

DOI:

10.22301/IJHMCR.2528-3189.610

Article can be accessed online on:
<http://www.ijhmcr.com>

ORIGINAL ARTICLE

**INTERNATIONAL JOURNAL
OF HEALTH MEDICINE AND
CURRENT RESEARCH**

THE EFFECT OF TRUST COMMUNICATION IN PATIENT- PHYSICIAN RELATIONSHIP ON SATISFACTION AND COMPLIANCE TO TREATMENT

**Assoc. Prof. Mahmut AKBOLAT ^{1*}, Fatma KARAKAYA ², Çiğdem UĞAN ³,
Ayhan DURMUŞ ⁴**

¹ Sakarya University, Healty Management, Turkey.

² Sakarya University, Health Management Master Student, Turkey.

³ Sakarya University, Health Management, Turkey.

ARTICLE INFO

Article History:

Received 24th October, 2017

Received in revised form

04th November, 2017

Accepted 16th November, 2017

Published online 23th December,
2017

Key words:

Trust Communication in Patient-
Physician Relationship, Patient
Satisfaction, Compliance to
Treatment.

***Correspondence to Author:**

Assoc. Prof. Mahmut AKBOLAT

Sakarya University, Healty
Management, Turkey.

E-mail:

makbolat@sakarya.edu.tr

ABSTRACT

Purpose: The purpose of this study is to reveal the effect of trust communication in patient-physician relationship on satisfaction and compliance to treatment among patients with hospital experience.

Material and Methods: The population of the study consists of patients living in the Sakarya province of Turkey and having hospital experience. Face-to-face surveys were administered to 170 participants chosen through convenience sampling. A 43-item survey form composed of trust communication in patient-physician relationship (22 items), patient satisfaction (8 items), and compliance to treatment (4 items) scales and the participants' socio-demographic characteristics was used for data collection. Descriptive statistical methods, correlation analysis, and regression analysis were used for data analysis. The results were analyzed at the 95% confidence interval.

Findings: The findings of the study indicate medium levels of patient satisfaction with treatment (3.36±0.675), trust communication in patient-physician relationship (3.18±0.572), and patient compliance to treatment (3.72±0.673). There are significant relationships between patient trust in physician and patient satisfaction and between patient satisfaction and compliance to treatment. While patient's trust communication with physician has

Copyright © 2017, Assoc. Prof. Mahmut AKBOLAT. This is an open access article distributed under the creative commons attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Assoc. Prof. Mahmut AKBOLAT ^{1*}, Fatma KARAKAYA ², Çiğdem UĞAN ³, Ayhan DURMUŞ ⁴, 2017 "The Effect Of Trust Communication In Patient-Physician Relationship On Satisfaction And Compliance To Treatment", *International Journal of Health Medicine and Current Research*, 2, (04), 610-619.

a positive effect on patient satisfaction, it has a low effect on compliance to treatment.

Conclusion: According to the research findings, establishing a trust-based communication between patients and physicians is important for patient satisfaction and compliance to treatment. To better the communication between patients and physicians, courses for improving physicians' communication skills should be included in formal education, and its importance should be emphasized. Any deficiencies in this matter should be eliminated through in-service training.

INTRODUCTION

Communication is an inevitable activity for human being, who lives as a social being. Communication is compulsory to communicate with people, find solutions to existing problems, or meet on a common ground (Gurgen, 1997). Communication is also defined as a process in which information is exchanged between sources and a common sense is constructed by those who are in communication (Ker, 1998). One of the areas where interpersonal communication is most intense is health services. The main basis of medical practices in health services is the relationship between patient and physician (Atici, 2007a). The trust that the patient has in the professional ability and the personality of the physician is the first condition for effective treatment (Koch and Turgut, 2004).

The patient needs to trust in and be supported by the physician so that s/he (the patient) can give him/her (the physician) the information that will allow an effective treatment. Therefore, the patient-physician relationship should be based on trust (Karsavuran et al., 2011). Interpersonal trust is a key feature of patient-physician relationship and has something to do with both patients and physicians. Trust in another person refers to the expectation that the other person will behave in a way that is beneficial or at least not harmful. For example, the patient's trust in the physician constitutes a basis for taking the risk of sharing personal information. At the same time, it is a professional responsibility that the trust between the physician and the patient is maintained (Thom et al, 2011; Cusack, 2000).

Establishing a trust-based relationship with the patient requires special communication skills (Hardoff and Schonmann, 2001). Physicians' communication style is an important factor influencing patient-physician interaction and patient satisfaction, and the degree of the relationship established with the patient affects patient benefit, patient satisfaction level, and positive response to the treatment (Ciftcioglu and Ordun, 2010; Atici,

2007b). Koutsosimou et al. (2013) reported that the quality of patient-physician relationship can determine both patient and physician satisfaction and patient's compliance, coping ability, recurrence rate, quality of life, and health status to a degree.

One of the concepts considered to be related to patient communication is compliance to treatment. Compliance, which has certain types such as compliance to treatment, compliance to diet, compliance to exercise, compliance to recommended lifestyle, and compliance to appointments, refers to a set of behaviors expected from the patient and performed through physician-patient collaboration (Taskaya, 2014). Compliance is about how well a person's behavior complies with the medical advice given (Misdrahi et al., 2002).

Compliance is the main determinant of the success of treatment. Failure in adequate compliance to treatment increases rehospitalization, morbidity, and mortality, and rehospitalization can lead to professional and familial problems and reduce the patient's quality of life. Inadequate compliance seriously affects not only the patient but also the health system (Jimmy and Jose; 2011, Cobanoglu et al., 2003).

The rising prevalence and increasing economic costs of chronic diseases require a better understanding of the factors affecting patient compliance in the primary care setting (Russo-Innamorato, 2011). Inadequate compliance is a striking problem in the treatment of chronic diseases worldwide. In developed countries, compliance to long-term care in chronic diseases is 50% on average. The rates are even lower in developing countries, and the worldwide increase in the burden of chronic diseases also raises the effect of inadequate compliance. Inadequate compliance in long-term treatments seriously jeopardizes the effectiveness of the treatment, and this is a critical issue for community health, both in terms of quality of life and health economics (Sabaté, 2003).

Information exchange and communication are seen among the factors influential on improving compliance. Physicians' communication attitudes, treatment efficiency, and prescription are important points affecting compliance (Misdrahi et al., 2002). According to Cameron (1996), social and psychological factors considered to affect compliance are communication styles in which knowledge and understanding are incorporated, the quality of interaction covering patient-healthcare personnel relationship and patient satisfaction, social isolation and social support, beliefs and attitudes concerning health, health belief model variables, and health- and treatment-related factors including the complexity and duration of the

dosage. According to the World Health Organization, factors affecting compliance are social and economic factors, treatment-related factors, factors associated with health system and health staff, disease-related factors, and patient-related factors (Sabaté, 2003).

Developing effective and useful techniques for inadequate compliance to treatment requires understanding the factors affecting compliance (Dikec and Kutlu, 2014). The patient's compliance to treatment and satisfaction can be increased when it is ensured that patient-physician relationship, which is regarded as one of the important reasons for the patient's compliance to treatment and satisfaction and is deemed changeable, is based on trust and sound communication.

Effective delivery of health services is influenced by patient-physician communication, which is considered as the basis of these services. Despite the research on the effect of patient-physician communication on patient satisfaction, there are very few studies dwelling on trust and compliance. The present study aims to reveal the effect of trust communication on patient satisfaction and compliance to treatment.

METHODS

The purpose of this study is to show the levels of trust in communication between patients having hospital experience and their physicians and how trust communication influences their compliance to treatment.

The population of the study consists of patients living in the Sakarya province of Turkey and having hospital experience. Face-to-face surveys were administered to 170 participants chosen through convenience sampling. A 43-item survey form was used for data collection. The first part of the survey consists of the 12-item patient satisfaction with treatment and compliance to treatment scale developed by Prenner (2001) and aiming to measure the patient's views about the treatment provided by the physician; the second part is composed of the 22-item trust communication with physician scale developed by Yilmaz (2005) and aiming to measure the patient's views about the physician's behaviors; and the last part is made up of nine items about the participants' socio-demographic characteristics and the most recent physician they preferred and their disease. The scales included in the survey are 5-point Likert-type. Their rating ranges from 1 (I strongly disagree) to 5 (I strongly agree). The data were obtained from the participants face-to-face from 29 February to 11 March 2017.

The validity and reliability of the data were checked through Cronbach's alpha coefficient, exploratory factor analysis, and confirmatory factor analysis. Descriptive statistical methods, correlation analysis, and regression analysis were used for data analysis. The data were analyzed at the 95% confidence interval ($p=0.05$).

RESULTS

First, the validity and reliability analyses of the patient satisfaction with treatment and compliance to treatment scale developed by Prenner (2001), whose validity and reliability analyses had not been made in Turkish, were made. In this process, initially, the scale was translated into Turkish by two academics. Then it was back translated into English. In this way, it was confirmed that the translation made was compliant with its original version. After that, a pilot study was conducted on 50 people. As adequate correlations were detected among the scale items and the Cronbach's alpha value was found close to that of the original scale, the scale was decided to be used. Upon the decision to use it, the trust communication with physician scale and socio-demographic characteristics were added. Then it was administered to patients with a chronic disease and hospital experience.

As seen in Table 1, according to the exploratory factor analysis results of the first scale, KMO coefficient was found to be 0.818, which shows that the scale is adequately capable of representing the population (Karagoz, 2014). Also, Bartlett's test of sphericity results were seen to be significant. In addition, the factor loadings of the scale were detected to be 0.5 or more. The scale was determined to have two dimensions with initial eigenvalues over 1. The total variance explained by the scale was found to be 50.303%. As the scale was seen to be usable in its current status, a confirmatory factor analysis was made. As is seen in Table 2, CFA goodness-of-fit indices fulfill the required conditions. According to the reliability analysis results of the scale, the overall reliability value of the scale is 0.799; the reliability value for the satisfaction with treatment dimension is 0.828; and the reliability value for the compliance to treatment dimension is 0.725. As to the reliability analysis results of the original scale, the reliability value for the satisfaction with treatment dimension was found to be 0.810, and the reliability value for the compliance to treatment dimension was determined to be 0.710. A Cronbach's alpha value in the range of 0.80-1.0 is accepted to be referring to a

highly reliable scale, while a Cronbach's alpha value in the range of 0.60-0.80 is deemed to be indicating a quite

reliable scale (Kalayci, 2014). In its current status, the scale was concluded to be valid and reliable.

Table 1. Results of Reliability and Validity Analysis of The Satisfaction with Treatment and Compliance to Treatment Scale.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.818	
	Approx. Chi-Square	533.797	
Bartlett's Test of Sphericity	df	66	
	Sig.	0.000	
Cronbach Alpha	0.799	% Explained total variance	50.303
Factors/Items		Extractions	Explained Variance
Satisfaction with the Treatment (Initial Eigenvalue=33.563)			Cronbach Alpha
		30.904	0.828
After talking with the physician, had a good idea of what change to expect in my health over the next few weeks and months.		.759	
The doctor gave me a chance to say what was really on my mind.		.744	
The doctor told me all I wanted to know about my condition.		.735	
The physician explained my condition in words that I could understand.		.716	
The physician I saw would be someone I would trust.		.682	
The physician told me what the medicines prescribed would do for me.		.606	
The doctor was not friendly to me.		.588	
Felt the physician accepted me as a person.		.520	
Compliance to Treatment (Initial Eigenvalue=14.011)			19.399 0.725
The physician's treatment was not worth the trouble.		.791	
I followed the physician's instructions.		.751	
I felt it was difficult for me to do exactly what the physician told me to do.		.708	
I felt it was easy for me to follow the physician's advice.		.697	

As the validity and reliability analyses of the trust communication scale used in the study had been made by Yilmaz (2005) before, only confirmatory factor analysis and reliability analysis were made in the present study. The reliability analysis results of the scale show its Cronbach's alpha value to be 0.923. In Yilmaz (2005), making the validity and reliability study of the

scale in Turkish, it had been found to be 0.910. In this regard, the Cronbach's alpha value found in the present study is similar to the one calculated in the original study. In addition, as seen in Table 2, the goodness-of-fit indices obtained at the end of CFA fulfill the required conditions in general. According to these findings, the data obtained from both scales are usable for analysis.

Table 2. Some Goodness of Fit Index Used CFA and Findings of Study.

Fit Indices	Acceptable Fit	The Satisfaction with Treatment and Compliance to Treatment	Trust Communication
CMIN	-	56.209	252.523
DF	-	48	180
CMIN/DF	$2 \leq X^2/df \leq 3$	1.171	1.401

Fit Indices	AcceptableFit	TheSatisfactionwithTreatmentandCompliance	TrustCommunication
p	-	0.019	0.000
RMSEA	$0.05 \leq RMSEA \leq 0.10$	0.032	0.049
RMR	$0.05 \leq RMR \leq 0.10$	0.055	0.060
GFI	$0.90 \leq GFI \leq 0.95$	0.948	0.901
AGFI	$0.85 \leq AGFI \leq 0.90$	0.915	0.855
NFI	$0.90 \leq NFI \leq 0.95$	0.907	0.900
TLI	$0.90 \leq TLI \leq 0.95$	0.919	0.926
RFI	$0.90 \leq RFI \leq 0.95$	0.873	0.852
IFI	$0.90 \leq IFI \leq 0.95$	0.985	0.945
CFI	$0.90 \leq CFI \leq 0.95$	0.985	0.943
PNFI	$0.50 \leq PNFI \leq 0.95$	0.66	0.647
PGFI	$0.50 \leq PGFI \leq 0.95$	0.583	0.633

Source: Tezcan, 2008; MeydanveSesen, 2015

Table 3 presents the findings concerning the participants' socio-demographic characteristics. Of the participants, 60.6% are female, and 53.8% are married. The percentages of the participants with an undergraduate degree (35.7%) and those with a high school degree (%33.9) are much higher than the percentage of the participants with a graduate degree (3.0%). The ages of the participants range from 18 to 69. Their mean age is 34.41 ± 12.77 . 80.6% of the

participants had consulted a physician in the last 1 to 3 months. Again, %80.6 stated that they had consulted the same physician for 1 to 3 times. A great majority of the participants (87.0%) said that they received health service from public health establishments, and 23.5% denoted that they consulted a physician because of serious health problems. Majority of the physicians consulted were male (65.1%).

Table 3. Frequency and Percentage Distributions of Participants' Socio-Demographic Characteristics.

	Özellik	n	%
Gender	Male	103	60.6
	Female	67	39.4
MaritalStatus	Married	91	53.8
	Single	78	46.2
Age (Years)	≤ 25	53	31.2
	26-35	46	27.1
	36-45	34	20
	≥ 46	37	21.8
EducationalStatus	Primary School	17	10.1
	High School	57	33.9
	Two-year School	29	17.3
	Graduate School	60	35.7
Latestpatient-physicianinteraction	Master School	5	3.0
	1-3 age	133	80.6
	3-6age	15	9.1
How manytimesconsultedthesamephysician	≤ 6 age	17	10.3
	1-3	125	80.6
Thelastest service sectorwheretheyreceive	≤ 4	30	19.4
	PrivateSector	22	13.0
	PublicSector	147	87.0

	Özellik	n	%
Severity of illness	Very Severe	10	5.9
	Severe	40	23.5
	Moderate	78	45.9
	Minor	30	17.6
	VeryMinor	12	7.1
Gender of physician	Female	59	34.9
	Male	110	65.1

Table 4 demonstrates the arithmetic means and standard deviation values of the satisfaction with treatment and compliance to treatmentscale and the trust communication scale. According to the findings, the participants had a medium-level agreement with satisfaction with treatment and compliance to treatment in general(3.48±0.542), satisfaction with treatment

(3.36±0.675), and trust communication with physician (3.18±0.572), but had a higher-level agreement with compliance to treatment (3.72±0.673). Based on this finding, it can be stated that even if patients have low trust communication with their physician, they can have high compliance to treatment.

Table 4. Arithmetic Mean and Standard Deviation Values of the Scales Used in the Study.

	Mean	Std. Deviation
SatisfactionwiththeTreatment	3.36	0.675
CompliancetoTreatment	3.72	0.673
TheSatisfactionwithTreatmentandCompliancetoTreatment	3.48	0.542
TrustCommunication in Patient-PhysicianRelationship	3.18	0.572

Table 5 indicates the relationship between the trust communication with physician scale and the satisfaction with treatment and compliance to treatment scale as well as its sub-dimensions. According to the obtained findings, there are above-average statistically significant relationships between patient's trust

communication with physician and satisfaction with treatment (r=0.522) and satisfaction with treatment and compliance to treatment in general(0.509), and but there is a statistically significant lower relationship between patient's trust communication with physicianand compliance to treatment (r=0.182).

Table 5. The Satisfaction with Treatment and Compliance to Treatment and the Trust Communication.

	1	2	3	4
SatisfactionwithTheTreatment (1)	1			
CompliancetoTreatment(2)	.201**	1		
TheSatisfactionwithTreatmentandCompliancetoTreatment(3)	.914**	.581**	1	
TrustCommunication in Patient-PhysicianRelationship (4)	.522**	.182*	.509**	1

** Significant correlation at p <0,01 level, * Significant correlation at p <0,05 level

Based on the relationships detected at the end of the correlation analysis, three regression models were developed to identify the effect of patient's trust communication with physician on patient satisfaction,

patient compliance to treatment, and patient satisfaction with treatment and compliance to treatment in general. In all models, patient's trust communication with physician was used as the independent variable. As seen

in Table 6 in detail, the first regression model developed tested the effect of patient's trust communication with physician on patient satisfaction with treatment and compliance to treatment in general. According to the analysis results, the model is significant ($F=58.178$; $p=0.000$). The model shows that patient's trust communication with physician positively influences

satisfaction and compliance to treatment ($\beta=0.509$). The correlation coefficient of the model is 0.509, and the total variance explained is 25.9%. This result implies that improvement of patient's trust communication with physician enhances satisfaction with treatment and compliance to treatment.

Table 6. The Effect of Patient's Trust Communication with Physician on Patient Satisfaction with Treatment and Compliance to Treatment.

Dependent Variable	Predictors	Unstandardized Coefficients		Standardized Coefficients	t	p	
		B	S.E.	Beta			
The Satisfaction with Treatment and Compliance to Treatment	Constant	1.951	.203		9.610	.000	
	Trust Communication in Patient-Physician Relationship	.482	.063	.509	7.663	.000	
	R	.509	R ²	.259	F	58.716	p

Table 7 provides the regression model results revealing the effect of trust communication with physician on patient satisfaction with treatment. The regression model formed is significant ($F=62.902$; $p=0.000$). The model shows that patient's trust

communication with physician has a significant, positive effect on satisfaction ($\beta=0.522$). The total variance explained is 27.2%. Accordingly, it can be stated that rise in patient's trust communication with physician increases his/her satisfaction with treatment.

Table 7. The Effect of Trust Communication with Physician on Patient Satisfaction with Treatment.

Dependent Variable	Predictors	Unstandardized Coefficients		Standardized Coefficients	t	p	
		B	S.E.	Beta			
The Satisfaction with The Treatment	Constant	1.405	.251		5.606	.000	
	Trust Communication in Patient-Physician Relationship	.616	.078	.522	7.931	.000	
	R	.522	R ²	.272	F	62.902	p

The last model is concerned with the effect of trust communication with physician on compliance to treatment (Table 8). The model is significant ($F=5.749$; $p=0.018$). The model shows that patient's trust communication with physician positively affects patient

compliance to treatment, but this effect is a low one ($\beta=0.182$). The total variance explained is also quite low (3.3%). This result implies that patient's trust communication with physician has quite a limited effect on compliance to treatment.

Table 8. The Effect of Trust Communication with Physician on Compliance to Treatment.

Dependent Variable	Predictors	Unstandardized Coefficients		Standardized Coefficients	t	p
		B	S.E.	Beta		
Compliance to Treatment	Constant	3.042	.288		10.565	.000
	Trust Communication in Patient-Physician	.214	.089	.182	2.398	.018

Relationship

R .182 R² .033 F 5.749 p .018

DISCUSSION

The findings of this study, which was carried out to reveal the effect of trust communication between patients having hospital experience and their physicians on patient satisfaction and compliance to treatment, show that patients' satisfaction with treatment and trust communication with physicians are somewhat below the medium level, but patient compliance to treatment is somewhat above the medium level. This result is important in that it points out that even if patients do not have adequate trust communication with physicians or they are not satisfied with treatment, they pay attention to complying with treatment.

According to the results of this study, the relationship between patient's trust communication with physician and satisfaction is higher than the relationship between patient's trust communication with physician and compliance to treatment. In their study focusing on physicians' verbal attempts to provide patients with habits of compliance to treatment and patient satisfaction, Olynick et al. (2017) argue that there are significant relationships between compliance and general satisfaction and satisfaction with communication. Likewise, Kim and Park (2008) carried out a study to determine the effect of physicians' perceived styles of communication with patients on patient satisfaction and compliance in Korea. They found out that physicians' affective and cognitive empathic communication styles have a significant positive relationship with both patient satisfaction and compliance. It is clear that the results of the present study are similar to the results of the above-mentioned studies.

In general, trust communication with physician has a significant, positive effect on patient satisfaction with treatment and compliance to treatment. Patient's trust communication with physician also has a similar effect on satisfaction with treatment. However, patient's trust communication with physician has a significant, but lower effect on compliance to treatment. Similarly, in their meta-analysis study, Zolnierek and DiMatteo (2009) report that patients having a poor communication with their physicians have 19% more incompliance risks compared to patients having a good communication with their physicians. Gherman et al. (2011) and Levesque et al. (2012) also reached similar findings. Bartlett et al. (1984) determined that the quality of interpersonal

communication influences patient outputs more than the amount of training and instructions given to patients, and that the effects of physician's communication skills on patient compliance are mediated by patient satisfaction and reminding. Thus, they stated that physicians should pay special attention to these two variables for improving patient compliance.

CONCLUSION

The results of the study indicate that trust communication between patient and physician has a medium effect on patient's satisfaction with treatment and compliance to treatment. However, trust communication with physician has a lower effect on compliance to treatment. Based on these findings, it can be said that trust communication with physician affects patient satisfaction and compliance to treatment in any case. Hence, it is very important that physicians establish trust communication with their patients. Accordingly, it is considered valuable that physicians are offered courses aimed at improving communication skills during their formal education. The deficiencies of physicians who have not received such education or who are in need of this education may be eliminated through in-service trainings and on-the-job training programs to be developed.

It is an important limitation that the study was conducted on a small sample group. Researches who are willing to study on this issue in the future are recommended to study on larger sample groups and by using models that can put forward solution suggestions.

REFERENCES

1. Atici, E. Hasta-hekim ilişkisi kavramı. Uludağ Üniversitesi Tıp Fakültesi Dergisi, 2007a;33(1): 45-50.
2. Atici, E. Hasta-hekim ilişkisini etkileyen unsurlar. Uludağ Üniversitesi Tıp Fakültesi Dergisi, 2007b;33(2): 91-96.
3. Bartlett E. E., Grayson M., Barker R., Levine D. M., Golden A. & Libber S. The effects of physician communication skills on patients satisfaction; recall and adherence. J Chronic Dis, 1984;37(9-10):755-764.
4. Cameron, C. Patient compliance: recognition of factors involved and suggestions for promoting com

- pliancewiththerapeuticregimens. *Journal of Advanced Nursing*, 1996;24(2): 244-250.
5. Cusack, D. A. Ireland: breakdown of trustbetween doctorandpatient. *TheLancet*, 2000;356(9239):1431-1432.
 6. Ciftcioglu, B. A.& Ordun, G. Hastaların hekimlerin kendileri ile kurdukları iletişiminden memnuniyet düzeylerinin ölçümüne yönelik bir araştırma. *Öneri Dergisi*, 2010;9(34): 109-118.
 7. Cobanoglu, Z. S. Ü., Aker, T.&Cobanoglu, N. Şizofreni ve diğer psikiyatrik bozukluğu olan hastalarda tedaviye uyum sorunları. *Düşünen Adam*, 2003;16(4): 211-218.
 8. Dikec, G.& Kutlu, Y. Bir grup şizofreni hastasında tedaviye uyum ve etkileyen etmenlerin belirlenmesi. *Journal of PsychiatricNursing/Psikiyatri Hemşireleri Derneği*, 2014;5(3):143-148.
 9. Gherman, A.,Schnur, J., Montgomery, G., Sassu, R., Veresiu, I.& David, D. How areadherentpeoplemorelikelytothink? A meta-analysis of healthbeliefsanddiabetes self-care. *TheDiabetesEducator*, 2011;37(3): 392-408.
 10. Gorgen, H. *Örgütlerde İletişim Kalitesi*. İstanbul: Der Yayıncılık; 1997.
 11. Hardoff, D.&Schonmann, S. Training physicians in communicationskillswithadolescentsusingteenageactors as simulatedpatients. *Medical Education*, 2001;35(3): 206-210.
 12. Jimmy, B.&Jose, J. Patientmedicationadherence: Measures İn Daily Practice. *Oman MedicalJournal*, 2011;26(3), 155.
 13. Kalaycı, S. (2014). *SPSS Uygulamalı Çok Değişkenli İstatistik Teknikleri*. 6. Baskı, Ankara: Asil Yayın Dağıtım.
 14. Karagoz, Y. (2014). *SPSS 21.1 Uygulamalı Biyoistatistik*, Ankara: Nobel Yayınevi.
 15. Karsavuran, S., Kaya, S. &Akturan, S. (2011). Hasta-hekim iletişiminde güven: bir genel cerrahi polikliniği örneği. *Hacettepe Sağlık İdaresi Dergisi*, 14(2), 185-212.
 16. Ker, M.(1998).İletişim becerisini geliştirmek. *EÜ. İletişim Fakültesi Dergisi*,11(11),69-82.
 17. Kim, S. S.,& Park, B. K. (2008). Patient-perceivedcommunicationstyles of physicians in rehabilitation: theeffect on patientsatisfactionandcompliance in Korea.*AmericanJournal Of PhysicalMedicine& Rehabilitation*,87(12), 998-1005.
 18. Koch, E.&Turgut, T. (2004).Hasta-hekim ilişkisinin güncel sorunları ve kültürlerarasıyönleri: bir bakış. *Türk Psikiyatri Dergisi*,15(1),64-69.
 19. Koutsosimou, M.,Adamidis, K., Liakos, A.&Mavreas, V. (2013). Thedevelopment of an instrumentfortheassessment of doctor-patientrelationship (dopraq-16). *Journal of Psychology&Psychotherapy*, 3(3), 1-11.
 20. Levesque, A.,Li, H. Z.& Pahal, J. S. (2012). Factorsrelatedtopatients' adherencetomedicationandlifestylechangerecommendations: Data fromCanada. *International Journal of PsychologicalStudies*, 4(2), 42-55.
 21. Meydan, C.H. ve Sesen, H. (2015). *Yapısal Eşitlik Modellemesi Amos Uygulamaları*. 2. Baskı. Ankara: Detay Yayıncılık
 22. Miral, S. (2001). *Tıp eğitiminde iletişim becerileri: çağdaş yöntem ve teknikler*. Dokuz Eylül Üniversitesi Tıp Fakültesi Dergisi, Özel Sayı, 63-66.
 23. Misdrahi, D.,Llorca, P. M., Lancon, C.&Bayle, F. J. (2002). Compliance in schizophrenia: predictivefactors, therapeuticalconsiderationsandresearchimplications. *L'Encephale*, May-Jun; 28(3 Pt 1), 266-272.
 24. Olynick, J.,Iliopoulos, A.&Li, H. Z. (2017). Physicianverbalcompliancegainingstrategiesand patientsatisfaction. *HealthEducation*, 117(6),551-565.
 25. Prenner, L. G. (2001). Patientcompliance, patientsatisfaction, relationalcommunicationandpowerdistance in a healthcarecontext. *California: TheFaculty of California StateUniversity*
 26. Russo-Innamorato, L. (2011). Doesthequality of thepatient-physicianrelationshipmoderatepredictors of pooradherence in urban, underservedandvulnerablepatientswithchronicillness?. *Philadelphia: PhiladelphiaCollege of OsteopathicMedicine*. PhD
 27. Sabaté, E. (Ed.). (2003). *Adherencetolong-termtherapies: evidenceforaction*. World HealthOrganization. Geneva.
 28. Taskaya, S. (2014). *Diyabet hastalarının tedaviye uyum düzeyleri ile sağlık hizmeti kullanımı ve yaşam kalitesini etkileyen faktörler*. Ankara: Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Doktora Tezi
 29. Tezcan, C. (2008). *Yapısal Eşitlik Modelleri*, Yayımlanmamış Yüksek Lisans Tezi, Ankara: Hacettepe Üniversitesi, Sosyal Bilimler Enstitüsü.

30. Thom, D. H., Wong, S. T., Guzman, D., Wu, A., Penko, J., Miaskowski, C. & Kushel, M. (2011). Physician trust in the patient: development and validation of a new measure. *The Annals of Family Medicine*, 9(2), 148-154.
31. Yilmaz, A.A. (2005). Hasta hekim ilişkisinde güven iletişimi: Akdeniz Üniversitesi tıp fakültesi kadın hastalıkları ve doğum anabilim dalı tıp bebek ünitesinde bir uygulama. Antalya:

Akdeniz Üniversitesi Sosyal Bilimler Enstitüsü Yüksek Lisans Tezi.

32. Zolnierak, K. B. H. & DiMatteo, M. R. (2009). Physician communication and patient adherence to treatment: A meta-analysis. *Medical Care*, 47(8), 826.

Appendices:

Tedaviden Memnuniyet ve Tedaviye Uyum Ölçeği

1. Doktor, durumumu anladığım kelimelerle açıkladı.
2. Doktor, durumum konusunda bilmek istediğim her şeyi söyledi.
3. Doktor, aklımdan geçenleri söylemem için bana bir fırsat verdi.
4. Doktorun beni ayrı bir kişilik olarak kabul ettiğini düşünüyorum
5. Doktorla konuştuktan sonra önümüzdeki birkaç hafta ve ay içinde sağlığımdaki değişiklikler konusunda fikir sahibi oluyorum.
6. Doktor reçeteye yazdığı ilaçların benim için ne işe yarayacağını anlattı.
7. Doktor bana karşı dostane davranmadı.
8. Tedavi olduğum doktor, güvendiğim biridir.
9. Benim için doktor tavsiyesine uymak oldukça kolaydır.
10. En son tedavi aldığım doktorun talimatlarına uydum.
11. Doktorun bana önerdiği şeyleri tam olarak yapmakta zorlanıyorum.
12. Doktor verdiği tedaviyi dikkate almaya değmez.

Güven İletişimi Ölçeği

1. Hekimler, hastaların ihtiyaç duyduğu her türlü bakım için her ne gerekiyorsa yaparlar.
2. Hekimlerin tıbbi kararları genellikle doğrudur.
3. Hekimler son derece dikkatli ve titizdir.
4. Hangi tedavinin en iyi olduğu konusunda hekimlerin kararları güvenilirdir.
5. Bir hekim asla hastası için yanlış ilaç vermez.
6. Hekimler, hastalara tüm değişik tedavi seçeneklerini söylemek konusunda tamamen dürüştür.
7. Hekimler, hastaların hassas tıbbi bilgilerini konuyla ilgisi olmayan kimselerle paylaşmazlar.
8. Hekimler, her zaman kendi bilgi ve gayretlerinin en iyisini hastaları için kullanırlar.
9. Hekimler hastalarının durumu para ödemeye elverirse bile onlara bakacak kadar iyilik severdirler.

10. Benim hekimim genellikle benim ihtiyaçlarıma saygılıdır ve önceliği bu ihtiyaçlara vererek karar alır.
11. Ben hekimime güvenirim ve her zaman onun tavsiyelerini yerine getirmeye çalışırım.
12. Eğer hekimim bana bir şey söylerse, o doğrudur.
13. Hekimimin kararına güvenirim ve başka bir hekime başvurmam.
14. Eğer tedavim hakkında bir yanlışlık yapılıyorsa hekimimin bana söyleyeceğine güvenirim.
15. Hekimim sağlığım için gerekli harcamaları en azda tutmaya özen gösterir.
16. Hekimim sağlığımı benim kadar çok önemser.
17. Eğer tedavimde bir hata yapılırsa, hekimim benden onu gizlemez.
18. Hekimim ihtiyaç duyulduğunda beni hastaneye yatırır.
19. Hekimim sosyal güvencem masrafları karşılamasa da uygun tıbbi kararlar verir.
20. Hekimim fiyatı ne olursa olsun zorunlu tıbbi test ve prosedürleri yapar.
21. Hekimim bana yüksek kaliteli tıbbi bakımı sunar.
22. Bir kez daha sağlık hizmeti alma ihtiyacı duyduğumda tekrar aynı hekimi tercih ederim.