Original article / *Araştırma*

Alexithymia levels in patients with unipolar and bipolar depression and the effect of alexithymia on both severity of depression symptoms and quality of life

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ABSTRACT

Objective: *Aims of this study are to compare the alexithymia scores of patients with unipolar depression (UD), bipolar affective disorder depressive episode (BAD-D) and healthy controls, to explore the effects of alexithymia scores on both severity of depression symptoms and quality of life.* ***Methods:*** *Case group of the study is consisted of one hundred and eighteen UD diagnosed, forty eight BAD-depression diagnosed patients, based on DSM-IV-TR criteria. Control group of the study is consisted of ninety six people who had no history of psychiatric disease. Overall, 262 people had involved in the study. Sociodemographic and Clinical Data Form, Hamilton Rating Scale for Depression (HRDS), Beck Depression Inventory (BDI), Toronto Alexithymia Scale (TAS-20) and SF-36 Quality of Life Scale are used for acquiring information of the patients.* ***Results:*** *Mean of age, gender, marital status, place for living, level of income of UD, BAD-D and control groups were similar. Statistically significant differences were observed in between UD, BAD-D and control groups, in terms of HRDS, TAS-20 and SF-36 scores. Mean group scores of UD and BAD-D group were higher than controls, in terms of all scales. However, mean points of UD and BAD-D groups were similar in terms of four scales. Patients with UD and BAD-D had positive relationship with TAS-20, BRDS and BDI; negative relationship between SF-36, significantly. In conclusion, it is found that alexithymia scores of UD and BAD-D groups were higher; quality of life scores were lower than controls. It is also observed that patients with higher alexithymia scores have more severe depressive symptoms and having a less sense of quality of life. Although our findings indicate that presense of alexithymia is important in depressive disorders, however no difference were found between alexithymia scores in patients with UD and BAD-D.* ***Discussion:*** *Alexithymia scores of all groups had positively related with depression, negatively related with quality of life. Our findings showed that, alexithymia is an important factor to the diagnosis of depressive disorders, however alexithymia is not a marker to make differential diagnosis of BAD-D and UD.* ***(Anatolian Journal of Psychiatry 2016; 17(5):362-368)***

Keywords: *Alexithymia, quality of life, unipolar depression, bipolar depression*

Bipolar ve unipolar depresyonda aleksitimi düzeyleri ve depresif belirti şiddeti ile yaşam kalitesi üzerine etkisi

ÖZ

Amaç: *Bu çalışmada unipolar depresyon (UD), bipolar afektif bozukluk depresif nöbet (BAB-D) olguları ve sağlıklı kontrollerin aleksitimi düzeylerini karşılaştırmak, bununla ilişkili olarak aleksitimi puanlarının depresif belirti şiddeti ve yaşam kalitesi puanları üzerine etkisini incelemek amaçlanmıştır.* ***Yöntem:*** *Çalışmada DSM-IV-TR ölçütlerine göre ruhsal durum muayenesi ile UD tanısı konan 118 hasta, BAB depresif nöbette olan 48 hasta olgu grubunu oluşturmuştur. Herhangi bir psikiyatrik bozukluğu olmayan 96 kişi kontrol grubu olarak alınmıştır. Toplam 262 kişi çalışmaya alınmıştır. Veri toplama aracı olarak Sosyodemografik ve Klinik Veri Formu, Hamilton Depresyon Dere-*

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celendirme Ölçeği (HDDÖ), Beck Depresyon Ölçeği (BDÖ), Toronto Aleksitimi Ölçeği (TAÖ-20) ve SF-36 Yaşam Kalitesi Ölçeği kullanılmıştır. ***Sonuçlar:*** *UD, BAB-D ve sağlıklı kontrol gruplarının yaş ortalamaları, cinsiyetleri, medeni durumları, yaşadıkları coğrafi bölge ve gelir düzeyleri açısından birbirine benzerdi. UD, BAB-D ve sağlıklı kontrol gruplarına ait HDDÖ, BDÖ, TAÖ-20 ve SF-36 ölçek puanları arasında istatistiksel olarak anlamlı fark vardı. UD ve BAB-D hasta gruplarında tüm ölçeklerde ortalama grup puanları kontrol grubundan daha yüksekti. UD ile BAB-D gruplarının dört ölçek için ortalama puanları birbirine benzerdi. Hem UD, hem de BAB-D hasta gruplarında TAÖ-20 ile HDDÖ ve BDÖ arasında pozitif yönde anlamlı ilişki, SF-36 ile arasında ise negatif yönde anlamlı bir ilişki bulundu. Sonuç olarak UD ve BAB-D hastalarının aleksitimi düzeylerinin kontrol grubundan yüksek olduğu; yaşam kalitesi puanlarının kontrol grubundan daha düşük olduğu saptanmıştır. Tüm olguların aleksitimi puanlarının artışı ile depresif belirti şiddetlerinin artış gösterdiği, yaşam kaliteleri puanlarında ise azalma olduğu bulunmuştur. Elde ettiğimiz sonuçlar depresif bozukluklarda aleksitimi varlığının önemli olduğunu gösterse de, BAB-D ve UD hastaları arasında aleksitimi düzeyinin farklı olmadığı saptandı.* ***(Anadolu Psikiyatri Derg 2016; 17(5):362-368)***

Anahtar sözcükler: *Aleksitimi, yaşam kalitesi, unipolar depresyon, bipolar depresyon*

INTRODUCTION

Alexithymia refers to a specific disturbance in emotional processing of people that is manifested by difficulties in identifying and verbalizing feelings and also states decline of people's ability to dream of.[1] Recent studies show that alexithymia is related with dissociation, alcoholism, pathologic gambling, substance dependence, depression, psychogenic pain, anxiety disorder, panic disorder and obsessive compulsive disorder, posttraumatic stress disorder, eating disorder, somatoform disorder and personality disorders.[2]

Alexithymia has a permanent pattern, according to some studies. Studies that relate with depression,[3] eating disorders[4] and substance dependence[5] show that these pathologies have the tendency of 'decreased symptoms' with the appropriate therapy, however; alexithymia has not. Thus, alexithymia could be a permanent personality pattern, just because of having stable scores after receiving appropriate therapy.[2] On the other hand, decrease of alexithymia scores after receiving therapy are observed in some studies. To illustrate, patients who are received therapy for phobia, panic disorder or depression have significantly lower alexithymia scores.[6,7] Therefore, alexithymia could be defined as the result of the depression.[8] It is also known that alexithymia could seen in general population.[9] Moreover, alexithymic patterns have related with female gender, genetic predisposition, elder age, undereducated and poor perception of health.[10]

Quality of life is defined as physical, social and psychological well-being.[11] It is known that when problems arise in the biopsychosocial adaptation process, it has a negative effect on the patient's quality of life.[12] Thus, evaluation of the quality of life and alexithymia in patients with depression becomes particularly import. Studies about this subject states that depressed patients have lower quality of life. Moreover, a relationship between alexithymia and quality of life is also revealed.[13,14]

The aim of this study is to explore whether; alexithymia could be a marker for differentiating UD and BAD-D, patients with UD or BAD-D's alexithymia levels differ from healthy controls and alexithymia levels of these patients have related with both depression symptoms and quality of life.

METHODS

Patient and control groups

This study is conducted with 118 UD-diagnosed, 48 BAD-D-diagnosed and 96 people with no history of psychiatric diseases, who applied to Erciyes University School of Medicine Psychiatric Polyclinic in July -October 2012. Patients who were older than 18 and who had graduated from primary school were enrolled in the study. Patients had informed about the aim, definition and details of the study and also clarified that they had right to refuse to enroll or stop the interview any time they wanted to. After debriefing; patients who signed informed consent had received for consideration of the study. Patients who had comorbid psychiatric diseases, mental retardation severe neurologic or general medical condition and who received ECT in the last six months were excluded from the study.

Data collection tools

Sociodemographic and Clinical Data Forms: Form that includes participant's demographic features, such as age, gender, marital status, occupation, educational level, city of living, alcohol-substance use and smoking habits, level of income and clinical features such as family history of physical and psychological disease are established by researchers.

Hamilton Rating Scale for Depression (HRSD): HRSD which is designed to evaluate the severity of depression is developed by Hamilton in 1960. Although original scale had consisted of 21 items, Hamilton suggested researchers to use the first 17 items. Remaining 4 items are either seen rarely (depersonalization) or defined the dimension of the disease (diurnal range) instead of the severity of the disease. Items in HRDS are ranked between 0-4 or 0-2. Maximal score of the scale is 53. Akdemir et al conducted a Turkish validation and safety study of HDRS in 1996.[15] Cut off points are >23, very severe depression 19-22, severe depression 14-18, moderate depression 8-13, mild depression and ≤7 normal. According to internal consistency studies for HRSD, Cronbach's alpha value and reliability coefficient were found in 0.75 and 0.76, respectively.[16]

Beck Depression Inventory (BDI): BDI consists of 21 items which evaluate the patient's perceived depression symptoms in a quantitative way; also vegetative, emotional, cognitional signs in depression and signs in section of motivation. Each sign has a set of at least four choices. Participants are required to sign one choice which is most likely to fit him. Each question is ranked from 0 to 3, so the total score of this scale ranges from 0 to 63. Higher scores show higher severity of depression. It is argued that people whose BDI score is greater than or equal to 17 could be in a risk group.[17] Validation and safety study of this scale is conducted by Hisli et al in undergrads.[18]

Toronto Alexithymia Scale (TAS-20): This Likert type, self-assessment scale has 20 items that are graded 1 to 5. It has subscales such as difficulty describing feelings (TAS-1), difficulty identifying feeling (TAS-2) and externally-oriented thinking (TAS-3). It is suggested that '51' point should be named as lowest value if alexithymic people should be noticed, '59' point should be named as highest value if only pure alexithymic people are wanted to work with. 'Eleven' point, according to TAS-26[19] adaptation of this scale into Turkish is conducted by Gulec et al. Total scale Cronbach's alpha value was found in 0.78, subscales's were found in between 0.57 and 0.80.[20]

SF-36 Quality of Life Scale: It is a 36-item, patient-reported scale. It has eight sections: physical functioning (10 item), role physical (4 item), bodily pain (2 item), general health (5 item), vitality (4 item), social functioning (2 item), role-emotional (3 item) and mental health (5 item). Items scores are calculated for each section and it is also converted as a scale by rating each condition 0 (worst health condition) to 100 (best health condition). Mean of first four subscale scores and last four subscale scores are known as physical component (PC) and mental component (MC), respectively. Validity and safety of the Turkish version of this scale is concluded by Kocyigit et al.[21]

Statistical analysis

Kolmogorov-Smirnov test was used for testing for normality of the distribution of data set. Mean of groups age and sociodemographic features were conducted with Mann-Whitney U, Pearson chi-square, Yates chi-square and Fisher's Exact Test, respectively. Kruskall-Wallis test for triple, Mann Whitney U test for paired comparisons of HRDS, BDI, TAS-20 and SF-36 scores for the patient and control groups are used. Relationships between TAS-20 scores to other parameters are evaluated with Spearman Correlation Test. Correlation coefficients were categorized into, insignificant correlation (0.05-0.30), mild-moderate correlation (0.40-0.60), strong correlation (0.60-0.70), very strong correlation (0.70-0.75), perfect correlation (0.75-1.00). Results were accepted as statistically significant if they had 95% confidence interval and their p value were lower than 0.05. All data were analyzed using Statistical Package for Social Science (SPSS) Windows Version 11.5.

RESULTS

Mean age of UD, BAD-D and control group were 37.29±13.25 (range: 18-73), 39.42±11.17 (range: 20-64), 33.88±11.39 (range: 23-57), respectively (ANOVA, p=0.197)

Comparing sociodemographic features of UD, BAD-D and control groups, no significant relationship was observed in terms of mean age, gender, marital status, place of birth, place of living and income level. Significant relationship was observed among groups in terms of education, working status, smoking and alcohol and/or substance use (p<0.001), (Table 1).

There was no significant relationship between UD and BAD-D groups in terms of age at disease onset and duration of disease (respectively, p=0.154, p=0.076).

Difference among three groups according to cut-off points of TAS-20 were statistically significant (p<0.001). Alexithymia score of the healthy control group was lower than the other groups'

Table 1. Comparisons and dispersion of characteristics of study group's people

Sociodemographic characteristics	UD (n=118) n	%	BAB-D (n=48) n	%	Control (n=96) n	%	p (χ^2)
Gender							0.147
Male	42	35.6	24	50.0	44	45.8	
Female	76	64.4	24	50.0	52	54.2	
Marita status							0.152
Single	51	43.2	22	45.8	54	56.3	
Married	67	56.8	26	54.2	42	43.8	
Education level							<0.001
Primary school	66	55.9	12	25.0	12	12.5	
High school or university	52	44.1	36	75.0	84	87.5	
Working status							<0.001
Unemployed	90	76.3	26	54.2	44	45.8	
Employed	28	23.7	22	45.8	52	54.2	
Place for birth							0.116
Burg or township	47	39.8	14	29.2	26	27.1	
City or Metropolice	71	60.2	34	70.8	70	72.9	
Place for living							0.072
Burg or township	10	8.5	-	-	4	4.2	
City or metropolice	108	91.5	48	100	92	95.8	
Income level							0.137
Minimum wage and less	44	37.3	14	29.2	44	45.8	
Above minimum wage	74	62.7	34	70.8	52	54.2	
Smoking							<0.001
Yes	52	44.1	24	50	2	2.1	
No	66	55.9	24	50	94	97.9	
Alcohol/substance abuse							
Yes	4	3.4	4	8.3	-	-	
No	114	96.6	44	91.7	96	100	

Tablo 2. TAS-20 cut scores, and comparison of groups

Variable	UD (n=118) n	%	BAB-D (n=48) n	%	Control (n=96) n	%	p (χ^2)
TAS-20 ccores							<0.001
<51	18	15.3	4	8.3	60	62.5	
51-59	38	32.2	22	45.8	28	29.2	
>59	62	52.5	22	45.8	8	8.3	

score. This was the reason of difference, according to Post-Hoc analysis. Rates of alexithymia in control, UD and BAD-D groups were 37.5%, 84.7% and 91.6%, respectively (Table 2).

Triple comparisons of the mean scores of HRDS, BDI, TAS-20 and SF-36 showed a statistically significant relationship among groups (p<0.001) Control groups' scale scores was the reason of the difference observed, according to Post-Hoc analysis. UD and BAD-D groups' mean of scale scores were similar. Control group had the higher mean of subscale scores of SF-36 scale (PC: 72.9, MC: 63.9) Lowest means of subscale scores of SF-36 scale were observed in patients with UD (PC: 48.7, MC: 28.2) (Table 3).

TAS-20 and HRDS scores (Spearman correlation) had the mild-moderate (r=0.370, p<0.001), BDI scores had positively moderate (r=0.474, p<0.001) and SF-36 MC scores had negatively mild relationship (r=-0.249, p=0.007) in patients with UD (Table 4).

TAS-20 and BDI scores (Spearman correlation) had positively moderate (r=0.413, p=0.004) and SF-36 PC scores had negatively mild-moderate

Table 3. Relationship of groups in terms of the mean score of scales

Variable	UD (n=118) Mean±SD	BAB-D (n=48) Mean±SD	Control (n=96) Mean±SD	p (Kruskal Wallis)
TAS-20	61.73±11.64	61.71±10.69	48.04±9.71	<0.001
HDRS	30.95±9.47	29.83±8.90	6.73±3.00	<0.001
BDI	31.80±10.97	29.04±10.64	6.08±4.03	<0.001
SF- 36				
Physical component	48.77±20.01	53.92±20.39	72.98±18.78	<0.001
Mental component	28.20±17.61	34.60±21.08	63.97±20.35	<0.001
Physical functioning	53.98±25.06	62.29±23.34	75.88±27.16	<0.001
Role physical	45.34±42.23	51.04±41.56	72.40±34.12	<0.001
Pain	57.29±26.19	62.08±29.38	75.52±19.65	<0.001
General health	38.49±17.89	40.28±20.54	68.14±15.94	<0.001
Vitality	24.15±19.08	32.08±20.31	60.73±21.18	<0.001
Social functioning	36.86±26.80	45.83±29.77	72.14±21.03	<0.001
Role-emotional	19.77±31.50	20.83±30.46	59.03±41.18	<0.001
Mental health	32.00±18.39	39.67±20.64	64.00±21.53	<0.001

Table 4. Relationship of groups in terms of the TAS-20, HDRS, BDI, SF-36 scores

	TAS-20 r	TAS-20 p
UD group		
HDRS	0.370	<0.001*
BDI	0.474	<0.001*
SF-36		
PC**	-0.153	0.098*
MC***	-0.249	0.007*
BAB-D group		
HDRS	0.253	0.083*
BDI	0.413	0.004*
SF-36		
PC	-0.341	0.018*
MC	-0.065	0.663*

** Spearman correlation test; ** PC: Physical compound; *** MC: Mental compound*

relationship (r=-0.341, p=0.018) in patients with BAD-D (Table 4).

DISCUSSION

Depressive disorders, which are one of the most discussed psychiatric diagnoses, are worked with alexithymia recently and it is also studied whether alexithymia has the effect on depressive signs in patients with depression.[22] Frequency of alexithymia in patients with acute phase on major depression ranged 34.1% to 46% in some studies.[23,24] Moreover, relationship between alexithymia and depression is shown in patients with major depression.[7] However studies which are aimed to evaluate the relationship between quality of life and alexithymia in patients with UD or BAD-D are limited. Frequency in population-based studies are ranged 6.7% to 18.8%.[25] In this study, frequencies of pure alexithymia cases (>59) in patients with UD and BAD-D were 52.5% and 45.8% respectively. However, frequency of this case in the control group was 8.3%.

Bagby et al. stated that alexithymia has a strong relationship with depression.[23] Results of some studies implicate that frequency of alexithymia in patients with depression are 39% or 41%.[24]

Yurt's study stated that patients with alexithymia have higher HRDS scores and these scores have linear relationship between three dimensions of TAS-20.[26] In a meta analysis about alexithymia stated a moderate correlation between alexithymia and depression. Another study from Turkey showed that, compared to the controls; higher levels of alexithymia scores are observed in patients with depression sendromically.[28] Results of the study stated that alexithymia scores of both UD and BAD-D patients were higher than healthy controls. However, no statistically significant relationship was observed among two patient groups.

On the other hand, study that explores the alexithymia scores of patients under treatment

showed no relationship between BAD-I, BAD-II and UD cases treated with lithium and alexithymia scores.[29]

Negative relationship is observed between the severity of depression and the quality of life in cases with concomitant depression.[30] In a study including cases with MDD and the patient follow up period of 10 years, in the acute phase, it was observed that there was a significant decrease of points in all scales of the quality of life.[31] Zikic et al. argued that patients with UD had lower scores, compared to healthy controls; in terms of psychical health, psychological health, social relations and environment.[32] Lower Mental and Psychical component scores, which are evaluated via SF-36 in BAD-D cases are observed in other studies, conformably with our study.[33] Therefore, BAD patients with euthymia or non-euthymia (mania/hypomania, depression) had significantly lower SF36 subscale scores, compared to healthy controls.[34]

Deterioration in the quality of life was higher in BAD cases with depression, following mania/ hypomania/euthymia.[35] However, another study stated that patient with BAD-depression episode had lower quality of life than UD cases.[36,37]

Our study has limitations. Just because patient follow-up was not recorded, whether therapy had effected the alexithymia scores could not be evaluated. Patients had different therapy regimes. Moreover patient group and control group were statistically different in terms of, education level, occupation, smoking, and alcohol and/or substance use of patient. So, this may affect the results of study. However, majority of both sociodemographic and clinical features of the groups were similar.

In conclusion, this study implicates that alexithymia scores in both UD and BAD-D cases are higher than controls. Also this study suggests that there is no statistically significant relationship between unipolar depression and BAD-D cases in terms of alexithymia scores is observed. Our findings show the importance of alexithymia in the diagnosis of depressive disorders, sorely; alexithymia scores in UD and BAD-D groups were not statistically different.

Authors' contributions: *Both authors: design, acquisition of data, analysis of data, writing and revising the article.*

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