ARAŞTIRMA / RESEARCH

Communication of patient-physician in patients with chronic obstructive pulmonary disease with acute exacerbation

Akut alevlenme ile yatırılan kronik obstrüktif akciğer hastalığı olan hastalarda hasta-hekim iletişimi

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Abstract

Purpose The aim of this study was to investigate the patient-physician communication of patients with chronic obstructive pulmonary disease (COPD) who were hospitalized due to acute exacerbation.

Materials and Methods: The study was carried out in the department of pulmonology in a training and Research Hospital in Izmir with COPD patients who were hospitalized due to acute exacerbation. 400 patients who were able to communicate and literate in the 18-65 age group, were selected with simple random sampling the study. In the collection of research data, "Patient Identification Form" and "Satisfaction Scale of Communication of Physicians" were used.

Results: The total score of the Physicians' Communication Form Satisfaction Scale was 100.10 ± 17.79. The mean scores of the sub-dimensions of Body Language, Speech-Listening, Caring and Giving information were 11.03 ± 2.83, 39.03 ± 7.20, 42.06 ± 9.40 and 7.98 ± 3.05. A significant relationship was found between the communication characteristics of the patients, such as knowing the name of the physician, asking the physician questions and answering the questions during the daily interview duration about the disease and treatment.

Conclusion: In general, patients reported satisfaction with the total average score of satisfaction from the communication style of physicians.

Keywords: COPD, Communication, patient-physician communication, patient satisfaction

Öz

Amaç: Akut alevlenme nedeniyle yatırılan kronik obstrüktif akciğer hastalığı (KOAH) olan hastalarda hasta-hekim iletişiminin incelenmesi amacıyla yapılmıştır.

Gereç ve Yöntem: Çalışma İzmir'de bir eğitim ve araştırma hastanesinin göğüs hastalıkları kliniklerinde Temmuz-Aralık 2015 tarihlerinde, akut alevlenme nedeniyle yatırılan KOAH tanılı hastalarla gerçekleştirilmiştir. Örneklemi 18-65 yaş grubunda, iletişim kurulabilen, okuryazar olan ve basit rastgele örneklemle seçilen, araştırmaya katılmaya gönüllü 400 hasta alınmıştır. Araştırma verilerinin toplanmasında "Hasta Tanıtım Formu" ve "Hekimlerin İletişim Biçiminden Memnuniyet Ölçeği" kullanılmıştır.

Bulgular: Hekimlerin İletişim Biçiminden Memnuniyet Ölçeğinin toplam puan ortalaması 100.10±17.79 bulunmuştur. Alt boyutların Beden Dili, Konuşma-Dinleme, İlgilenme ve Bilgi Verme alt boyutları puan ortalamaları 11.03±2.83, 39.03±7.20, 42.06±9.40 ve 7.98±3.05'dir. Hastaların, servisteki hekiminin adını bilme, hekimiyle günlük görüşme süresi, hastalığı ve tedavisiyle ilgili sorularını hekime sorma ve yanıtlarını alma gibi iletişim özellikleriyle, ölçek puanları arasında anlamlı ilişki saptanmıştır.

Sonuç: Hastalar genel olarak hekimlerin iletişim biçiminden memnuniyet ölçeği toplam puan ortalamasına göre memnuniyet bildirmişlerdir.

Anahtar kelimeler: KOAH, iletişim, hasta-hekim iletişimi, hasta memnuniyeti

INTRODUCTION

In chronic obstructive pulmonary disease (COPD), exacerbation is an important cause of morbidity and mortality and often leads to hospitalization. The number of exacerbations reported between 0.5 and 3.5 per year is associated with the onset of the disease; and progress of the disease negatively affected as this number increases[1].

COPD also have an effect on the individual physically, socially and emotionally[2]. COPD is a progressive and irreversible disease, so problems arise such as physical strength decrease over time, loss of role in family and business life, and inability to carry out social activities. For successful treatment of COPD, patient and their relatives should be informed about the disease; patient should be actively involved in the treatment, and lead to live as active as possible. Exacerbation and admissions are reduced, if the importance of treatment and physical activity explained to the patients[3].

Physician-patient communication is an important component of the health care process[4]. Patients demand a physician, who can skilfully diagnose and treat their illness and communicate effectively with them. A good physician-patient relationship appears to be particularly important and effective for chronic diseases. When patients are well informed and participate decision-making process, they were found to be more cautious to cooperate with physicians' suggestions and show positive behaviours about their disease[5].

In chronic diseases, an important point in patient-physician communication is that the patient who is satisfied with their physician carry out treatment recommendations of the physician[6]. Good communication between the patient and physician affects not only processes related to knowledge transfer and treatment, but also different subjects such as patient and physician satisfaction, satisfaction of nurses and other health professionals, hospital profitability and even public health. In conclusion, patient–physician relationships are an important factor in patients taking a more active role in their health care, so the patient-physician relationship should be in high level in chronic diseases in order to improve the compliance with treatment[7]. During COPD care; care and treatment plan quality and for other vital matters patient-physician communication plays an important role. Effective patient-physician communication is required for successful COPD treatment[8].

In this study, satisfaction with physician communication of COPD patients admitted with acute exacerbation were investigated. Kant's epigraph of 'Practice without theory is blind, and theory without practice is just a mind game' is the basic motivator of this research. The aim of this study was to investigate the patient-physician communication of patients with chronic obstructive pulmonary disease who were hospitalized due to acute exacerbation.

MATERIALS AND METHODS

400 COPD patients hospitalized with acute exacerbation in pulmonology department of SBU Izmir Dr. Suat Seren Chest Diseases and Surgery Training and Research Hospital between July 2015 and December 2015 were included in the study. Both male and female patients were selected with simple random sampling and agreed to participate to the study. They were between 18 and 65 years old, and all of them were communicative, and literate.

In 2014, a total of 7061 patients in the 18-65 age group (N) were hospitalized for acute exacerbation of COPD. With the power analysis (sample width $\alpha = 0.05$, strength of the test $(1-\beta)$ 0.90) the sample size (n) was calculated as 364 patients; considering the possible losses, a total of 400 people were included to the study.

Measures

The data were collected with face-to-face interviews by the "Patient Presentation Form" prepared in accordance with the literature (9-12) and "Satisfaction Scale Of Communication of Physicians".

Patient Identification Form

Aa new form consisting of 12 questions specified to our study, which included features related to socio-demographic characteristics and patient-physician communication, has been formed. There are 8 questions that determine socio-demographic characteristics of the patients such as age, gender, marital status, education level, occupation, financial situation, place of residence and number of hospital admissions. There are 4 questions that determine the characteristics of the patient-physician

communication such as whether the patient knows the name of the physician who follows up, and if their physician answers their questions about the disease and the treatment and give enough time for explanation.

Satisfaction Scale of Communication of Physicians

In our study, which was developed by Ciftcioglu ve Ordun (2010) by combining different scales and taking advantage of similar studies (13-15), it is an original scale that we use as 'Satisfaction Scale of Communication of Physicians' communication format and filled with the patient (Annex-1). The scale consisted of 28 items and 4 sub-dimensions according to factor analysis. Sub-dimensions; caring, speaking and listening, giving information and body language. Five-point likert-type ratings were used. Ciftcioglu and Ordun (2010) found the reliability coefficient (Cronbach's alpha) of the scale as 0.9369 in the analyzes.

In our study, in the scale analysis, the expressions in three questions that was part of the informative factor containing the inverse questions were evaluated. The highest and lowest total scores were 140 and 28 respectively. Satisfaction rises with increased scores. The total score values of 98 and above was interpreted as positive (satisfied with the communication) and below was accepted as negative (not satisfied with the communication). When factor analysis was performed for the reliability of the items of the scale, the reliability coefficient (Cronbach's alpha) was found to be 0.77.

Ethical approval was from Manisa Celal Bayar University Health Sciences Ethics Committee (24.06.2015 with the reference number 20478486-250) as well as written permission from the institution were obtained. Patients consent was obtained according to these approvals. In order to use the Satisfaction Scale of Physicians Communication Form the permission was obtained from the author who developed the scale (30.03.2015) via e-mail.

Statistical analysis

Data was collected face-to-face interview method. Statistical analyses were completed using SPSS 21.0 software. Sample size of the study was calculated using G*Power Software (version 3.1.9.2)[16]. The data was found to be distributed normally over the total scale score. Independent-t test was performed in the

paired groups, and One Way ANOVA was used in the groups of three and above. However, when sample size (n) was less than 30 (n<39), Mann Whitney U and Kruskall Wallis was chosen as non-parametric tests. Tukey's-b test was applied for further analysis to determine the difference between the groups. In all analyses 95% confidence interval and p value less than 0.05 (5%) were accepted as significant.

RESULTS

The sociodemographic characteristics of patients and relation of the scale results are shown in Table-1. 55.3% of the patients were in the age range of 56-65, 63.5% were male, 71.5% were married, 39.5% were middle school graduates, 45.5% were working, and 50.2% had an equal expense and income rate. 43.3% of them live in the province and 42.8% of the patients were found to be referenced to hospital 2 to 5 times a year.

The relationship between socio-demographic and communication characteristics of patients and self-rated scale scores that determines the satisfaction of physicians' communication was examined; and the total score was found as 100.10 ± 17.79. The mean scores of the sub-dimensions of Body Language, Speech-Listening, Caring and Giving information were 11.03 ± 2.83, 39.03 ± 7.20, 42.06 ± 9.40 and 7.98 ± 3.05 (Table 1).

It was found that, there was a significant difference according to working status within the socio-demographic data, and this difference was the total score of the scale. Patients who did not work reported lower scores with dissatisfaction. According to the post-hoc analysis to determine the difference between the groups, the mean scores of retired and working patients was not significantly different, whereas the average score of non-working patients was significantly lower (Table 1).

The relationship between patient communication characteristics distribution and scale scores are shown in Table-2. 59.7% of the patients knew the name of the physician in the unit, 60.3% of them were able to meet with their physician 3-5 minutes a day. 84% of them could ask their physicians about their disease and treatment. 93.8% of the patients who ask questions say that they get answers from their physicians. The relationship between total scores of the scale and its sub-dimensions and the

name of the physician in the clinic, duration of daily conversation with physician, asking about the disease and treatment, and receiving answers is shown in Table-2.

Patients who knew the name of the physician in the clinic were more satisfied with their communication of the physician than those who did not.

Table 1. Relationship between patient characteristics and total points of scale and sub-dimension mean scores of scale (n = 400)

	n	%	Body Language (score gap: 3-15) X̄±SD	Speaking-Listening (10-50) X̄±SD	Attention (12-60) X̄±SD	Sharing Information (3-15) X̄±SD	Scale Total (28-140) X̄±SD
			X̄±SD=11,03±2,83	X̄±SD=39,03±7,20	X̄±SD=42,06±9,40	X̄±SD=7,98±3,05	X̄±SD=100,10±17,79
Age							
35 years and under	34	8,6	11,06±2,56	38,59±6,81	42,59±9,80	7,53±3,00	99,76±19,03
36-45	45	11,3	10,96±2,02	40,78±5,78	44,27±7,87	7,18±3,39	103,18±14,23
46-55	99	24,8	10,93±2,37	38,98±7,43	41,63±8,75	7,97±3,18	99,51±15,89
56-65	222	55,3	11,09±3,19	38,77±7,40	41,73±9,87	8,21±2,92	99,79±17,79
			F=0,86* p=,968	F=1,028* p=,380	F=1,025* p=,381	F=1,703* p=,166	F=,510* p=,676
Gender							
Male	254	63,5	11,21±3,00	39,41±6,94	42,62±9,19	8,13±3,13	101,38±17,44
Female	146	36,5	10,72±2,47	38,37±7,61	41,09±9,70	7,70±2,90	97,88±18,24
			t=--1,684** p=,093	t=--1,392** p=,165	t=-1,574** p=,116	t=-1,375** p=,170	t=-1,901** p=,058
Marital Status							
Married	286	71,5	10,97±3,00	38,69±7,29	41,65±9,32	8,09±3,09	99,40±18,01
Single	114	28,5	11,19±234	39,89±6,92	43,09±9,55	7,69±2,96	101,87±17,17
			t= -,716** p=,474	t= -1,519** p=,130	t= -1,379** p=,169	t=1,167** p=,244	t=-1,256** p=,210
Education							
Literate	79	19,8	10,97±2,50	38,76±7,46	41,99±9,28	7,72±3,05	99,44±18,13
Primary School	64	16,0	11,00±4,36	39,31±6,52	41,16±9,74	8,49±3,02	99,95±16,98
Middle School	158	39,5	11,24±2,48	39,80±7,31	42,95±9,42	7,84±3,19	101,82±18,30
High School/Associate Degree Prg/Undergraduate	99	24,7	10,77±2,31	37,84±7,17	41,29±9,23	8,07±2,84	97,97±17,18
			F=,587* p=,624	F=1,579* p=,194	F=,890* p=,446	F=,918* p=,432	F=1,005* p=,391
Working Status							
Working	182	45,5	11,39±3,19	39,90±6,63	43,08±9,06	8,00±3,24	102,36±16,88
Retired	110	27,5	10,85±2,40	38,50±7,39	41,96±9,98	8,38±3,00	99,69±18,62
Not working	108	27,0	10,62±2,51	38,11±7,81	40,45±9,18	7,52±2,73	96,70±18,02
			F=2,871* p=,058	F=2,511* p=,082	F=2,673* p=,070	F=2,205* p=,112	F=3,513* p=,**031**
Financial Status							
Income less than expenditure	173	43,3	11,08±3,40	39,23±7,30	41,95±9,77	8,25±2,97	100,51±18,43
Equal income and expenditure	201	50,2	11,02±2,28	39,13±6,85	42,28±9,20	7,79±3,17	100,23±16,95
Income more than expenditure	26	6,5	10,81±2,50	36,88±8,97	41,11±8,60	7,54±2,60	96,35±19,99
			x^2 =,115*** p=,944	x^2 =1,405*** p=,495	x^2 =,345*** p=,842	x^2 =2,370*** p=,306	x^2 =1,124*** p=,570
Residence							
Village / Town	71	17,7	11,20±4,44	38,70±7,46	41,48±9,58	7,79±2,84	99,17±18,62
District	173	43,3	11,28±2,25	39,62±6,42	43,23±8,87	8,19±3,15	102,32±16,53
Province	156	39,0	10,69±2,42	38,53±7,87	41,03±9,79	7,82±3,04	98,06±18,57
			F=1,952* p=,143	F=1,033* p=,357	F=2,431* p=,089	F=,764* p=,467	F=2,482* p=,085
Number of hospitalization made to the hospital							
1	82	20,5	11,20±2,41	39,45±7,08	42,67±9,13	7,45±3,14	100,77±18,15
2-5	171	42,8	11,08±2,38	39,09±7,44	42,04±9,26	7,82±3,00	100,04±17,59
6-10	62	15,5	11,45±4,34	38,69±6,52	42,55±8,61	8,13±2,77	100,82±16,23
11-15	39	9,8	11,00±2,41	39,49±6,92	42,79±9,38	8,82±3,10	102,10±17,84
16 and more	46	11,5	10,02±2,70	38,11±7,79	39,80±11,26	8,54±3,27	96,48±19,99
			F=1,910* p=,108	F=,333* p=,856	F=,850* p=,494	F=1,912* p=,108	F=,653* p=,625

*F= One-way anova   **t=İndependent sample t test   *** x^2= Kruskall wallis   ****Z= Mann-whithney u

There was significant relationship between average scores of Body Language, Speaking-Listening, and Attention sub-dimensions compared to average scale scores of having daily conversation with clinic physician. In post-hoc analyses, it was determined that the difference between groups was caused by the group that meets their physician 3-5 minutes a day, and the satisfaction increased as time elapsed. The level of satisfaction of patients who inquired their physician about their disease and treatment is higher than those who did not. The satisfaction of those who receive answers from their physician is higher than those who do not (Table-2).

Table 2. The relationship between communication characteristics of the patients and scale total score and sub-dimension mean scores (n=400)

	n	%	Body Language (3-15) X±SD	Speaking-Listening (10-50) X±SD	Attention (12-60) X±SD	Sharing Information (3-15) X±SD	Scale Total (28-140) X̄±SD
			X±SD=11,03±2,83	X±SD=39,03±7,20	X±SD=42,06±9,40	X±SD=7,98±3,05	X±SD=100,10±17,79
Knowing the name of the physician responsible from patient follow-up							
Yes	239	59,7	11,22±2,34	39,61±7,13	42,97±9,14	7,90±3,15	101,71±17,23
No	161	40,3	10,76±3,42	38,17±7,25	40,71±9,64	8,08±2,90	97,71±18,38
			t=1,598** p=,111	t=1,973** p=,049	t=2,380** p=,018	t=-,568** p=,570	t=6,325** p=,000
Daily interview duration with physician in the clinic							
3-5 minutes	241	60,3	10,69±3,13	37,88±7,55	7,39±0,73	7,84±3,02	96,74±18,29
6-10 minutes	103	25,8	11,30±2,76	39,66±8,07	9,50±0,61	7,98±2,84	103,95±20,81
11 minutes and longer	56	13,9	11,68±1,85	41,38±4,96	10,59±1,41	8,55±3,51	105,87±12,22
			F=4,784* p=,009	F=9,126* p=,000	F=10,882* p=,000	F=1,250* p=,288	F=11,623* p=,000
Asking the physician about the disease and treatment							
Yes	336	84,0	11,28±2,81	39,98±6,74	43,24±8,88	7,94±3,11	102,44±16,65
No	64	16,0	9,75±2,56	34,03±7,50	35,86±9,65	8,16±2,77	87,80±18,62
			t=4,035** p=,000	t=5,909** p=,000	t=6,012** p=,000	t=-,518** p=,615	t=6,325** p=,000
Receiving answers from physicians about questions relevant to their disease and treatment							
Yes	315	93,8	11,43±2,73	40,55±6,17	43,77±8,52	7,95±3,10	103,71±15,46
No	21	6,2	8,90±2,98	31,43±9,05	35,29±10,46	7,86±3,24	83,48±22,15
			Z=-3,776**** p=,000	Z=-4,834**** p=,000	Z=-3,519**** p=,000	Z=-0,25**** p=,980	Z=-4,411**** p=,000

*F= One-way anova   **t=İndependent sample t test   *** x2= Kruskall wallis   ****Z= Mann–whitne

In Table 3, responses of patients to the expressions in scale sub-dimensions were examined. In the Attention sub-dimension; with the exception of responses to the sub-dimension of handshake by the physician, more than half of the patients were satisfied with being attended. More than 70% of the patients in Speaking and Listening sub-dimension were satisfied with all statements. Approximately one third of the patients were not pleased according to Sharing Information sub-dimension, and more than 60% of the patients in Body Language sub-dimension were found to be satisfied with all expressions.

A high level of positive correlation was found between the Speaking-Listening and Attention sub-dimensions when patients' total scale and sub-dimensions mean scores were taken into account. Patients' satisfaction in sharing information sub-dimension was nominal (Table-4)

Table 3. Distribution of the responses of patients to the statements in the subscales of physicians' communication attitude satisfaction scale

Physicians' Communication Attitude Satisfaction Scale Sub-Dimensions and Expressions Within the Scale	I Strongly Disagree + I Disagree	Undecided	I Agree + I Strongly Agree	x̄±SD
	% (n)	% (n)	% (n)	
Attention Sub-Dimension				
I think I can always call my doctor whenever I need him/her.	24,5 (98)	22,2 (89)	53,3 (213)	3,347±1,249
I think my doctor treats me friendly and sincere.	11,8 (47)	16,0 (64)	72,2 (289)	3,797±1,011
My doctor provides enough information about side effects of my medications.	21,7 (87)	12,8 (51)	65,5 (262)	3,592±1,135
My doctor provides sufficient information about treatment methods.	16,5 (66)	10,5 (42)	73,0 (292)	3,735±1,101
I think my doctor allocates enough time to answer my questions about my health condition.	21,5 (86)	17,7 (71)	60,8 (243)	3,457±1,123
My doctor ask me whether I understand the explanations he/she has made.	19,5 (78)	17,2 (69)	63,3 (253)	3,602±1,103
My doctor repeats important information about my disease.	18,3 (73)	11,8 (47)	69,9 (280)	3,695±1,097
My doctor communicates in accordance with my mental state.	20,5 (82)	18,5 (74)	61,0 (244)	3,547±1,088
My doctor shares my worries and troubles.	26,5 (106)	20,8 (83)	52,7 (211)	3,345±1,159
My doctor is always cheerful and good-humoured.	13,0 (52)	17,0 (68)	70,0 (280)	3,777±1,007
My doctor shake hands.	64,7 (259)	10,0 (40)	25,3 (101)	2,360±1,330
My doctor address me using my first name.	18,0 (72)	5,8 (23)	76,2 (305)	3,805±1,196
Speaking and Listening Sub-Dimension				
In general, I am satisfied with the communication I have with my doctor.	11,8 (47)	12,0 (48)	76,2 (305)	3,827±1,072
I think the doctor treating me is always respectful to me.	9,5 (38)	10,0 (40)	80,5 (322)	3,950±0,972
I feel relieved after I have talked with my doctor.	10,2 (41)	15,2 (61)	74,6 (298)	3,890±1,005
My doctor does not interrupt me while speaking.	13,2 (53)	13,7 (55)	73,1 (292)	3,732±1,023
I believe my doctor listens to me and pays attention to me when he/she is dealing with me.	7,5 (30)	12,5 (50)	80,0 (320)	3,922±0,876
My doctor establishes eye contact while listening to me.	9,0 (36)	11,0 (44)	80,0 (320)	3,892±0,947
My doctor does not distract himself/herself with other things during our meeting.	10,0 (40)	11,8 (47)	78,2 (313)	3,852±0,968
My doctor speaks clearly and plainly.	9,0 (36)	8,3 (33)	82,7 (331)	3,952±0,898
My doctor speaks at the speed I can understand.	8,0 (32)	10,0 (40)	82,0 (328)	3,955±0,868
My doctor speaks in a normal tone of voice (neither too high nor too low).	7,5 (30)	6,0 (24)	86,5 (346)	4,055±0,853
Sharing Information Sub-Dimension				
I think that my doctor does not give enough explanation about the usage of prescription drugs.	45,5 (182)	12,0 (48)	42,5 (170)	2,895±1,348
I believe my doctor does not give enough information about my diagnosis.	61,5 (246)	10,2 (41)	28,3 (113)	2,470± ,307
I cannot ask questions about the matters I want during interviews with my doctor.	54,0 (216)	12,7 (51)	33,3 (133)	2,610±1,318
Body Language Sub-Dimension				
Body contact (back rubbing, hand, arm, shoulder contact) of my doctor has a positive effect on me.	22,2 (89)	16,5 (66)	61,3 (245)	3,470± 1,136
My doctor speaking at a close distance from me affects me positively.	9,5 (38)	10,4 (42)	80,1 (320)	3,905± 0,918
My doctor has an expression on his/her face that comforts me.	19,0 (76)	18,0 (72)	63,0 (252)	3,582± 1,127

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Table 4. Correlation values between scale sub-dimensions of satisfaction with physicians' communication (n = 400).

Correlation	Total	Body Language	Speaking-Listening	Attention	Sharing Information
Total	1				
Body Language	0,647** 0,000	1			
Speaking-Listening	0,923** 0,000	0,456** 0,000	1		
Attention	0,937** 0,000	0,627** 0,000	0,830** 0,000	1	
Sharing Information	0,204** 0,000	0,126* 0,012	0,018 0,727	0,019 0,702	1

** Correlation is significant at the 0.01 level (2-tailed).; * Correlation is significant at the 0.05 level (2-tailed).

DISCUSSION

In this research, socio-demographic characteristics of 400 COPD patients hospitalized with acute exacerbation, answers given to survey questions about patient-physician relationship, and results of self-rated scale which determines satisfaction levels of patients' communicating with their physicians' were examined. The total score was calculated to be 100.10 ± 17.79 (3.78 out of 5 ± 0.79). These results, similar to the value of 3.89 in Thornton et al. study, show satisfaction of our patients. In the study conducted by Ciftcioglu and Ordun in which the original scale was developed by participation of 600 patients; the satisfaction level of the patients was found to be 3.42 out of 5. Because the value was below the accepted threshold of 3.5, it was deduced that patients were not satisfied. It is known that successful communication between a patient and their physician improves physician-patient cooperation, enhances success in diagnosis and treatment process, and increases patient satisfaction[18,19].

There were no significant correlations between the socio-demographic characteristics of the patients and the mean scores of the subscales and the mean scores of the patients in the same study[20]. Only the working status was significant. Significance was found to be caused by non-working patients. In the study of Fan et al., a similar result was found[21]. This result may be related to working experience[22]. Employed patients who were sick and receiving health care found to show understanding and tolerance towards physicians and health workers; whereas the unemployed patients had relatively small understanding and tolerance, which can be gained through experience.

Another finding similar to that of Gezergun et al. is, patients who knew the name of their physician had higher satisfaction rate compared to those who did not. There may be some take home message from these results such as, starting to conversation with patient by saying your name is a courteous, respectful, and pleasing attitude.

In addition to the total scores and sub-dimension mean scores of the scale, we can draw some conclusions from the responses of the patients to some expressions in the scale. 60.8% of the patients acknowledge the expression in Attention sub-dimension "I think my doctor allocate enough time to answer my questions about my health status" (Table-3), which is lower than the value (92.7%) obtained by Anderson et al. Patients in our research group reported that as long as daily interviews with doctors who follow them in the unit were prolonged, their satisfaction levels with their physicians were increased. These results were found to be similar to the findings of previous studies[9,23,24].

Similar to those of other studies[25,26] our findings showed that, patients who ask about their disease and treatment were generally more satisfied. That is to say, conversation should be dialogue not monologue. Physicians' workload affects the length of the interview with the patient. Even though the duration is short, talking with the patient may increase satisfaction. Before patients inquiring about their illness, physicians and other health professionals should inform them about their condition.

53.3% of patients approved the phrase "I think I can always call my doctor whenever I need" within the Attention sub-dimension. 65.5% of patients agreed "My doctor gives enough information about side effects of my medications" statement in the same

sub-dimension (Table-3). The responses of patients in the sub-dimension of scale related to their physicians' Information Sharing showed that one third of the patients were not satisfied (Table-3). At first glance, it may be thought that this needs to be worked on and improved because it can decrease the compliance and success of treatment. However, during the study all the patients were treated as inpatient. Unlike outpatients, whose prescriptions are written and treatments will be carried out at home on their own, the diagnosis and treatment procedures of inpatients are under monitoring and responsibility of health workers. Although the clinic where the research was conducted is a hospital with a lot of workload; the physician was not alone. The quality of service and patient satisfaction will increase when the informing duty and responsibility are shared among the nurse, respiratory physiotherapist and other health care workers.

According to the short definition communication is exchange of feelings, thoughts, information and news in all kinds of forms and ways[27]. In general, the sharing of negative and intense emotions is difficult for people, compared to information and news sharing. This difficulty, which can be experienced during the patient-physician relationship, is revealed by our data: 61% of the patients in the Attention sub-dimension approve "My doctor communicates in accordance with my mental state" expression; while 52.7% of the patients acknowledge the expression "My doctor shares my worries and frustrations" (Table-3). In other words, near the half of the patients perceived their physician being in a non-empathic approach. This perception will lead the patients to feel themselves distant from their doctor. Medicine is a profession that requires one-on-one relationship with people. Physicians' duty is to detect and heal the disease. Physicians while fulfilling this duty must remember that the patient is a person, and establish an empathy relationship with them. Having an empathy connection between physician and patient increases patient satisfaction[28]. It is very important for physicians to share patients' feelings, show empathy, be susceptive to their sensitivities, and develop confidence between physician and patient[29]. One possible reason why physicians do not share distress and worries of their patients is due to the worry and anxiety that acting sincere and intimate may lead to border violations and relentless requests from patients. In addition, the personality structure, mental defence mechanisms, and communication styles of the patients may also prevent sharing.

A physician cannot understand and treat all the health problems[30], which are composed of bio-psycho-socio-spiritual components. Physicians who are responsible for patients care in this research may be focused on biological diagnosis and treatment for obvious reasons. The number of patients and workload may compel doctors to behave in such a way. In addition, some conditions must be provided concurrently to focus on the patients' feelings and thoughts: an uninterrupted and silent interview environment, adequate time, the parties being ready mentally and voluntary are some of these conditions[31]. Simultaneous achievement of all conditions can be hard in most cases and may cause a problem. This may be the reason why half of our patients report that they are unable to share their concerns and distresses with their physicians.

Not only the disease itself, but also patient needs the physicians' attention. The general belief based on such views is that for patient satisfaction, it is important and necessary for the physician to touch his or her patient's body[32]. In our study, data from Body Language sub-dimension of the scale showed that, 61.3% of patients agreed the expression "Body contact (back rubbing, hand, arm, shoulder contact) of my doctor has a positive effect on me" (Table-3). Others reported an indecisive or negative opinion. Whether or not to touch the patient should be determined by the physician depending on their observations, impressions and experiences. In the Attention sub-dimension of the scale, "My doctor shakes my hand" statement can be evaluated within the scope of touching the patient; and was agreed by 25.3% of the patients (Table-3). This result should also be interpreted by taking into consideration the fact that patients in the study were hospitalized. Hand shaking is only one type of physical contact. Physical examinations of patients are carried out and recorded during their hospital stays and daily follow-ups. Inspecting touches to a patient can create more positive effect than hand shaking, giving a sense of being cared. However, the physical examination, which has a positive effect on the patient-physician relationship, is replaced by technological diagnostic methods.

In our study, the patients reported satisfaction with the communication style of physicians according to the total average score of satisfaction. The patients reported satisfaction in the sub-dimension of the body language of interest, speaking and listening; but dissatisfaction with informing sub-dimension.

Physicians should inform their patients about the disease and treatment process in sufficient time. The most important point in physician-patient communication is time. The physician should be in a friendly manner from the moment of the first meeting wtih the patients and relatives, ensure the active participation of the patient and his / her relatives during the treatment and care process and explain without using the medical terms about the planned care and treatment. The physician should make eye contact with the patient while talking, listen carefully and should not interrupt the speech of the patient. It is thought that the patients' satisfaction will be increased by responding to the patients' questions about the disease, giving enough information about the disease, the treatment methods, and the possible side effects of the drugs.

In conclusion, effective communication of physicians with patients in chronic disases will improve the process of the disease.

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APPENDIX-1:

SATISFACTION SCALE OF PHYSICIANS COMMUNICATION ATTITUDE

	1 I Strongly Disagree	2 I Disagree	3 Undecided	4 I Agree	5 I Strongly Agree
I am generally satisfied with the communication with my doctor					
I think the doctor treating me is always respectful to me					
I feel relieved after I talked with my doctor					
I think I can always call him/her whenever I need my doctor					
I think that my doctor is acting friendly and sincere					
My doctor provides sufficient information about the side effects of the medications I use					
My doctor gives enough information about the treatment methods					
I think that my doctor does not give enough explanation about the use of prescription drugs					
I believe that my doctor does not give enough information about my diagnosis					
I think my doctor devotes enough time to answer my questions about my health status					
I cannot ask questions about the matters I want during interviews with my doctor					
My doctor does not interrupt me while I'm talking					
I believe my doctor devotes his/her attention and listens to me while auditing me					
My doctor makes eye contact while listening to me					
My doctor does not engage in other things during our interview					
My doctor speaks open and clearly to me					
My doctor speaks at the speed I can understand					
My doctor speaks to me in a normal tone of voice (neither too high nor too low)					
My doctor asks me if I understand the statements he/she had made					
My doctor repeats important information about my disease					
My doctor communicates in accordance with my mental state					
My doctor shares my worries and concerns					
Body contact by my doctor (back rubbing, hand, arm, shoulder contact) has a positive effect on me					
Talking at a close distance from my doctor affects me positively					
My doctor always smiles to me					
My doctor shakes hands with me					
There is an expression on my doctors' face that makes me feel comfortable					
My doctor addresses me with my name speaking to me					

28 items and 4 sub-dimensions

Attention	4, 5, 6, 7, 10, 19, 20, 21, 22, 25, 26, 28
Speaking and Listening	1, 2, 3, 12, 13, 14, 15, 16, 17, 18
Sharing Information (negative statements)	8, 9, 11
Body Language	23, 24, 27