Family functioning of patients with an eating disorder compared with that of patients with obsessive compulsive disorder

Atila Erol, Fadime Yazici, Gulser Toprak

Department of Psychiatry, Osmangazi University Faculty of Medicine, Eskisehir 26480, Turkey
Yunusemre State Hospital, Psychiatry Clinic, Tepebasi Eskisehir 26190, Turkey
Anadolu University Faculty of Education, Eskisehir 26470, Turkey

Abstract

This study compares the family functioning of patients with anorexia nervosa (AN), bulimia nervosa (BN) and obsessive compulsive disorder (OCD). The study participants, who were all female, consisted of 15 patients with AN, 13 with BN, and 17 with OCD. Family functioning was assessed by using the Family Assessment Device self-rating scale. The study subjects also completed the Eating Attitudes Test. Subjects in the AN and BN groups did not differ statistically either from each other or from the OCD group in all 7 Family Assessment Device subscales. Patients with an eating disorder and OCD rated their family functioning in a similar way. It is difficult to conclude that patients with AN or BN have a specific type of family functioning, which is totally different from the family functioning of patients with OCD. Thus, the study results further support the idea that family interaction in eating disorders is not specific to these disorders, especially when compared with patients with OCD.

© 2007 Elsevier Inc. All rights reserved.

1. Introduction

An abnormal pattern of family interaction is routinely cited as an important factor influencing the development and course of anorexia nervosa (AN) [1,2]. The main assumption about family interaction and AN is that AN symptoms exhibited by the identified patient are an alternative expression of underlying, unspoken family conflict. The “psychosomatic family” theory of Minuchin et al [1] suggests that families of patients with AN have specific interactional features that may trigger the onset of the psychophysiological processes. The transactional characteristics of an anorexic patient’s family organization include enmeshment, rigidity, overprotectiveness, and lack of conflict resolution.

Family functioning studies [3,4] report that there are general dysfunctions in families of individuals with eating disorder (ED) when compared with that of controls. According to the findings of Kog and Vandereycken [5], families of individuals with ED show more conflict avoidance and rigidity than that of controls. The anorectic patient’s family had interpersonal boundary problems and interactions avoiding conflicts. Patients with bulimia nervosa (BN) reported high levels of family conflict and distress within their families [6-8]. However, results of family functioning studies of individuals with ED are equivocal. Gowers and North [9] reported no relationship between reports of family functioning by adolescents and the severity of AN. These studies provide tentative and limited support for the aforementioned descriptions of family functioning of patients with EDs [10,11].

The results of the comparisons of family ratings of patients with ED and patients with other psychiatric diagnoses are intriguing. According to the results of a study, ratings by BN patients were almost identical to the ratings of patients with anxiety disorder [12]. The family environment of adolescents either with EDs or depression did not differ from each other [13]. It is not yet clear whether any reported and speculated abnormalities in perception of family functioning are specific to ED. Despite the large amount of theoretical information regarding family functioning in ED patients, there is only limited data, which are not enough for neither validating the theories nor describing the functioning type of these families [14].
The relationship between and comorbidity of ED and obsessive compulsive disorder (OCD) have been extensively investigated [15-19]. Research findings show that ED has a considerable psychopathological overlap with OCD [20]. Hence, obsessions and compulsions cause a significant amount of distress and have a significant negative impact on the sufferer’s interpersonal relations [21]. In a study done by Hollander et al [22], 70% of patients with OCD reported having difficulties in their family relationships secondary to their OCD symptoms. Patients with OCD had more impairment in their family lives and daily activities than patients with social anxiety and panic disorder [23]. Difficulty in interaction with families is another overlapping feature of OCD with ED. Comparison of family functioning patterns of patients with ED and patients with OCD have not been investigated so far, although OCD has more considerable overlapping features with ED than depression, panic disorder, and social phobia.

In this study, we tried to compare the family functioning styles of patients with OCD and EDs. Based on the similarity between OCD and EDs, it was hypothesized that family functioning ratings of patients with OCD and ED would not differ from each other significantly. In this respect, we questioned whether patients with OCD and ED rated their families differently from each other.

2. Method

2.1. Subjects

Of 45 subjects, all of whom were female, 15 were diagnosed with AN, 13 with BN, and 17 with OCD according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition criteria. There were no referrals of male subjects during the course of the study. The inclusion criteria were to be single and to live with at least 1 biologic parent. The subjects with AN were admitted consecutively to the Osmangazi University Medical Faculty, Department of Psychiatry. Patients with OCD were admitted likewise to the Eskisehir Yunusemre State Hospital. Subjects participated in the study voluntarily after their informed consents were obtained, and the study was approved by the human subject ethical committee of Yunusemre State Hospital.

Because we did not have any referrals of bulimic cases, subjects with BN were selected among university students. Of the students who were contacted, 411 undergraduate students attending Anadolu University in Eskisehir, a midland city in Turkey, agreed to participate in the survey, and they were submitted the scales. The participants represented 2.2% of the student population, which was 18546 in total. The students were recruited via a random selection. Questionnaires filled out by 129 male students were not included, and 3 subjects were excluded because of insufficient completion of forms. Of the 279 female students, 17 scored 30 and above in the EAT. Of these, 2 did not agree to participate in a diagnostic interview. The remaining 15 of the 17 subjects were interviewed by a clinician, and 13 of them fulfilled the criteria for BN according to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.

Table 1 shows mean (±SD) values of some subject characteristics in OCD, AN, and BN groups.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>OCD Mean (SD)</th>
<th>AN Mean (SD)</th>
<th>BN Mean (SD)</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>21.65 (5.6)</td>
<td>23.53 (6.02)</td>
<td>19.23 (1.3)</td>
<td>2.59</td>
<td>.080</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>164.24 (6.9)</td>
<td>160.8 (7.2)</td>
<td>164.77 (4.5)</td>
<td>1.62</td>
<td>.200</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>53.65 (4.7)</td>
<td>42.27 (12.0)</td>
<td>58.62 (6.7)</td>
<td>14.4</td>
<td>.000</td>
</tr>
<tr>
<td>BMI</td>
<td>19.95 (2.1)</td>
<td>16.15 (3.6)</td>
<td>21.56 (1.9)</td>
<td>15.1</td>
<td>.000</td>
</tr>
<tr>
<td>Education year</td>
<td>11.06 (3.5)</td>
<td>12.13 (2.9)</td>
<td>12.31 (0.4)</td>
<td>0.91</td>
<td>.400</td>
</tr>
<tr>
<td>EAT</td>
<td>17.06 (7.8)</td>
<td>37.13 (20.6)</td>
<td>36.77 (8.1)</td>
<td>11.3</td>
<td>.000</td>
</tr>
</tbody>
</table>

2.2. Measures

2.2.1. Family Assessment Device

Family Assessment Device (FAD) is a self-report questionnaire designed to assess specific aspects of family functioning [24]. Family Assessment Device was based on the well-conceptualized McMaster Model of Family Functioning, a clinically oriented model of families that assesses structural, organizational, and transactional dimensions found to distinguish between healthy and unhealthy families in 7 different dimensions, as follows: general functioning (the overall health/pathology of the family), problem solving (the way in which the family resolves problems), communication (the clarity and appropriateness of the distribution of family roles), affective involvement (the extent to which family members are interested in each other’s activities and concerns), and behavior control (the clarity of family rules). Each item is scored on a 4-point Likert scale, where the participant rates his/her agreement with the statement (1 = strongly agree; 4 = strongly disagree). All the subjects participating in the study have completed the Turkish version of the FAD (60-item version) questionnaire [25].

2.2.2. Body mass index

Body mass was calculated using the body mass index (BMI): = weight (kg)/height² (m²).

2.3. Eating Attitudes Test

The Eating Attitudes Test (EAT) is widely used for self-rated screening to determine abnormal eating attitudes and has been proven to be effective in detecting AN and BN [26]. It contains 40 items with 6 possible answers for each statement ranging from “never” (0) to “always” (3). The cutoff score of 30 shows a potential risk of developing ED. Eating Attitudes Test was found to be a highly reliable measurement with an internal consistency of .94 for a pooled sample of participants with AN and those in control
groups. A translated experimental version validated in Turkish was used in this study [27]. To investigate group differences in FAD data, multivariate analysis of variance and analysis of variance were calculated. All statistical analyses were performed using SPSS (SPSS, Chicago, Ill).

3. Results

As shown in Table 1, patients with BN, AN, and OCD did not differ significantly in age, height, and education variables. Patients with AN had significantly lower scores than patients with BN and OCD.

A 1-way, between-groups multivariate analysis of variance was performed to investigate diagnostic differences in family functioning. Seven dependent variables were used: problem solving, communication, roles, affective responsiveness, affective involvement, behavioral control, and general functioning subscale scores of FAD. The independent variable was the diagnosis of the subject. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with linearity, univariate and multivariate outliers, homogeneity of variance, and specific ED diagnosis when including an OCD comparison group. Patients with ED and OCD were not different from each other as far as perceived family difficulties were concerned. Moreover, no significant differences were observed between family functioning ratings of AN and BN patients. Patients in the OCD, AN, and BN groups were comparable for the variables such as age, education, year, and height (see Table 1).

Although research findings suggest that there may be a different familial component to both AN and BN and that the nature of the disturbed processes may differ between AN and BN [5,28], our findings did not support this hypothesized difference. The AN and BN groups showed similar perceived family functioning as in the findings of Waller et al [3]. The association of family functioning style with a particular disorder or ED is complicated and not clear. However, any reported and speculated abnormalities in perception of family functioning are not specific to AN because ratings by patients with BN and OCD were almost identical to those by patients with AN. Although there is limited evidence in the literature that families with a patient with ED interact in a different way than normal families, there is not enough research showing that these family dysfunctions are specific to ED.

Our findings regarding FAD ratings of patients with ED and OCD, which were indistinguishable statistically, may have several explanations. Some authors, however, conclude that family dysfunction characteristics are secondary to the presence of an ill family member, rather than being causative [11,29]. Atypical features in family functioning have been frequently implicated as a causative factor in AN and BN; however, this has not been postulated for OCD. Our results suggest that the family functioning characteristics of AN and BN as presented by patients seem to closely resemble those reported by patients with OCD. Perceived family dysfunctions may be the consequence of having one of the general psychopathologies such as AN, BN, OCD, or depression. Another assumption is the possibility that a similarity between family functioning ratings of patients with AN, BN, and OCD have been found because of powerful obsessive characteristics—which are also highly likely in EDs—being reflected into family relationships in a likewise manner. This similarity may be the result of the adverse impact of common OCD symptoms existing in all 3 diagnoses because OCD symptoms are associated with significant impairments in home and social functioning [30].

Despite the limitations of our study—such as the small sample size, not including a control group without any psychiatric diagnosis, uncontrolled effect of sex, self-report measure evaluation, and cross-sectional nature—these findings suggest that the general application of a psychosomatic family theory to these patient groups should be viewed with considerable caution. Nevertheless, this study should be repeated in a larger group of patients.

4. Discussion

Our results failed to support the previous findings, which suggested an association between family functioning types and specific ED diagnosis when including an OCD comparison group. Patients with ED and OCD were not different from each other as far as perceived family difficulties were concerned. Moreover, no significant differences were observed between family functioning ratings of AN and BN patients. Patients in the OCD, AN, and BN groups were comparable for the variables such as age, education, year, and height (see Table 1).

Table 2

<table>
<thead>
<tr>
<th>FAD scale</th>
<th>OCD (17) Mean (SD)</th>
<th>AN (15) Mean (SD)</th>
<th>BN (13) Mean (SD)</th>
<th>F2,42 P</th>
</tr>
</thead>
<tbody>
<tr>
<td>General functioning</td>
<td>1.98 (.65)</td>
<td>2.19 (.73)</td>
<td>2.07 (.38)</td>
<td>0.43 .65</td>
</tr>
<tr>
<td>Problem solving</td>
<td>2.05 (.62)</td>
<td>2.14 (.65)</td>
<td>2.46 (.38)</td>
<td>1.70 .19</td>
</tr>
<tr>
<td>Communication</td>
<td>1.86 (.38)</td>
<td>2.27 (.72)</td>
<td>2.29 (.49)</td>
<td>2.52 .09</td>
</tr>
<tr>
<td>Roles</td>
<td>1.98 (.45)</td>
<td>2.15 (.52)</td>
<td>2.06 (.41)</td>
<td>0.54 .58</td>
</tr>
<tr>
<td>Affective responsiveness</td>
<td>2.30 (.71)</td>
<td>2.15 (.71)</td>
<td>2.26 (.51)</td>
<td>0.21 .81</td>
</tr>
<tr>
<td>Affective involvement</td>
<td>2.26 (.35)</td>
<td>2.19 (.53)</td>
<td>2.00 (.29)</td>
<td>1.54 .22</td>
</tr>
<tr>
<td>Behavioral control</td>
<td>2.26 (.34)</td>
<td>2.00 (.63)</td>
<td>2.01 (.31)</td>
<td>0.61 .54</td>
</tr>
</tbody>
</table>

49

Although research findings suggest that there may be a different familial component to both AN and BN and that the nature of the disturbed processes may differ between AN and BN [5,28], our findings did not support this hypothesized difference. The AN and BN groups showed similar perceived family functioning as in the findings of Waller et al [3]. The association of family functioning style with a particular disorder or ED is complicated and not clear. However, any reported and speculated abnormalities in perception of family functioning are not specific to AN because ratings by patients with BN and OCD were almost identical to those by patients with AN. Although there is limited evidence in the literature that families with a patient with ED interact in a different way than normal families, there is not enough research showing that these family dysfunctions are specific to ED.

Our findings regarding FAD ratings of patients with ED and OCD, which were indistinguishable statistically, may have several explanations. Some authors, however, conclude that family dysfunction characteristics are secondary to the presence of an ill family member, rather than being causative [11,29]. Atypical features in family functioning have been frequently implicated as a causative factor in AN and BN; however, this has not been postulated for OCD. Our results suggest that the family functioning characteristics of AN and BN as presented by patients seem to closely resemble those reported by patients with OCD. Perceived family dysfunctions may be the consequence of having one of the general psychopathologies such as AN, BN, OCD, or depression. Another assumption is the possibility that a similarity between family functioning ratings of patients with AN, BN, and OCD have been found because of powerful obsessive characteristics—which are also highly likely in EDs—being reflected into family relationships in a likewise manner. This similarity may be the result of the adverse impact of common OCD symptoms existing in all 3 diagnoses because OCD symptoms are associated with significant impairments in home and social functioning [30].

Despite the limitations of our study—such as the small sample size, not including a control group without any psychiatric diagnosis, uncontrolled effect of sex, self-report measure evaluation, and cross-sectional nature—these findings suggest that the general application of a psychosomatic family theory to these patient groups should be viewed with considerable caution. Nevertheless, this study should be repeated in a larger group of patients.

References
