

The effect of the content of the knowledge on adherence to medication in hypertensive patients

Hipertansiyonlu hastalarda bilgi içeriğinin ilaç tedavisi uyumuna etkisi

Hayrettin Karaeren, Mehmet Yokuşoğlu, Şenay Uzun**, Oben Baysan, Cem Köz, Belgüzar Kara**, Ata Kırılmaz¹, İlkin Naharcı*, Murat Pınar*, Mehmet Birhan Yılmaz, Mehmet Uzun¹

From Departments of Cardiology and *Internal Medicine, Medical School and **School of Nursing Gülhane Military Medical Academy, Ankara
¹Department of Cardiology, Haydarpaşa Training Hospital, Gülhane Military Medical Academy, Istanbul, Turkey

ABSTRACT

Objective: It was suggested that knowledge might influence the adherence to treatment in hypertension. Accordingly, in this study, we investigated the effects of content of knowledge on medication adherence and knowledge-based predictors of adherence to treatment in hypertensive patients

Methods: This cross-sectional study included 227 hypertensive patients (70% female; mean age: 57±12 years), who were followed by cardiology and internal medicine clinics. The patients were asked to fulfill a questionnaire including 40 items. Besides the demographic and disease-related questions, the patients were also asked (1) the name of the drug, (2) the duration of the drug use; (3) the reason of using the drug; (4) the cause of hypertension; (5) the target level of hypertension; (6) the side effects of antihypertensive medicines. Statistical analyses were performed using Chi-square, Fischer exact, Mann Whitney U tests and logistic regression analysis.

Results: It was found that 163 (72%) were adherent and 64 (28%) were nonadherent to the treatment. Angiotensin-II receptor antagonist use (OR= 4.405; 95%CI: 1.561-12.365, p=0.022) and hypertension duration ≥5 years (OR= 0.446; 95%CI: 0.246-0.811, p=0.006) was found to be independently related to adherence. Among the knowledge-based variables, knowing the duration of use of the medicine (OR= 6.822; 95% CI: 1.478-31.241, p=0.075), the reason of use of medicine (OR= 2.828; 95% CI: 1.445-5.543, p=0.018), the cause of the hypertension (OR= 3.447; 95% CI: 1.889-6.290, p=0.037) and the target level of blood pressure (OR= 12.859; 95% CI: 5.045-32.640, p<0.001) significantly increased the adherence rates. On the other hand, knowing the name of the medicine (p=0.112) or the results of hypertension (p=0.719) had no effect on adherence, while knowing the side effects of the medicine (OR= 0.607; 95% CI: 0.340-1.084, p=0.005) had negative effect. The total number of correct answers was also higher in patients with adherence to treatment (p=0.002).

Conclusion: Patient knowledge about hypertension and medications is associated with higher adherence rates. However, it should be taken into consideration that the possible effects of knowledge may differ according to its content. (*Anadolu Kardiyol Derg 2009; 9: 183-8*)

Key words: Knowledge, adherence, medication, hypertension, logistic regression analysis

ÖZET

Amaç: Hipertansiyonlu hastalarda tedaviye uyumda bilginin etkili olabileceği ileri sürülmüştür. Bu nedenle, bu çalışmada, hipertansif hastalarda, bilgi içeriğinin ilaç tedavisi uyumuna etkisi ve ilaç tedavisine uyumun bilgiye dayalı öngördürücüleri araştırılmıştır.

Yöntemler: Bu kesitsel çalışmada kardiyoloji ve iç hastalıkları kliniklerinde takip edilen 227 (%70 kadın; yaş= 57±12 yıl) erişkin hipertansiyonlu hasta yer almıştır. Hastalardan, araştırmacılar tarafından hazırlanmış 40 soruluk bir anketi doldurmaları istenmiştir. Demografik veriler ve hastalıkla ilgili soruların yanında, hastalara, aynı zamanda (1) ilacın adı; (2) ilaçları kullanma süresi; (3) ilaçları kullanma nedeni; (4) hipertansiyonun nedeni; (5) hedef kan basıncı düzeyi; (6) hipertansiyonun sonucu; (7) antihipertansif ilaçların yan etkisi soruldu. İstatistiksel analizler Ki-kare, Fischer, Mann Whitney U testleri ve lojistik regresyon analizi yapılmıştır.

Bulgular: Çalışmada 163 hasta (%72) uyumlu ve 64 hasta (%28) uyumsuz bulundu. Anjiyotensin II reseptör antagonisti kullanımı (OR= 4.405; %95 GA: 1.561-12.365, p=0.022) ve hipertansiyon süresinin ≥5 yıl olması (OR= 0.446; %95 GA: 0.246-0.811, p=0.006) uyuma bağımsız etkili bulundu. Bilgiye dayalı değişkenler içinde, ilacın kullanım süresini bilmenin (OR= 6.822; %95 GA: 1.478-31.241, p=0.075), ilacın kullanım nedenini bilmenin (OR= 2.828; %95 GA: 1.445-5.543, p=0.018), hipertansiyon nedenini bilmek (OR= 3.447; %95 GA: 1.889-6.290, p=0.037) ve hedef kan basıncını bilmenin (OR= 12.859; %95 GA: 5.045-32.640, p<0.001) uyum oranlarını anlamlı olarak artırdığı belirlendi. Öte yandan, ilacın adını bilmek (p=0.112) ve hipertansiyonun sonucunu bilmenin (p=0.719) uyum üzerine etkili bulunmazken, ilacın yan etkilerini bilmenin (OR= 0.607; %95 GA: 0.340-1.084, p=0.005) uyum üzerinde olumsuz etkili bulundu. Toplam doğru yanıt sayısı uyumlu hastalarda daha fazla idi (p=0.002).

Sonuç: Hipertansiyon ve ilaçlar konusunda hasta bilgisi ilaç tedavisine daha yüksek uyum oranları ile birlikte. Bununla birlikte, bilginin, ilaç tedavisine uyum üzerine olası etkilerinin bilgi içeriklerine göre farklı olabileceği de dikkate alınmalıdır. (*Anadolu Kardiyol Derg 2009; 9: 183-8*)

Anahtar kelimeler: Bilgi, uyum, ilaç, hipertansiyon, lojistik regresyon analizi

Address for Correspondence/Yazışma Adresi: Dr. Mehmet Yokuşoğlu, Department of Cardiology, Gülhane Military Medical School, Ankara, Turkey

Phone: + 90 312 304 42 67 Fax: + 90 312 304 42 50 E-mail: myokusoglu@yahoo.com

© Telif Hakkı 2009 AVES Yayıncılık Ltd. Şti. - Makale metnine www.anakarder.com web sayfasından ulaşılabilir.

© Copyright 2009 by AVES Yayıncılık Ltd. - Available on-line at www.anakarder.com

Introduction

Hypertension is a serious health problem contributing to cardiovascular diseases, stroke and renal failure. Appropriate treatment of hypertension significantly reduces the cardiovascular mortality and morbidity. The Cardiovascular Health Study suggest that failing in treating systolic BP of >140 mm Hg accounts for 34% of strokes and 22% of myocardial infarctions in older adults (1). Also, pharmacologic treatment of high BP can reduce the risk of stroke by 30% to 40% and myocardial infarction by 20% to 25% (2). Although the benefits of the regulation of high blood pressure have been well established in many studies, it remains inadequately controlled in most patients (3, 4). The variability in response to antihypertensive treatment partially accounts for this failure. World Health Organization has reported that at least 50% of the patients who are diagnosed as hypertensive do not take the recommended antihypertensive medication (5). Therefore, the patient's non-adherence with the antihypertensive medications might well be one of the main factors in this failure. The PatenT study, which was held in Turkey have revealed that the adherence to medication is a serious problem for also in Turkey (6).

In earlier studies, the term of "compliance" has been used to describe the extent of the patient's following of recommended treatment. This term is replaced by "adherence" in later studies. The term of "compliance" suggests a passive approach while the term of "adherence" implies active participation of the patients in the treatment (7). Therefore, we preferred to use the term of "adherence" throughout the study except for the data obtained from other studies. Adherence is traditionally defined as the extent to which patients adhere with the recommendations of the health care professionals (8). In hypertension, these recommendations include instructions about medication, diet, exercise, smoking, and home blood pressure monitoring (9). Because it is a crucial component in helping the patients with hypertension, adherence to antihypertensive medication has been the mostly researched one of these recommendations (10-12). Some strategies have been developed according to such studies (13). There is a substantial amount of research into the areas of adherence or compliance, in the literature. Although education of the patient has been proposed as a means to increase adherence to medication, its effectiveness was not confirmed by systematic reviews (14, 15). However, the effects of content of knowledge, including which subject that patient know is increasing, which subject is decreasing and which subject is not influencing the medication adherence in hypertensive patients is not well elucidated.

Accordingly, in this study, we investigated the effects of content of knowledge on medication adherence and knowledge-based predictors of adherence to treatment in hypertensive patients.

Methods

Overall, 227 (70% female; mean age - 57 ± 12 years) patients who were followed by cardiology and internal medicine clinics, were included in this cross-sectional study. The patients with following characteristics were invited to participate in the study: age >20 years old, being prescribed medication for control of hypertension at least one year ago, no other chronic disease requiring life-long medication use. The eligible patients were directed to the nurse for acquiring data before the patients was given a prescription or education/information. The nurse gave information about the study and asked for participating, which was based on voluntariness. Those who accepted the invitation were then asked to fulfill a questionnaire.

Data acquisition

The data were obtained with a questionnaire form, which was prepared by the investigators. It included 40 items in three sections: patient characteristics (age, gender, marital status, and educational level), disease- and medication-related items (duration of the time since the diagnosis, duration of time since the first diagnosis of hypertension, number of medication prescribed currently, whether he/she used the medication regularly in the last week, the name of the drug, side effect) and information-related items (whether he/she is informed about the medication, the source of the information, the content of the information). The content of the knowledge was tested by seven questions: 1- What is the name of the drug? 2- How long have you been used these drugs? 3- Why do you use these drugs? 4- What is the cause of the hypertension? 5- What is the target level of hypertension? 6- What does the hypertension result in? 7- What are the side effects of these drugs?

The education level was graded to four levels: illiterate, graduated from elementary school, graduated from high school, graduated from a license program. Marital status was defined in three forms: single, married, and widow.

The questionnaires were filled out by a nurse, experienced in such techniques. The nurse was instructed to notify the inconsistent answers and to seek for the correct answer, which has no bias.

Statistical analysis

All statistical analyses were performed by using SPSS® version 13.0 (Chicago, IL, USA). The continuous variables were expressed as mean \pm 1 standard deviation, the categorical variables as percentage. The comparisons of proportions of demographic, clinical and knowledge-based parameters between adherents and nonadherents were made by Chi-square test. The Fisher's Exact test was used when necessary. The total numbers of correct answers were compared between adherents and nonadherent by Mann-Whitney U test. For age, 65 years (the definition for geriatric age group) was accepted as the cut-off value for categorizing the patients. For duration of hypertension, ROC analysis was used to determine the cutoff

value and 5-year value was found to be the best discriminating value. Then, patients were categorized as whether "hypertension was present for ≥ 5 years or not". The independency of the variable on affecting adherence was tested by binary logistic regression analysis with the exclusion value for p set at 0.1. The ROC analysis was used to assess accuracy of numbers of correct answers in prediction of adherence to treatment. The significance of p value was set at 0.05. The odds ratio was estimated with using the web based free statistical program available at <http://statpages.org>.

Results

The study included 227 patients with 70% female. The mean age was 57 ± 12 years. It was found that 64 (28%) were nonadherent to the treatment. The average duration of the time between the first diagnosis of hypertension and the inquiry was 7.7 ± 7.6 years. The average duration of antihypertensive medication use was 6.9 ± 7.0 years. Of patients, 46.3% were on monotherapy while the remaining were on combination therapy. The mostly prescribed group of medications was angiotensin-converting enzyme

inhibitors (49.8%) followed by diuretics (37%), calcium channel-blockers (26.9%), beta-blockers (26%), angiotensin receptor antagonists (18.1%), arterial vasodilators (3.5%), and centrally-acting antihypertensive drugs (1.3%).

Of the patients, 63% reported that the information was provided by physician, followed by pharmacist (18%), nurse (14%) and the prospectus of the medication (5%).

The relation between the social, demographic and disease-based variables and adherence is shown in Table 1. Among the parameters not related to content of knowledge, angiotensin II receptor antagonist use (OR= 4.405; 95% CI: 1.561-12.365, $p=0.022$) and duration of time since the first diagnosis of hypertension (OR= 0.446; 95% CI: 0.246-0.811, $p=0.006$) were found to be independently related to adherence. It was shown that knowing the duration of use of the medicine (OR= 6.822; 95% CI: 1.478-31.241, $p=0.075$), knowing the cause of the hypertension (OR= 3.447; 95% CI: 1.889-6.290, $p=0.037$) and knowing the target level of blood pressure (OR= 12.859; 95% CI: 5.045-32.640, $p<0.001$) significantly increases the adherence rates (Table 2). On the other hand, to know the name of the medicine ($p=0.112$) and to know the results of hypertension ($p=0.719$) has no effect on

Table 1. Clinical characteristics of patients with hypertension with and without adherence to treatment and their value in prediction of adherence to treatment

Variables	Total number of patients	Adherent to treatment	Nonadherent to treatment	p*	OR (95%CI)**	p**
Age >65 years, n (%)	61 (27)	44 (27)	17 (27)	0.947		
Male gender, n (%)	80 (34)	55 (39)	25 (35)	0.452		
Married, n (%)	183 (81)	138 (85)	45 (70)	0.017	2.331 (1.183-4.596)	0.092
Education level higher than elementary school, n (%)	181 (80)	135 (83)	46 (72)	0.071		
Comorbid situations requiring lifelong medication use, n (%)	128 (56)	86 (53)	42 (66)	0.076		
ACE inhibitor, n (%)	113 (50)	82 (50)	31 (48)	0.800		
Diuretic, n (%)	84 (37)	64 (39)	20 (31)	0.257		
A2 receptor antagonist, n (%)	41 (18)	37 (23)	4 (6)	0.002	4.405 (1.561-12.365)	0.022
Beta blocker, n (%)	57 (26)	41 (25)	18 (28)	0.648		
Ca++ channel blocker, n (%)	61 (27)	38 (23)	23 (36)	0.049	0.542 (0.291-1.009)	0.518
Centrally acting vasodilators, n (%)	3 (1)	3 (2)	0 (0)	0.157		
Arterial vasodilator, n (%)	8 (4)	6 (4)	2 (3)	0.852		
Combination therapy, n (%)	108 (48)	82 (50)	26 (41)	0.188		
Being informed about medicine, n (%)	87 (38)	59 (36)	28 (44)	0.294		
HT duration ≥ 5 years, n (%)	117 (52)	75 (46)	42 (62)	0.007	0.446 (0.246-0.811)	0.006

Data are represented as proportions/percentages

*.Chi-square test, ** - logistic regression analysis

A2 – angiotensin 2, ACE – angiotensin converting enzyme inhibitor, HT - hypertension

Table 2. Content of knowledge of patients with hypertension with and without adherence to treatment and its value in prediction of adherence to treatment

Content of knowledge	Total number of patients	Adherent to treatment, n (%)	Nonadherent to treatment, n (%)	p*	OR (95%CI)**	p**
What is the name of your medicine?	145 (64)	99 (61)	46 (72)	0.112		
How long will you use this/these medicines?	220 (97)	161 (99)	59 (92)	0.016	6.822 (1.476-31.241)	0.075
Why do you use this/these medicines?	182 (80)	139 (86)	43 (67)	0.003	2.828 (1.445-5.543)	0.018
What is the cause of hypertension?	134 (59)	111 (68)	23 (36)	<0.001	3.447 (1.889-6.290)	0.037
What is the target level of blood pressure?	90 (40)	85 (52)	5 (8)	<0.001	12.859 (5.045-32.640)	<0.001
What does hypertension cause?	139 (61)	101 (62)	38 (59)	0.719		
What the side effects of your medicine?	97 (43)	64 (39)	33 (51)	0.047	0.607 (0.340-1.084)	0.005

Data are represented as proportions/percentages
*-Chi-square test, ** - logistic regression analysis

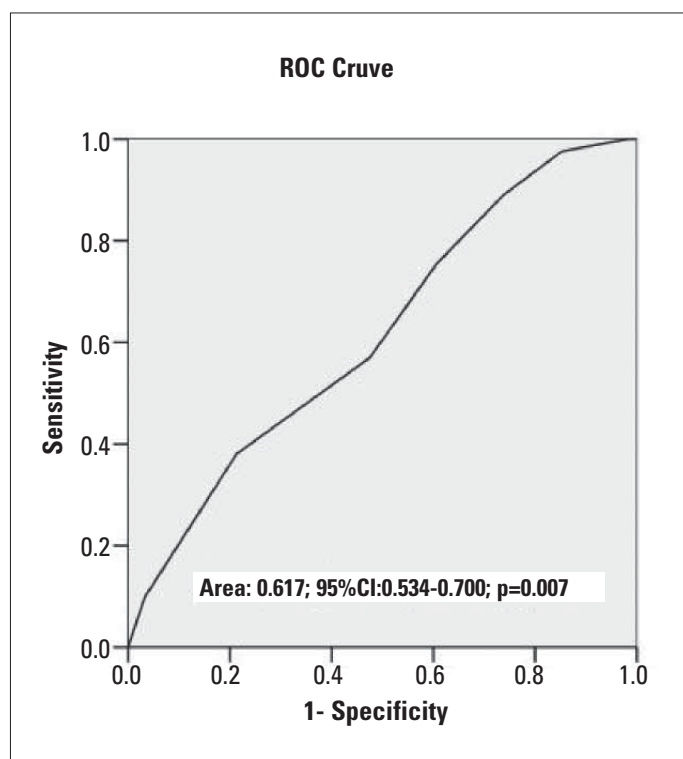


Figure 1. Diagnostic value of total number of correct answers in prediction of adherence to treatment

* - receiver operator characteristics (ROC) analysis

adherence. Knowing the side effects of the medicines has negative effect (OR= 0.607; 95% CI: 0.340-1.084, p=0.005). The total number of correct answers was also higher in adherent patients (p=0.006). The area under ROC curve of total number of correct answer (total point) against predicting adherence was 0.617 (95%CI – 0.534-0.700, p=0.007) (Fig. 1). For the six or seven correct answers, the sensitivity of predicting adherence was 38% and specificity was 79%.

Discussion

The adherence rate in this study was found to be 72%. This is very similar to that found in PatenT study (74.2%) (6). Among the variables that are not knowledge-based, the use of angiotensin II receptor antagonist was associated with better adherence, which was also shown by Koylan et al. (16). The present study has also shown that the total amount of knowledge about the disease or medicines was higher in patients with adherence to medicines. However, not all the correct answers were associated with better compliance. Gonzales et al. (17) reported that “knowing what the high blood pressure level is” is associated with higher compliance rates. This finding is consistent with our findings such that knowing the target level and knowing the cause of hypertension was associated with higher adherence rates in our study. Knowing the target level of the arterial blood pressure is the most important component of “goal setting”, which has been shown to increase adherence (18).

Knowing the cause of hypertension was well correlated with adherence. It is possible that the patients who know the cause of hypertension are more interested about the result of using medicine. Also, knowing the reason of using the medicine was associated with better adherence rates. The correct answer was set at knowing that the medication is used for decreasing blood pressure and its potential complications. However, to decrease the blood pressure as reason for adherence is more likely because “knowing what hypertension may result in” was not effective on the adherence.

Knowing what hypertension may result in was not influencing the adherence. This was surprising because the perceived threat on an occasion is a major motivating factor for behavioral change. The patients are informed about the possible complications of a specific disease to achieve adherence to

medical recommendations because the perceived threat of complications is expected to cause state-anxiety, which in turn might result in congruency with trait anxiety, leading to increased motivation for behavioral change (19). However, the patients are usually interested in short-term problems, such as symptoms and drug side effects, rather than long-term problems, such as complications of a specific disease. Svensson et al. (20) have reported that side effects or symptoms ascribed to medication are the patients' leading reason for non-adherence. This is also consistent with our findings because knowing the side effects of the medication was associated with a lower adherence rate in the present study.

Being informed about how long the medicine should be used was also associated with higher adherence rates. There is a misunderstanding among the hypertensive patients that hypertension is an intermittent disease that only needs treatment in the presence of symptoms or external stress (21). According to them, the medication should be stopped after the blood pressure is regulated. Therefore, the patients should be instructed that the medical treatment of hypertensive is life-long.

Knowing the side effect of the medication was associated with less adherence rate to medication. The patients usually learn the side effects of a medication from the prospectus or from the health care providers. The patients should be acknowledged that all symptoms listed as side effect are not always related to the medication, and every side effect does not require discontinuation of the medication.

Limitations of the study

In this study, the self-assessment method was used for assessing adherence. However, we still believe in that the results are valid because there is a good correlation with the most comprehensive study held in Turkish population (Patent) (6). The second limitation is the possibility of white-coat compliance, which can be defined as the increase in the adherence before the control examination (22). Therefore, the adherence rates might be lower than that mentioned in the study. However, the adherence rates are similar to some other studies carried out in our population, suggesting that the adherence rates are valid for assessing the associated factors. Another limitation is that we used only the last week as the reference time for adherence. The time was limited because the patients might have difficulty in remembering the earlier dates.

A nurse significantly helped the illiterate patients during filling out the questionnaire. This may cause some problems in interpreting the symptoms. However, it is unavoidable in such studies if the illiterate people are to be included.

The combination therapy was analyzed as a covariate in the study, although it is not same with polypharmacy. It was impossible to differentiate between two at the analysis stage of the study, therefore we could not include polypharmacy use in the analysis.

Conclusion

The non-adherence is a significant cause of failure in controlling hypertension. Patients knowledge about hypertension and medications is important in achieving higher adherence rates. However, during the education, the possible effects of knowledge should be taken into account. Especially, informing about the side effects of medications should be accompanied by assuring the patient about the significance or insignificance of them.

References

1. Psaty BM, Furberg CD, Kuller LH, Cushman M, Savage PJ, Levine D, et al. Association between blood pressure level and the risk of myocardial infarction, stroke, and total mortality: the cardiovascular health study. *Ach Intern Med* 2001; 161: 1183-92.
2. Collins R, MacMahon S. Blood pressure, antihypertensive drug treatment and the risks of stroke and of coronary heart disease. *Br Med Bull* 1994; 50: 272-98.
3. Whitworth JA; World Health Organization, International Society of Hypertension Writing Group. 2003 World Health Organization (WHO)/International Society of Hypertension (ISH) statement on management of hypertension. *J Hypertens* 2003; 21: 1983-92.
4. Psaty BM, Smith NL, Siscovick DS, Koepsell TD, Weiss NS, Heckbert SR, et al. Health outcomes associated with antihypertensive therapies used as first-line agents. A systematic review and meta-analysis. *JAMA* 1997; 277: 739-45.
5. Sabaté E. Adherence to long-term therapies: evidence for action. Geneva: World Health Organization, 2003.
6. Altun B, Arici M, Nergizoğlu G, Derici U, Karatan O, Turgan C, et al. Prevalence, awareness, treatment and control of hypertension in Turkey (the Patent study) in 2003. *J Hypertens* 2005; 23: 1817-23.
7. Carpenter R. Perceived threat in compliance and adherence research. *Nurs Inq* 2005; 12: 192-9.
8. Osterberg L, Blaschke T. Adherence to medication. *N Engl J Med* 2005; 353: 487-97.
9. Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo JL Jr, et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: the JNC 7 report. *JAMA* 2003; 289: 2560-72.
10. Kim EY, Han HR, Jeong S, Kim KB, Park H, Kang E, et al. Does knowledge matter?: intentional medication nonadherence among middle-aged Korean Americans with high blood pressure. *J Cardiovasc Nurs* 2007; 22: 397-404.
11. Fongwa MN, Evangelista LS, Doering LV. Adherence to treatment factors in hypertensive African American women. *J Cardiovasc Nurs* 2006; 21: 201-7.
12. Li WW, Stewart AL, Stotts N, Froelicher ES. Cultural factors associated with antihypertensive medication adherence in Chinese immigrants. *J Cardiovasc Nurs* 2006; 21: 354-62.
13. Schroeder K, Fahey T. Improving adherence to drugs for hypertension. *BMJ* 2007; 335: 1002-3.
14. Krousel-Wood M, Hyre A, Muntner P, Morisky D. Methods to improve medication adherence in patients with hypertension: current status and future directions. *Curr Opin Cardiol* 2005; 20: 296-300.

15. Chaves ES, Lúcio IM, de Araújo TL, Damasceno MM. Efficiency of health education programs for adults with high blood pressure. Rev Bras Enferm 2006; 59: 543-7.
16. Koylan N, Acartürk E, Canberk A, Çağlar N, Erdine S, et al. Effect of irbesartan monotherapy compared with ACE inhibitors and calcium-channel blockers on patient compliance in essential hypertension patients: a multicenter, open-labeled, three-armed study.
17. González-Fernández RA, Rivera M, Torres D, Quiles J, Jackson A. Usefulness of a systemic hypertension in-hospital educational program. Am J Cardiol 1990; 65: 1384-6.
18. Brown VA, Bartholomew LK, Naik AD. Management of chronic hypertension in older men: an exploration of patient goal-setting. Patient Educ Couns 2007; 69: 93-9.
19. Reiss S. Trait anxiety: it's not what you think it is. J Anxiety Disord 1997; 11: 201-14.
20. Svensson S, Kjellgren KI, Ahlner J, Säljö R. Reasons for adherence with antihypertensive medication. Int J Cardiol 2000; 76: 157-63.
21. Neutel JM, Smith DH. Improving patient compliance: a major goal in the management of hypertension J Clin Hypertens 2003; 5: 127-32.
22. Feinstein AR. On white-coat effects and the electronic monitoring of compliance. Arch Intern Med 1990; 150: 1377-8.

Ağa Dolanan Aşk

Bu kez gönlüm ağına takıldı
Deniz yıldızsız okyanuslarda
Yunusların şarkılar söylediği
Beyaz köpüklü mavi sularda

Besbelli bu kez sevgi güneşim
Seni sarsın istedim
Sıcacık bir kumsalda
Dört mevsimli şafaklarda
Kızıl alevli akşamlarda

Bu kez de can güneşim
Sen ol istedim
Gök kuşaklı yağmurlarda

Beni sarmalasin istedim
Sevgi dolu bakışlar
Siyah kirpikler arasında

Bu kez de kor ateşte
Yanalım istedim
Ya bir dağ başında
Ya bir köy yolunda...

Prof. Dr. Yıldız Tümerdem