An Analysis of Alexithymia and Social Support in Patients With Hypertension and Asthma

Hipertansiyon ve Astım Hastalarında Aleksitimi ve Sosyal Desteğin İncelenmesi

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SUMMARY

Objectives: This descriptive study aims to determine the relationship between alexithymia and social support in patients with hypertension and asthma.

Methods: The study population consisted of patients admitted to the Cardiology and Chest Diseases polyclinics in two hospitals in Erzurum (Turkey) between April, 1 and May, 15 2011 and diagnosed with hypertension and asthma. The study sampling consisted of 191 patients with hypertension and 150 patients with asthma (341 patients) who agreed to participate in the study. Data were collected using a personal information form, the Toronto Alexithymia Scale (TAS-20), and the Perceived Social Support from Family and Friends Scale (PSS-FA and PSS-FR). Data were analyzed using percentage distributions, means, t test, and the Pearson correlation test.

Results: Of the patients with hypertension, 38.2%, and of the patients with asthma, 36% were found to be alexithymic. The perceived social support from friends scores of the alexithymic patients with hypertension (p=0.004), and from family of the alexithymic patients with asthma (p=0.002) were lower than those of non-alexithymic patients, and the difference was significant. A significant difference was found between the perceived social support from friends and alexithymia levels of the patients with hypertension and the perceived social support from family and alexithymia levels of the patients with asthma (p<0.001). Lower alexithymia score averages were found to be related to lower perceived social support. The total score average of the patients with hypertension on the alexithymia scale was found to be 59.72±7.56, and their score average on the difficulty in recognizing emotions subscale was found to be 18.4±5.19. The total score average of the patients with asthma on the alexithymia scale was found to be 57.00±7.43, and their score average on the difficulty in recognizing emotions subscale was found to be 15.28±4.40. The total score average on the alexithymia scale and on the difficulty in recognizing the emotions subscale of the patients with hypertension were found to be higher than those of the patients with asthma, and the difference was statistically significant (p≤0.001). The perceived social support from family of the patients with hypertension (14.26±3.65) was found to be higher than that of the patients with asthma (11.83±3.75), and the difference was significant.

Conclusion: It can be concluded that the perceived social support of the alexithymic patients is lower. Patients with an alexithymic chronic disease may need more help, especially from health professionals, in activating social support systems. It is important for health professionals to know the alexithymic patients. Based on these results, it is recommended that healthcare personnel be informed about alexithymia, and protective social support systems be activated in mental problems such as alexithymia that emerge in chronic diseases.

Keywords: Alexithymia; asthma; hypertension; social support.

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ÖZET

Amaç: Bu çalışma, hipertansiyon ve astım hastalarında aleksitimi ve sosyal destek arasındaki ilişkiyi belirlemek amacıyla tanımlayıcı olarak yapılmıştır.

Gereç ve Yöntem: Araştırmanın evrenini Erzurum'da iki hastanede Kardiyoloji ve Göğüs Hastalıkları polikliniklerine 1 Nisan–15 Mayıs 2011 tarihleri arasında başvuran hipertansiyon ve astım tanısı almış hastalar oluşturmaktadır. Örneklemi ise çalışmaya katılmayı kabul eden 191 hipertansiyon ve 150 astım hastası (341 hasta) oluşturmuştur. Veri toplamada kişisel bilgi formu, Toronto Aleksitimi Ölçeği (TAÖ-20), Aile ve Arkadaşlardan Algılanan Sosyal Destek Ölçeği (ASD-AL ve ASD-AR) kullanılmıştır. Verilerin değerlendirilmesinde yüzdelik dağılımlar, ortalamalar, t testi ve pearson korelasyon analizi kullanılmıştır.

Bulgular: Bu çalışmada hipertansiyon hastalarının arkadaştan algıladığı sosyal destek ile aleksitimi düzeyleri ve astım hastalarının aileden algıladığı sosyal destek ile aleksitimi düzeyleri arasında anlamlı bir ilişki olduğu belirlenmiştir(p<0.001). Çalışmamızda düşük aleksitimi puan ortalamalarının düşük sosyal destek algısı ile ilişkili olduğu belirlenmiştir. Çalışma sonucunda hipertansiyon hastalarının aleksitimi ölçeği toplam puan ortalaması (59.72±7.56), duyguları tanıma zorluğu alt boyutu puan ortalaması (18.4±5.19); astım hastaların da ise aleksitimi ölçeği toplam puan ortalaması (57.00±7.43), duyguları tanıma zorluğu alt boyut puan ortalaması (15.28±4.40) olarak bulunmuştur. Hipertansiyon hastalarında aleksitimi ölçeği toplam puan ortalaması ve duyguları tanıma zorluğu alt boyutu puan ortalamasının astım hastalarına göre daha yüksek olduğu ve aradaki farkın istatistiksel olarak anlamlı olduğu belirlenmiştir. Hipertansiyon hastalarının aileden algıladıkları sosyal desteğin puan ortalaması (14.26±3.65), astım hastalarında ise hipertansiyon hastalarına göre daha düşük olduğu (11.83±3.75) ve aradaki farkın anlamlı olduğu belirlenmiştir.

Sonuç: Sonuç olarak aleksitimik olan bireylerin sosyal destek algılarının düşük olduğu söylenebilir. Bu sonuçlar doğrultusunda aleksitimi konusunda sağlık personelinin bilgilendirilmesi, kronik hastalıklarda oluşabilecek aleksitimi gibi ruhsal sorunlarda koruyucu etkisi olan sosyal destek sistemlerinin harekete geçirilmesi önerilmektedir.

Anahtar sözcükler: Aleksitimi; astım; hipertansiyon; sosyal destek.

Introduction

Alexithymia is defined as the difficulty in recognizing the emotions and distinguishing them from physical senses, in expression of the emotions, and in concrete thinking. [1] There are many different opinions on alexithymia, such as being a personal tendency, a situation arising from insufficient social support, a psychological disorder or a clinical symptom, a psychosomatic disease, a cognitive disorder, a personality trait, or a neurological problem. [2] Some specialists have suggested that alexithymia is a socio-cultural event. While emo-

tions are directly expressed in western societies, suppressing the emotions rather than expressing them is preferred in eastern societies. Our country is closer to the societies where emotions are not expressed and are somatized. Alexithymic patients are thought to have difficulty in expressing their emotions and reveal them by somatizing, usually as a pain. Alexithymia causes the patients' resistance to stress, adaptation capacity to be limited, physical senses due to emotions to increase, and the patients to express their emotions with physical symptoms.

Studies on patients diagnosed with osteoarthritis, fibromyalgia, systemic lupus erythematous, hypertension, and asthma have revealed that alexithymic characteristics were higher than in the normal population.^[4,7-9] Although the concept of alexithymia was put forward to explain the symptoms observed in psychosomatic patients, it is emphasized to be observed in not only these patients but also in patients with other physical and mental disorders. [8-10] Gürkan indicated that alexithymic characteristics were most observed in the psychiatric group (67.9%), followed by psychosomatic disorders (57.7%).[11] The most observed psychosomatic diseases are essential hypertension, asthma, peptic ulcer, ulcerative colitis, thyrotoxicosis, neurodermatitis, and rheumatoid arthritis.[12] The chronic course, along with the functional restrictions and the medications used in its treatment, may cause the patients have difficulty and some physical and psychological complaints to be made. [10,13] In addition, it was suggested that alexithymic patients are exposed to a chronic stress that affects their immune systems.[14] In most of the chronic diseases such as hypertension and asthma, the disease negatively affects the patients' life and causes the patient to develop a certain life style. This causes them to sustain a stressful life and therefore experience various emotional responses.[13,15,16]

A study found that alexithymic characteristics were observed in patients with hypertension at the rate of 36%.[17] Other studies indicated that the alexithymia level of the patients who were just diagnosed and had not received treatment yet was clearly high.[18,19] Difficulty in recognition of and expressing the emotions, one of the basic characteristics of alexithymia, is stated to be also one of the factors that make asthma management difficult.^[20] Another study indicated that alexithymic characteristics are related to emotional symptoms such as panic, fear, etc. and physical symptoms such as fatigue. The same study showed a negative relationship between the difficulty in expressing the emotions subscale of alexithymia and respiratory functions.^[21] A study conducted in Italy with patients with asthma found that alexithymic characteristics were high in the patients and were related to the deterioration of pulmonary functions, anxiety, and depression.^[22]

Alexithymic patients are superficial in their interpersonal relationships. They tend to socially adjust and to avoid conflicts. Therefore they may be known as people who can establish unproblematic relationships and live in harmony with their environment. However, this is stated to be a pseudonormality, and these people are scarcely related to their own mental reality.[23] As they have difficulty in recognizing and defining the emotions, these people have more difficulty in coping with social anxiety and benefit less from social supports. [10] A study conducted with patients with coronary heart disease found a negative correlation between alexithymia and social support.[16] In addition, it could not be clearly explained whether insufficient social support is the reason for or the result of alexithymia. It is obvious that determination of the reason for these contradictions is difficult and more research is needed on this subject.^[24] No studies were found in our country on the relationship between alexithymia and social support.

The previous studies indicated that alexithymic characteristics were observed in patients diagnosed with hypertension and asthma, two of the most frequent psychosomatic diseases. [18-22] The findings of this study clearly show that alexithymia can emerge as a problem in these diseases. Therefore, the factors related to these diseases such as alexithymia and social support should be determined and intervention provided during nursing care. In these diseases, nurses should be able to recognize the problems of the patients such as understanding and expressing their emotions and thoughts, to provide the psychosocial support needed by the patients, and have knowledge about the effect of activating the social support systems of the patients on the solution of these problems.

For these reasons, this study aimed to determine the alexithymia and perceived social support level of the patients with hypertension and asthma.

The Questions of the Study

- Is there a significant difference between the alexithymia levels of the patients with hypertension and asthma?
- Is there a relationship between the alexithymia level and perceived social support of the patients with hypertension and asthma?

Materials and Method

Study Population and Sampling

The population of this descriptive study consisted of patients admitted to the Cardiology and Chest Diseases Polyclinics of two hospitals in Erzurum between April 1 and May 15, 2011 and diagnosed with hypertension and asthma. The study sampling consisted of 341 patients who agreed to par-

ticipate in this study: 191 with hypertension, and 150 with

Data Collection

Data were collected using a Personal Information Form, the Toronto Alexithymia Scale (TAS-20), and the Perceived Social Support from Family and Friends Scale (PSS-FA and PSS-FR). Data were obtained by the researcher through 10 to 15 minutes of face-to-face interviews.

Personal Information Form

This form includes questions on the sociodemographic characteristics of the patients (age, gender, marital status, etc.)

Toronto Alexithymia Scale: Toronto Alexithymia Scale (TAS-20)

Toronto Alexithymia Scale is a Likert-type self-assessment scale containing 20 items scored between 1 and 5. It was developed by Bagby et al.^[25] It has three subscales as difficulty in recognizing the emotions (TAS-1), difficulty in verbalizing the emotions (TAS-2), and extroversive thinking (TAS-3). The difficulty in recognizing the emotions subscale includes seven items (1st, 3rd, 6th, 7th, 9th, 13th, and 14th items), and is defined as the difficulty in determining the emotions and distinguishing them from the physical senses that accompany emotional arousals. The difficulty in verbalizing the emotions subscale includes five items (2nd, 4th, 11th, 12th, and 17th items) and is defined as the difficulty in conveying the

emotions. The extroversive thinking includes eight items (5th, 8th, 10th, 15th, 16th, 18th, 19th, and 20th items) and is defined as the existence of an extroversive cognitive structure, introversive thinking, and poor imagination power. Individuals are asked to mark the most appropriate choice among 'Never,' 'Rarely,' 'Sometimes,' 'Frequently,' and 'Always' for each item. The cutoff score of the scale was found to be 61. Those who score over 61 on the Toronto Alexithymia Scale are evaluated as alexithymic. A higher score shows a higher alexithymic level. [26] The scale was tested in Turkey by Sayar et al. for validity and reliability. [26] The alpha coefficient of internal consistency was found to be 0.74 in the present study.

Perceived Social Support from Family and Friends Scale (PSS-FA and PSS-FR)

The 'Perceived Social Support from Family (PSS-FA) and Friends (PSS-FR) Scale,' developed by Pracidona and Heller ^[27] and adapted into Turkish and tested for validity and reliability by Eskin, was used to determine the social support scores of the patients from family and friends. ^[28] The alpha consistency coefficient of the scale was found by Eskin to be 0.76 for the perceived social support from family, and to be 0.76 for the perceived social support from friends. ^[28] In the present study, the alpha internal consistency coefficient of the scale was found to be 0.71 for the perceived social support from family and to be 0.77 for the perceived social support from friends. This scale consists of two scales that independent

Sociodemographic characteristics	Hypertension (n=191)		Asthma (n=150)	
	n	%	n	%
Gender				
Female	126	66	72	48
Male	65	34	78	52
Education				
Literate	111	58.1	36	24.0
Primary school	53	27.7	32	21.3
Secondary school	18	9.4	53	35.3
Higher education	9	4.8	29	19.4
Marital status				
Married	158	82.7	102	68
Single	33	17.3	48	32
Working status				
Working	21	11	66	44
Not working	170	89	84	56
Working status				
Civil servant	11	5.8	12	17.6
Worker	4	2.1	30	45.5
Retired	2	1.0	23	36.8
Other	4	2.1	1	0.1
Living with				
Spouse	60	31.4	55	36.7
Family	91	47.6	50	33.3
Alone	13	6.8	17	11.3
Other	27	14.2	28	18.7
Age (Mean±Standard deviation)	63.06±43.15		48.09±32.73	

dently assess the perceived social support from family and friends. Each scale includes 20 questions answered as 'Yes,' 'No' and 'I don't know'. The response for the perceived social support is scored as '+1' for each question. The scores vary between 0 and 20. The choice 'I don't know' is not scored. The 3rd, 4th, 6th, 16th, 19th, and 20th items in the Perceived Social Support from Family (PSS-FA) Scale, and the 2nd, 6th, 7th, 15th, 18th, and 20th items in the Perceived Social Support from Friends (PSS-FR) Scale are reverse questions. The answer of 'No' is given 1 point in these questions.

Ethical Considerations

The ethics committee approval and required permissions of the relevant institutions were obtained to conduct this study. The patients were informed and their oral consents were also obtained.

Data Analysis

Data were analyzed in computer environment using the SPSS 20. package. Percentage distributions, means, t test, and the Pearson correlation test was used to analyze the data.

Results

Of the patients with hypertension, 66% were females, 82.7% were married, 58.1% were literate, and 89% were not working. Of them, 46.7% were living with their family. Of

the patients with asthma, 52% were males, 68% were married, 35.3% were secondary school graduates, and 56% were not working. Of them, 33.3% were living with their family (Table 1).

Of the patients with hypertension, 78.2% were not smoking, 57.6% had a history of hypertension in their family, and 65.4% had hypertension accompanied by another disease. Of them, 67.5% thought that the disease should be treated, and 56.5% were not doing any physical activities. Of the patients with asthma, 46.7% were smoking, 66.7% had a history of asthma in their family, 41.3% had asthma accompanied by another disease, and 57.3% were not doing any physical activities (Table 2).

Table 3 shows the patients' scores on alexithymia and perceived social support from family and friends subscales. These findings show that the score average of the patients with hypertension on the perceived social support from family (14.26±3.65) was higher than that of the patients with asthma (11.83±3.75), and the difference was statistically significant (p<0.001).

Of the patients with hypertension, 38.2%, and of the patients with asthma, 36% were found to be alexithymic. There was a statistically significant difference between the score average of the patients on the difficulty in recognizing the

Introductory characteristics	Hypertens	ion (n=191)	Asthma (n=150)		
	n	%	n	%	
Smoking					
Yes	25	13.8	70	46.7	
No	149	78.2	67	44.7	
Quit	17	8	13	8.6	
Family disease history					
Yes	110	57.6	100	66.7	
No	81	42.4	50	33.3	
Carrying out their controls					
Yes	162	84.8	125	83.3	
No	29	15.2	25	16.7	
Other disease history					
Yes	125	65.4	62	41.3	
No	66	34.6	88	58.7	
Opinions on the treatment					
Should be continuously treated	129	67.5	74	49.3	
Treatment can be quit when tension	43	22.5	61	40.7	
goes back to normal					
Treatment is not necessary	4	2.1	1	0.7	
I don't know	15	7.9	14	9.3	
Physical activity					
Doing	83	43.5	64	42.7	
Not doing	108	56.5	86	57.3	
Physical activity type					
Walking	80	41.0	57	38.0	
Running	2	1.0	1	0.7	
Other	1	0.5	6	4.0	

Table 3. The Score Averages of the Hypertension and Asthma Patients on the Perceived Social Support from Family and Friends Scale and the Alexithymia Scale

	Hypertension	Asthma	Test value (t)
	Mean±SD	Mean±SD	
Alexithymia			
Difficulty in recognizing the emotions	18.4±5.19	15.28±4.40	t=5.877 p=0.000
Difficulty in expressing the emotions	14.8±4.04	15.21±2.12	t=-1031 p=0.303
Extroversive thinking	26.45±4.02	26.50±4.22	t=-0126 p=0.900
Alexithymia total	59.72±7.56	57.00±7.43	t=3.334 p=0.001
Perceived Social Support from Family and Friends Scale (PSS-FA and PSS-FR)			
Perceived Social support from Family (PSS-FA)	14.26±3.65	11.83±3.75	t=6026 p=0.000
Perceived Social support from Friends (PSS-FR)	13.31±25.19	11.38±3.92	t=.932 p=0.298

Table 4. The Perceived Support scores of the Patients with Hypertension and Patients with Asthma from Their Family and Friends according to Being Alexithymic

Perceived Social Support from Family and Friends Scale (PSS-FA and PSS-FR)	Alexithymia Scale (Hypertension)		Test value (t)	Alexithymia Scale (Asthma)		Test value (t)
	Those who are alexithymic	Those who are not alexithymic		Those who are alexithymic	Those who are not alexithymic	
	73 (38.2%)	117 (61.3%)		54 (36%)	96 (64%)	
Perceived Social Support from Family (PSS-FA)	13.6±4.39	14.6±3.07	-0.028 p=0.596	10.01±2.39	12.85±3.99	-0.255 p=0.002
Perceived Social Support from Friends (PSS-FR)	10.3±4.15	15.2±31.9	-0.149 p=0004	11.07±2.34	11.55±4.58	-0.025 p=0.761

emotions subscale and their total score on the alexithymia scale (p<0.001). The score average of the patients with hypertension on the difficulty in recognizing the emotions subscale (18.4±5.19) and alexithymia (59.72±7.56) was found to be higher than that of the patients with asthma.

A relationship was found between the perceived social support from friends and the alexithymia levels of the patients with hypertension; those who were alexithymic were observed to perceive less social support from friends (10.3±4.15) (p<0.005). A relationship was found between the perceived social support from family and the alexithymia levels of the patients with asthma; those who were alexithymic were observed to perceive less social support (10.01±2.39) (p<0.005) (Table 4).

Discussion

The alexithymia levels of the patients with hypertension were found to be higher than those of the patients with asthma. However, the total scores of both groups of patients were lower than the alexithymia scale cutoff scores. Of the patients

with hypertension, 38.2%, and of the patients with asthma, 36% were found to be alexithymic according to the cutoff score. The alexithymia total scores of the patients with hypertension and their scores on the difficulty in recognizing the emotions subscale were significantly higher than those of the patients with asthma (p<0.001). International studies have found that patients with different chronic diseases (Turner's syndrome, asthma, COPD) had alexithymia levels. [29-31] Studies indicated that alexithymia was observed at the rate of 36% in patients with hypertension, and the patients with mild to severe hypertension had more alexithymic characteristics.^[15,17,32] Patients with hypertension are individuals who are extremely adjusted, passive, waiting for approval from their environment, tend to avoid conflicts, and have difficulty in expressing their positive and negative emotions. [33-36] It was reported that defining the emotions is a factor that affects the result of the treatment and care, and the alexithymia level of the patients is a guide to their clinical treatment.^[24] A study on the alexithymia level of patients diagnosed with mood disorder, cardiovascular disease, and hepatitis found

that the patients diagnosed with cardiovascular disease had a higher level of alexithymia than the patients diagnosed with hepatitis.^[37] Therefore, determination of the alexithymia levels is considered to be important for compliance to treatment and the evaluation of the treatment results in chronic diseases such as hypertension, asthma, etc.

The perceived social support from friends of the patients with hypertension and the perceived social support from family of the patients with asthma were found to be related to their alexithymia level (p<0.005). Another important finding of this study is that the alexithymic patients with asthma and hypertension had lower perceived social support. Two different international studies conducted with patients with hypertension and asthma found that lack of social support led to negative moods.^[38,39] Nekouei et al. observed in their study on hearth diseases that the perceived social support of the alexithymic patients was significantly lower. [16] Alexithymic characteristics were emphasized to possibly lead to social isolation, a more limited life, and belated seeking for help. [10] The findings of the present study are in line with the findings of these international studies. These findings suggest that alexithymia is an important variable on the perceived social support which should be evaluated.

The perceived social support from family of the patients with asthma, and the perceived social support from friends of the patients with hypertension were found to be low. Support particularly from family, which is important for patients with chronic diseases, not only enables the patients' physical and emotional functionality, but also encourages the patients to comply with their treatment and to adopt sanitary behaviors.^[40] Asthma is a situation that affects the patient psychosocially as other chronic diseases that require social support do. Another study on this subject found that patients with asthma perceived their social support level to be insufficient. [41] The intense symptoms of patients with asthma may cause limitations in performing their daily activities (nutrition, excretion, hygiene, moving, sleep, etc.), an increase in emotional stress, or dependence on another person. Problems such as being unable to perform their social activities, daily housework, establish a verbal communication due to dyspnea, going to work (for adult patients), or an increase in their financial burden can be observed in these patients.^[42] These problems cause serious limitations in the patients' lives and therefore they perceive their existing support to be insufficient. The findings of the present study are in line with the literature.

Conclusion and Recommendations

In the present study, the levels of alexithymia and recognition of the emotions were found to be higher in the patients with hypertension than in the patients with asthma.

One important finding of the present study was that the perceived levels of social support of the alexithymic patients with hypertension and with asthma were lower than those of the non- alexithymic patients.

Based on these results, it is very important to inform the nurses about alexithymia, considering the possible negative effects of alexithymia on patients. It is important in terms of holistic nursing care that nurses working with chronic patients evaluate the patients in terms of alexithymia and the variables that affect it, and to make interventions on this issue. It is thought that activation of the protective social support systems in mental problems such as alexithymia that may emerge in chronic diseases, could be useful. It is recommended that advanced studies be conducted on alexithymia, considered to be effective in the process of treatment and care.

Limitations of the Study

It should be taken into consideration while evaluating the findings of this study that the groups of patients with hypertension and with asthma were not homogeneous and were significantly different from each other in terms of sociodemographic and introductory characteristics (gender, marital status, education level, smoking, and the frequency of control).

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