intercourse against their will; used/abused alcohol and drugs; and did not use condoms regularly (3,5,6).

There are few studies concerning STDs risk-behaviours of female psychiatric outpatients. In this study we investigated the high risk behaviours and knowledge regarding STDs in female psychiatric outpatients.

METHOD

Istanbul Bakırköy Neuropsychiatry Hospital is the oldest and largest mental health center in the Middle East and the Balkans. The hospital receives referrals from all over Turkey and treats both acute and chronic mental illnesses.

We conducted face-to-face interviews with 150 female outpatients with diagnoses of schizophrenia (n=50), bipolar disorder (n=50) and unipolar depression (n=50), to identify their high risk behaviours and their knowledge of information about STDs including HIV/AIDS. Diagnoses were made by staff psychiatrists at the hospital (using DSM-IV Diagnostic Criteria (7)). We also conducted family interviews with or without patients present to enhance the validity of the interviews. Clinicians referred the female psychiatric outpatients between the ages of 15 to 49 years. Four members of the research team screened the referred female psychiatric outpatients for their eligibility to participate in the study. Of the 189 patients referred, 159 patients gave informed written consent, 10 refused to be interviewed, and 20 did not meet the inclusion criteria. Of the 159 who consented 9 patients decided to discontinue the study later. This resulted in an overall response rate of 79 per cent.

The research members grouped the patients according to their diagnoses, resulting in 50 patients being selected for each group. These patients were compared to a control group of 50 healthy subjects who indicated that they had never been diagnosed with a psychiatric illness.

The inclusion criteria for the study were as follows: (a) A diagnoses of schizophrenia by the psychiatrist and case notes confirming at least two years to illness duration; (b) for patients in the mood disorder groups we required diagnoses of bipolar or unipolar depression by the psychiatrist and case notes confirming at least two previous episodes of bipolar or unipolar depression, respectively; (c) Being in clinical remission; (d) Being within the reproductive period (15 to 49 years of age); and (e) providing

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voluntary written informed consent.

Patients with primary diagnoses of mental retardation or alcohol/drug abuse were excluded from the study.

The authors developed the semi-structured interview form to gather specific information about sociodemographic characteristics, high risk sexual behaviours and knowledge regarding STDs and HIV/AIDS. The patients who met the inclusion criteria were interviewed face to face by research doctors. Family members were also interviewed (in all cases). No family interviews were conducted for control participants. All data were collected between August 2004 and July 2005.

Data analyses consisted of t-tests (2 tailed), chi-square tests, and correlations. The biostatistical analyses were conducted using "SPSS for Windows Version: 11.5" We set the cut-off for significance at 'p<0.5'.

RESULTS

Age

Mean age was 36.24 ± 7.72 for BPD patients, 35.7±8.16 for unipolar depression group, 35.70±6.97 for schizophrenic cases and 35.22±7.93 for controls. Mean age was similar in patient groups and control group (p=0.932).

Level of Education

There was no significant difference among the groups in terms of education. Most of the subjects were elementary school graduates, and high-school graduates.

Marital Status

Among the patient groups, especially schizophrenics, the number of single, divorced and separated individuals was higher. Patients with depression were similar to controls. Divorce and separation were more frequent in the BPD group.

Sexual activity

Interview data revealed that 72 per cent of schizophrenics, 72 per cent of BPD patients, 88 per cent of depressives and 86 per cent of the control group reported some sexual experience over the past year. There was no difference between the patient groups and controls with respect to lifetime sexual activity (p=0.149). Nevertheless, reports of continuing relationship were significantly less in schizophrenic and BPD patients compared to the controls. The depressive group was similar to the controls in this regard.

In our study, 10 per cent of the schizophrenic patients had more than one partner, 6 per cent had multiple partners simultaneously, 8 per cent had anal intercourse, 4 per cent had IV substance addicted partners, 10 per cent had intercourse with someone whom she has known less than one day, 10 per cent had intercourse under the influence of alcohol/drugs, 6 per cent had intercourse in exchange for alcohol, drugs, or shelter and 10 per cent had forced intercourse. Among BPD patients, 8 per cent had multiple partners, 4 per cent had casual sex with a stranger and 4 per cent had anal intercourse. In the depressive patient group, no risky behaviours were reported with respect to STDs.

Level of information regarding STDs and HIV/AIDS

Schizophrenic (40.8 per cent) and BPD (34 per cent) patients reported more "I don't Know" answers (p=0.015), while depressive patients were similar to the control group.

The interview consisted of questions about AIDS that required either 'yes', 'no' or 'I don't know answers. "I don't Know" or "incorrect" answers were more frequent, however more than half of the answers did not differ significantly among the groups as seen in Table 2.
There was a lack of information in the schizophrenia and BPD groups, and level of information was similar in the controls and depressive group. This finding was attributed to lack of knowledge about STD in schizophrenics, whose cognitive and social skills are impaired. Although to a lesser degree than schizophrenics, BPD group also exhibited poorer knowledge.

"I don't Know" responses were more frequent than "incorrect" answers. Schizophrenics had more "I don't know", or "incorrect" answers, but there was no significant difference between the groups in more than half of the answers. "I don't Know" or "incorrect" answers were frequently given to questions such as "AIDS" is seen in homosexuals, there is no cure for it, 'substance users are under higher risk for AIDS' and 'condom protects from AIDS'. In Turkey, information about STDs such as AIDS is mainly received through media. The authors believe that this information is inadequate and sometimes misleading. In our sample there was lack of knowledge with regards to the nature of AIDS, risky behaviours means of contagion, and protection from STDs. Our findings suggest that more serious means of education is needed.

**Source of Information with regard to STD**

Overall, 73.4 per cent of the subjects reported learning about STDs through the media. Other reported sources were family, friends, school and books (p=0.584).

**History of STD**

Eight percent of BPD, 2 per cent of depressive patients, 12 per cent of schizophrenics, and 4 per cent of controls reported a history of STDs but there was no significant differences between the groups (p=0.172).

In summary, the schizophrenic patients had significantly more risky behaviours concerning STDs compared to BPD and depression cases. There were no risky behaviours in the depressive patient group. BPD patients had less risky behaviours and better information than schizophrenics. Information about STD and AIDS was mainly obtained through the media and appears to be inadequate; patients were not very different from controls in this regard.

**DISCUSSION**

Risky behaviours which may lead to STD were significantly more prevalent among schizophrenics compared to BPD cases, unipolar depression cases or controls. Although the rates were lower than those reported in previous literature (1,2,3,4,5,6), given the socio-cultural circumstances in Turkey the rates are significant and deserves attention. In Turkey, sex is considered as part of marriage and extra-marital sex is not approved. These society norms constrain casual sex and multiple partners. However, as a result of disturbances in problem solving, planning and judgement, schizophrenic patients are more likely to have casual intercourse, forced sexual intercourse, or be a victim of abuse/rape. Although sexual activity is commonly seen in manic episodes of BPD, we did not observe this in our sample. This may be due to the protective family environment in our society.

In his study that investigates the risky behaviours of mentally ill people, Kelly and colleagues found out that although the level of information in the general population was high, chronic mentally ill people had a significant lack of information about risky behaviours\(^6\). For example 43 per cent thought that heterosexual women could not spread AIDS and 45 per cent thought that individuals with HIV would display symptoms\(^5\). Kalichman and colleagues found that the patients were especially misinformed about means of infection, such as AIDS may spread via coughing/sneezing or sharing a bathroom or kitchen\(^7\). Chandra and colleagues found out no correlation between knowledge and high risk behaviour \(^8\). In our study, lack of
information appears to be prominent. This may be explained by the lower education level in our country compared to Western countries, the media being the means of informing about STD in 73.4 per cent of our sample and lack of education programs about AIDS.

In our sample 8 per cent of BPD, 2 per cent of depression cases, 12 per cent of schizophrenics and 4 per cent of controls had a history of STD, there were no cases of AIDS. Fungal infections, gonorrhea and hepatitis were among the reported infections. In Turkey, the incidence of AIDS is relatively low. The fact that only 1.96 in 100,000 people have HIV/AIDS leads to a disease description as 'in early stage with limited penetration to the general population'⁹. The non existence of AIDS in our patient groups may largely be explained by this fact.

The clinical implications of our study are as follows: (a) This is the first study performed in Turkey concerning the high risky behaviours of female psychiatric outpatients for STD; (b) High risk behaviours regarding STD and HIV/AIDS were reported more frequently in our female psychiatric outpatients compared to controls and (c) Awareness and knowledge about STD were inadequate among female psychiatric outpatients.

The limitations of our study are as follows: (a) The interview questions contained female psychiatric outpatients, past sexually history. Patients may have had difficulty in recalling and reporting accurately; (b) Our data directly depends on the female psychiatric outpatients self reports, although family interviews were also performed for confirmation it may include some biases because of the sensitivity of the subject and (c) Our sample sizes were relatively small.

CONCLUSION

Our Study suggests that the risk of STD and HIV/AIDS in the psychiatric population is increasing in our country, both psychiatrists and primary care doctors should be aware of these high risk behaviours in psychiatric outpatients and consider the possibility of STDs in the early phase of their treatment.

REFERENCES


TABLE : 1 STD risk behaviors

<table>
<thead>
<tr>
<th>Risk Behavior</th>
<th>BPD</th>
<th>Depression</th>
<th>Schizophrenia</th>
<th>Control</th>
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<tbody>
<tr>
<td>Multiple Partner</td>
<td>4</td>
<td>%8</td>
<td>5</td>
<td>%10</td>
</tr>
<tr>
<td>1+partner simultane</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anal intercourse</td>
<td>2</td>
<td>%4</td>
<td>4</td>
<td>%8</td>
</tr>
<tr>
<td>IV drug addicted partner</td>
<td></td>
<td></td>
<td>2</td>
<td>%4</td>
</tr>
<tr>
<td>One night stand</td>
<td>2</td>
<td>%4</td>
<td>5</td>
<td>%10</td>
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<tr>
<td>Intercourse under drug influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercourse for alcohol/drug/shelter</td>
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<td></td>
<td>3</td>
<td>%6</td>
</tr>
<tr>
<td>Forced Intercourse</td>
<td>3</td>
<td>%6</td>
<td>3</td>
<td>%6</td>
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TABLE : 2. Knowledge about AIDS

<table>
<thead>
<tr>
<th>Knowledge about AIDS</th>
<th>BPD</th>
<th>Depression</th>
<th>Schizophrenia</th>
<th>Control</th>
</tr>
</thead>
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<tr>
<td>AIDS is a STD</td>
<td>10</td>
<td>%20</td>
<td>13</td>
<td>%26</td>
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<tr>
<td>Passes to baby in pregancy</td>
<td>21</td>
<td>%42</td>
<td>31</td>
<td>%62</td>
</tr>
<tr>
<td>AIDS is fatal</td>
<td>13</td>
<td>%26</td>
<td>15</td>
<td>%30</td>
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<td>AIDS is a disease of homosexual men</td>
<td>23</td>
<td>%46</td>
<td>30</td>
<td>%60</td>
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<td>AIDS is curable</td>
<td>27</td>
<td>%54</td>
<td>34</td>
<td>%64</td>
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<tr>
<td>Condom is protective in AIDS</td>
<td>23</td>
<td>%46</td>
<td>34</td>
<td>%64</td>
</tr>
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<td>AIDS is transmitted by blood</td>
<td>15</td>
<td>%30</td>
<td>23</td>
<td>%46</td>
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<td>AIDS is frequent in IV drug user</td>
<td>29</td>
<td>%58</td>
<td>36</td>
<td>%72</td>
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