RISK FACTORS FOR DEPRESSION

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ABSTRACT
The role of social factors in the causation of depression based on the aetiological model proposed by Brown and Harris was examined in a sample of 50 depressed female patients. Loss of mother before age 11 years and lack of confiding relationship was found to act as a vulnerability factor whereas employment status and having three or more children aged 14 or under were not found to have an increased vulnerability in these patients. These results which provide general support for Brown and Harris’s causal model are discussed with their possible implications in our socio-cultural settings (JPMA 42: 57, 1992).

INTRODUCTION
Depression is a common psychiatric disorder in general and in hospital practice\(^1\). Different biochemical\(^5,6\), endocrinological\(^7-9\) and genetic factors\(^10\) have been proposed in the onset of this illness. Social factors may also be responsible for the onset and the maintenance of depressive symptoms\(^11,12\). Brown and colleagues\(^13\) identified four vulnerability factors which increased the chances of developing a depressive illness among females in the presence of adverse life events or difficulties. These factors included, loss of mother before 11 years of age, presence of 3 or more children aged less than 14 years at home, lack of confiding relationship and lack of full or part time employment. This model was tested in various developed countries and certain additions and deletions were suggested in the number of these factors\(^14-18\). Their role, however, needs to be determined in developing countries where social relationships are reported to be more integrated and extended\(^19\). The main objective of our study was to replicate Brown and Harris’s\(^13\) work in this culture and see whether vulnerability factors proposed by them were associated with depression in Pakistani female patients.

PATIENTS AND METHODS
Fifty depressed female patients admitted in the Department of Psychiatry, Mayo Hospital Lahore, from November, 1989 to July, 1990 were included in the study. They fulfilled the DSMIIIR diagnostic criteria for depression and the index admissions were the first episode of their illness. Information was collected about general demographic data, details of employment, marital relations, ages of children at home and loss of mother before age 11 years. Additional information was also collected about the presence of depression in the family. The data was also collected from fifty male depressive patients and fifty non-psychiatric female patients of same age and socioeconomic status for comparison with female depressive patients. Statistical analysis for interrelationships between the groups was carried Out with Chi square test.

RESULTS
Table I shows the general demographic informations about the patients included in the study.

**TABLE I.**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Depressed patients</th>
<th>Control (nondepressed patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Females (n = 50)</td>
<td>Males (n = 50)</td>
</tr>
<tr>
<td>Age (mean)</td>
<td>38.78 yrs.</td>
<td>40.36 yrs.</td>
</tr>
<tr>
<td>Hamilton score (mean)</td>
<td>38.54</td>
<td>32.86</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>43</td>
<td>47</td>
</tr>
<tr>
<td>Not married</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Employment status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>17</td>
<td>40</td>
</tr>
<tr>
<td>Unemployed</td>
<td>33</td>
<td>10</td>
</tr>
</tbody>
</table>

Table I shows the general demographic informations about the patients included in the study.

**TABLE II. Vulnerability factors in depressed males, females and nondepressed females.**

<table>
<thead>
<tr>
<th>Factors</th>
<th>Depressed females (n = 50)</th>
<th>Nondepressed females (n = 50)</th>
<th>Depressed males (n = 50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor marital relations</td>
<td>23(46)**</td>
<td>9(18)**</td>
<td>19(38)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>33(66)$</td>
<td>44(88)</td>
<td>10(20)$</td>
</tr>
<tr>
<td>Loss of mother before age of 11 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of 3 or more children under 14 years at home</td>
<td>38(76)</td>
<td>41(82)</td>
<td>30(60)</td>
</tr>
<tr>
<td>Family history of depression</td>
<td>23(46)$</td>
<td>7(14)$</td>
<td>20(40)</td>
</tr>
</tbody>
</table>

Table II shows the comparative results in terms of presence or absence of Brown and Harris’s proposed vulnerability factors and family history of depression among three groups of patients. Family history of depression, loss of mother before age 11 years and poor marital relations were significantly more frequent in depressive females whereas male depressives did not show any significant difference from female depressives in terms of these factors, except unemployment.

**DISCUSSION**
The present study, which replicated Brown and Harris’s findings, confirmed the presence of some of their proposed psychosocial vulnerability factors in depressed Pakistani females. The lack of an intimate relationship has shown to increase the vulnerability of depression in almost all studies\textsuperscript{13,14,16}. The present work confirmed these findings as both male and female depressive patients showed significantly more problems in such relationships than nondepressives. Loss of mother before age 11 years as a cause of depression, observed in this study has also been reported in other series\textsuperscript{20,21}. The relationship can, however, be argued as far as the pathways to depression are concerned as it is still to be found whether this early loss acts as a provoking agent, as a vulnerability factor or as a symptom formation factor. The next factor, i.e., having three or more children aged 14 years or under, living at home did not show a statistically significant difference between depressive and non-depressive female patients. This finding is surprising in the light of previous work\textsuperscript{13} but the rearing practice in our culture and common occurrence of a large family with its protective functioning may explain this difference. Contrary to the previous reports\textsuperscript{22,23}, no significant difference was observed between depressive and non-depressive female patients in terms of employment. The cultural difference in our social set up may explain this finding as “women at job” is not a popular concept in our society and females do not often opt for employment. The comparison between depressed females and males, however, showed that unemployment was more marked among females. This result may simply show an artifact in the data collection or it might be truly the case that unemployment, if present, has more adverse effects on females. There is no doubt that every culture is experiencing rapid social changes and opportunities available to women are also representing a radical break from traditions in every society. Employment is, therefore, an area which may operate as a significant source of stress for females in coming years but its relationship with mental illnesses will be worth testing in further studies. Although presence of family history of depression was not considered as a vulnerability factor in the original work of Brown and Harris\textsuperscript{13}, the role of heredity in affective disorders is established in the literature\textsuperscript{10}. The present results provide further support to the notion that family history of depression is a major risk factor and the chances of developing a depressive illness becomes more if a close relative has suffered from this disorder. The relationship of genetic loading to social adversities, however, needs to be clarified as a recent study from London\textsuperscript{24} has suggested that the first degree relatives of depressive patients are not only predisposed to develop depression but are also more liable to experience severe life events, thus experience to social adversities is also familial. The present study confirmed the presence of Brown and Harris’s\textsuperscript{13} two vulnerability factors, i.e., loss of mother before age 11 years and lack of confiding relationship in Pakistani depressed female patients whereas presence of 3 or more children at home under 14 years age and employment status did not show a significant difference between depressed and non-depressed female patients. The fact that two of the hypothesized vulnerability factors did not show the expected effects, do not disprove the Brown and Harris’s\textsuperscript{13} model. The value of this model as a general explanatory tool is a useful device for organizing currently available knowledge. The practical implications of this work do need special mention. Psychosocial stresses are associated with depression and may, therefore, be considered important areas of intervention for treatment and prevention strategies. The results of this study have emphasized the role of some of the psychosocial aspects but many are left, e.g., self esteem\textsuperscript{25}, personality make up\textsuperscript{26}, family environment\textsuperscript{27} and social support\textsuperscript{28}. These factors may be important in the development of depression. In case of losses, patient develops profound hopelessness and finds it difficult to work through the grief process because of the feelings of low self. Presence of 3 or more children at home or even financial problems may permit the patient to be less able to move into new areas of activity or make new contacts and thus isolation can lead to more sense of low self esteem and later on to depression. These observations suggest that future research should focus on the clusters of risk factors in addition to those which have been studied. It is proposed that further studies should be designed in a longitudinal way so that we could refine and
improve our understanding about role of these factors in a better and confident way.

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REFERENCES