Evaluation of the Patients' Attitudes and Behaviors Concerning Patient Safety

- Engin Ersin Şimşek,⁴ D Yusuf Baktır⁵

¹Department of Emergency and Disaster Management, Biruni University Faculty of Health Sciences, İstanbul, Turkey ²Department of Public Health, Üsküdar University Faculty of Medicine, İstanbul, Türkey ³Department of Nursing, Yıldırım Beyazıt University Faculty of Health Science, Ankara, Turkey ⁴Department of Family Medicine, University of Health Sciences, Kartal Dr. Lütfi Kırdar Training and Research Hospital, İstanbul, Turkev ⁵Department of Health Management, Üskudar University Faculty of Health Sciences, İstanbul, Turkey

> Submitted: 08.01.2020 Accepted: 24.01.2020

Correspondence: Tunçay Palteki, Biruni Üniversitesi Sağlık Bilimleri Fakültesi, Acil Yardım ve Afet Yönetimi Bölümü, İstanbul, Turkey E-mail: tuncaypalteki@gmail.com



Keywords: Patient attitudes and behaviors; patient safety; safety problems.



This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

ABSTRACT

Objective: Patient safety is a multi-factorial issue although the literature focused on the errors of health professionals. This study aims to disclose the safety problems that arise from patients' attitudes and behaviors.

Methods: To evaluate the patient attitudes and behaviors in patient safety practices, 300 patients or patient relatives were interviewed, and data were analyzed in this study.

Results: Approximately 3/4 of the participants declared that they applied to a hospital in case of a health problem. More than half of the participants expressed that they were not informed about their treatment and care.

Conclusion: An important component of coping with problems related to patient safety is to notice about patient attitudes and behaviors. Consequently, it is important for health care professionals to develop suggestions on patient-related safety concerns during treatment and care processes.

INTRODUCTION

By the end of the last century, patient safety has started to become an essential principle of medical service. Nowadays, patient safety, which is a significant problem for every country, has importance on a global scale. The reason for that is undoubtedly the increased morbidity and mortality rates that arise from medical errors. The "premium non nocere" principle has always existed in medical practice. With a report published by the Institute of Medicine in 1999, the importance of the subject dramatically has been addressed.^[1]

The patient safety issue is multi-factor. Today, studies regarding the subject are generally intended towards the

mistakes made by institutions and health care professionals. On the contrary, the other significant factor, which is safety issues that arise from the patients' own attitudes and behaviors, is generally ignored.

In a recent study, attributions of patients that may contribute to their own safety have been gathered under seven main titles as follows: autonomy, awareness, conscientiousness, knowledge, rationality, responsiveness and vigilance (Table I).^[2] Poor health literacy means making unhealthy choices, exhibiting more risky behaviors, worse health outcomes, inadequacy in the management of own health, spending more time on hospital and more exposure to medical errors.^[3] In studies, it is revealed that in-

70 South, Clin, 1st, Euras,

Table 1. Attributes of the patients towards their own safety

Attributes of the patients towards their own safety

Autonomy

- · Ability to speak up and ask questions
- · Ability to act
- · Ability to act independently

Awareness

- · Ability to recognize the possible medical error
- · Ability to recognize error-prone situations

Conscientiousness

· Questioning of self and others

Knowledge

- · Health literacy
- . Knowing who, when and how to call for help

Rationality

Ability to decide when to follow instructions

Responsiveness

Understanding

Vigilance

- Health alertness
- · Protectiveness of health
- · Focus on preventing harm

adequate health literacy causes inadequacy in understanding prescription and more frequent medication errors, ^[4,5] poor glycemic control in patients with type 2 diabetes and more cases of related complication^[6] and taking fewer precautions towards preventive health services.^[7] Patients' attitudes and behaviors towards their safety are not only determined by the level of health literacy but also determined by personal attributes, such as autonomy, awareness and vigilance. These attributes involve the ability to follow the advice that given by health care professionals, attention towards potential unwanted situations and the ability to ask questions. Kanj and Mitic^[8] have stated that inadequate health literacy is common in developing countries as well as developed countries and is related to high mortality.

World Health Organization (WHO) has raised the subject of safety issues caused by the patients at the beginning of the new millennium and has drawn attention to -patient and society participation- which is one of the six primary priorities in its "world alliance for patient safety" project. On the strategy plan of patient safety, there are raising awareness of patient engagement, building up resources to support advocacy, building and strengthening the capacity of patients for effective engagement, evidence-based tools and interventions that promote empowerment and partnership.^[9]

In today's world, it is presented that the success of preventive, health promotive, therapeutical and rehabilitative services is related to patient adherence. In all these processes, health care professionals, health technologies, ev-

idence-based medical practices certainly play a huge role; however, it will not be wrong to say that participation of the patient plays a key role in a successful outcome. Problems related to the participation of the patient may be examined in a wide spectrum from not using the prescribed drugs to not going to the appointment.

This study is designed with the purpose of revealing the possible safety concerns that arise from the patients.

MATERIALS AND METHODS

Our study was conducted by applying the "Evaluation of Patients' Attitudes and Behaviors in Patient Safety" questionnaire to 300 patients and relatives who were receiving service from some state hospitals in Istanbul in 2018. Before conducting this study, the necessary permissions and approval were obtained from the relevant public authority and the participants were informed about this study. In the questionnaire, there were six questions for demographic characteristics, two questions to determine the current status and twenty-nine questions which subjected to scoring.

Licensed SPSS Computer Package Program has been used to analyze the obtained data.

RESULTS

Many questions were asked to patients and their relatives about their own safety using the questionnaire. As an answer to the question of "What is the first thing you do when you become sick and if you think you cannot find a solution by yourself?"; is the findings revealed that 75% of the participants go to a medical institution for the appointment and 17% of them use traditional/complementary or botanical methods (Table 2). High preference rate of medical institutions shows there is a conscious awareness in society.

To the question of "Does doctor/nurse or any other health care professional give you information about your treatment and care?" more than half of the participants (n=155; 51.7%) answered as no. With this question, active participation of the patients in diagnosis and treatment is desired to be evaluated. To patients who answered this question as no, the question of "what could be the reason for physician/nurse or other health care professional asking your opinion on your treatment and care" has been

Table 2. Distribution of the answers given to the question of "what is the first thing you do when you get sick, and if you think you cannot find a solution by yourself?"

	n	%
I try traditional/complementary methods	50	16.7
I apply to a medical institution	226	75.3
I get information via face-to-face/telephone	19	6.3
I get help from the pharmacy	5	1.7
Total	300	100

Table 3. Distribution of answers given to the "what could be the reason for physician/nurse or other health care professional not asking your opinion on your treatment and care"

	n	%
I am having a hard time understanding because my information on this subject is inadequate	13	8.4
I cannot talk with health care professionals because of their shortage of time	77	49.7
I do not want to be informed	3	1.9
Health care professionals are not asking my opinion	62	40
Total	155	100

posed. In response, approximately half of the participants have stated that they think health care professionals do not have enough time (Table 3).

When it is thought that the answers given to the questions that are subjected to scoring in the questionnaire will impact the patient's own safety positively, it is "I", conversely, when it is thought that it will impact negatively, it is scored as "0". Also, "sometimes", which is one of the

answer choices of the two questions, has been evaluated as a "0.5 score" Mean scores of the participants have been found as "21.16". Table 4 shows the numbers and percentages of the answers of the Patient Safety Questionnaire on Patient's Attitudes and Behaviors.

Participants were divided into three age groups as 40 and below: 41–59 and 60 and below. According to the results, there was no significant difference concerning the scores

Table 4. The results of the patient safety questionnaire on patient's attitudes and behaviors (number/percentage) Questions **Patients Patients Patients Patients** responded gave gave gave "no" a "yes" "sometimes" to this question response response response (n/%) (n/%) (n/%) (n/%) Do you give complete/full information to doctors/ 300/100 263/87.7 37/12.3 Unasked nurses or other health care professionals about the drugs you take? 300/100 236/78.7 64/21.3 Unasked If you are using supplementary pills, oils, vitamins, vegetable substances etc. would you inform the doctors/nurses or other health care professionals? 279/93.0 21/7.0 Unasked Would you share information about the allergies you know you have 300/100 with doctors/nurses or other health care professionals? Unasked Would you share the information about drug side effects you have 300/100 282/94.0 18/6.0 with doctors/nurses or other health care professionals? 300/100 272/90.7 28/9.3 Unasked Could you comfortably ask the parts you did not understand about any process related to your drug or treatment to your doctor? If not explained, it to you, do you ask your doctor that in 300/100 267/89.0 33/11.0 Unasked what dosage you are going to use your drug? 32/10.7 If not explained, do you ask your doctor how long you will be using your drug? 300/100 268/89.3 Unasked If not explained, do you ask your doctor how you are going to take your drug? 300/100 260/86.7 40/13.3 Unasked If not explained, do you ask your doctor whether you will take dietary 300/100 247/82.3 53/17.7 Unasked supplements etc. with your drug or not? 80/26.7 Unasked If not explained, do you ask your doctor which side effects your drug may have? 300/100 220/73.3 If not explained, would you ask your doctor when to take your drug 300/100 253/84.3 47/15.7 Unasked (empty stomach, a full stomach, before food, with food, after food? If not explained, do you ask your doctor which drug she/he gave is for what? 300/100 218/72.7 82/27.3 Unasked Do you ask the pharmacist whether the drug you got from the 297/99.0 188/62.7 109/36.3 Unasked pharmacy is the one that prescribed? Do you read the prospectus of the drugs? 300/100 192/64.0 65/21.7 43/14.3 Participants who answered "yes" to the previous question answered the following question. 133/44.3 59/19.7 Unasked Do you consult your doctor about the problems you may have with 192/64.0 the drug that you have read its prospectus?

72 South. Clin. Ist. Euras.

Questions	Patients responded to this question (n/%)	Patients gave a "yes" response (n/%)	Patients gave "no" response (n/%)	Patients gave "sometimes" response (n/%)
Before being discharged from the hospital if you are not informed by a doctor/nurse or other health care professional, do you ask the treatment/care you should follow after discharge?	300/100	284/94.7	16/5.3	Unasked
The following two questions were answered by the patients who had a surgery.				
Do you read the surgery information form? Do you ask the points you did not understand to your doctor	167/55.6 167/55.7	124/41.3 149/49.7	43/14.3 18/6.0	Unasked Unasked
when you are going to have surgery? Do you ask the matters you have on your mind about your health and	300/100	278/92.7	22/7.3	Unasked
sickness to doctor/nurse or other health care professional without hesitating? If you have worries about the matters in the previous question, do you speak with a doctor/nurse or other health care professional?	299/99.7	262/87.3	37/12.3	Unasked
Do you have a personal doctor/family physician? Do you want and help health care professionals that are responsible	299/99.7 299/99.7	260/86.7 277/92.3	39/13.0 22/7.3	Unasked Unasked
for your care and treatment to have your important health information (e.g., drug, food allergies, drug side effects, surgeries)?	2,,,,,,,	277772.3	2277.0	Omasica
Do you think you are capable of fulfilling the processes, receiving the service and reaching to medical services by yourselves?	300/100	226/75.3	74/24.7	Unasked
Participants who answered "no" to the previous question answered the following question.				
While going to the medical institutions, do you bring your relative or someone whom you trust?	74/24.7	64 / 86.5	10/13.5	Unasked
Do you ask for a medical service/process (x-ray, drug, laboratory examination) completely at your own request without the suggestions of physicians?	300/100	148/49.3	152/50.7	Unasked
Do you get information about your health status and treatment from doctor/nurse or other health care professionals?	300/100	281/93.7	19/6.3	Unasked
Do you participate in vaccinations/screenings (e.g., flu, tetanus, pneumonia vaccines; colon, breast, cervical, prostate screening) suggested by medical authorities?	299/99.7	86/28.7	159/53.0	54/18.0

they received among the age groups. In other words, it is determined that the age difference does not cause a significant difference in the attitudes and behaviors of patients on patient safety. On the other hand, analysis results revealed a significant difference between genders. It is determined that the attitudes and behaviors of women towards patient safety are more sensitive than men's at-

Table 5. Women-men comparison according to the score they got on the evaluation of the patients' attitudes and behaviors in a patient safety questionnaire

Gender	n	Mean±SD	р
Women	172	21.58±3.91	0.029
Men	128	20.61±3.58	
SD: Standard de	viation.		

titudes and behaviors (Table 5). In our study, none of the survey questions showed a significant difference according to the educational background. Similarly, according to the Post-Hoc Turkey Test, none of the scales showed a significant difference according to the occupational groups.

DISCUSSION

In a study conducted about adult health literacy in the US, it is determined that gender does not make a significant difference in health literacy. However, health literacy increases with the level of education. [10] In our study, where patients' attitudes and behaviors are evaluated concerning patient safety, it is seen that women have higher scores. On the other hand, age difference and level of education does not make a difference in attitudes and behaviors related to patient safety.

In a study conducted by Williams et al.,[11] 59.5% of the participants stated they did not understand the informed consent form. 26% of them did not understand follow up appointment, and 41.6% of them did not understand they have to take pills on an empty stomach. It can see in a study about health literacy, ratios of the participants who got inadequate score change between 2-27.[12] In a study conducted in the US, it is found that health literacy is only at an adequate level for 12% of society.[13] In a study conducted in Turkey, two-thirds of society have limited or inadequate health.[14] It should be considered that all these results also have a probability of threatening patient safety. When considering the scoring given by the patients about their own safety, on average, it is closer to three fourth of the total score (a maximum score that can be achieved is 28). When the above-mentioned studies are considered, it is seen that attitudes towards patient safety are higher as distinct from studies about health literacy.

CONCLUSION

Patient safety is affected by many factors. Nowadays, mainly health care professional and medical errors arise from the institutions come to mind when the word patient safety is heard. On the other hand, safety concerns that arise from patients generally are ignored.

To achieve desired clinical quality, it is required to put emphasis on all risk factors for patient safety. Thus, there is a requirement for increasing the number of studies conducted about the own safety of the patient and for an effective problem and solution-oriented studies. On the other hand, the contribution of patients' attitudes and behaviors to the development or prevention of medical errors is one of the important subjects that need to be considered. Consequently, it is important for health care professionals to develop solutions offers towards possible patient-related safety concerns during treatment and care processes.

Ethics Committee Approval

Approved by the national health authority. No ethic committee evaluation was required for the related date.

Peer-review

Internally peer-reviewed.

Authorship Contributions

Concept: T.P., H.S.; Design: T.P., H.S.; Supervision: Y.B., G.Y.; Fundings: H.S., E.E.Ş.; Data: Y.B., E.E.Ş., G.Y.; Analysis: H.S., G.Y.; Literature search: T.P.; Writing: T.P., Y.B.; Critical revision: T.P., E.E.Ş.

Conflict of Interest

None declared.

REFERENCES

- Palteki T. Sağlık Profesyonellerinin Yetiştirilmesinde Hasta Güvenliği Eğitimi. In: Sur H, Palteki T, Yazıcı G, editors. Hasta Güvenliği. Ankara: Palme Yayınevi; 2019. p. 493–98.
- Buetow S, Davis R, Callaghan K, Dovey S. What attributes of patiens
 affected involvement in safety? A key opinion leaders' perspective.
 BMJ Open 2013;3:e003104. [CrossRef]
- Sørensen K, Van den Broucke S, Pelikan JM, Fullam J, Doyle G, Slonska Z, et al. Measuring heslth literacy in populations: illuminating the design and development process of the European Health Literacy Survey Questionnaire HLS-EU-Q. BMC Public Health 2013;13:948. [CrossRef]
- Kripalani S, Henderson LE, Chiu EY, Robertson R, Kolm P, Jacobson TA. Predictors of Medication Seif-management Skill in a Low-literacy Population. J Gen Intern Med 2006;21:852–6. [CrossRef]
- Shiffman S, Gerlach KK, Sembower MA, Rohay JM. Consumer Understanding of Prescription Drug Information: An Illustration Using an Antidepressant Medication. Ann Pharmacother 2011;45:452–8.
- Powell CK, Hill EG, Clancy DE. The Relationship Between Health Literacy and Diabetes Knowledge and Readiness to Take Health Actions. Diabetes Educ 2007;33:144–51. [CrossRef]
- Scott TL, Gazmararian JA, Williams MV, Baker DW. Health Literacy and Preventive Health Care Use Among Medicare Enrollees in a Managed Care Organization. Med Care 2002;40:395–404. [CrossRef]
- Kanj M, Mitic W. World Health Organization. Promoting Health and Development: Closing the Implementation Gap Nairobi. Kenya. Working document for discussion at the 7th Global Conference on Health Promotion; 2009 Oct 26-30; Nirobi, Kenya.
- World Health Organization. Patients for Patient Safety. Geneva: WHO Document Production Services; 2013.
- Rudd RE. Health Literacy Skills of U.S. Adults. Am J Health Behav 2007;31:S8–18. [CrossRef]
- Williams MV, Parker RM, Baker DW, Parikh NS, Pitkin K, Coates WC, et al. Inadequate Functional Health Literacy Among Patients at Two Public Hospitals. JAMA 1995;274:1677–82. [CrossRef]
- Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, et al. Health literacy and public health: A systematic review and integration of definitions and models. BMC Public Health 2012;12:80.
- Kutner M, Greenberg E, Jin Y, Paulsen C. The Health Literacy of America's Adults-Results From the 2003 National Assessment of Adult Literacy (NCES Publication No. 2006-483). DC: National Center for Education Statistics Institute of Education Sciences U.S. Department of Education. Washington: 2006.
- Durusu-Tanriöver M, Yıldırım HH, Demiray Ready FN, Çakır B, Akalın HE. Türkiye Sağlık Okuryazarlığı Araştırması. Ankara: Sağlık-Sen Yayınları; 2014.

74 South. Clin. Ist. Euras.

Hasta Tutum ve Davranışlarının Hasta Güvenliği Açısından Değerlendirilmesi

Amaç: Hasta güvenliği sorunu çok faktörlüdür. Günümüzde konu ile ilişkili çalışmalar kurumlar ve sağlık profesyonelleri tarafından yapılan hatalar üzerine odaklanmıştır. Çalışmamız, genellikle göz ardı edilen hastaların kendileriyle ilişkili tutum ve davranışlarının sebep olduğu güvenlik sorunlarını ortaya koyabilmek amacıyla tasarlanmıştır.

Gereç ve Yöntem: Hasta güvenliğinde hasta tutum ve davranışlarının değerlendirilmesine yönelik 300 hasta ve yakınına anket uygulanmış ve sonuçlar analiz edilmiştir.

Bulgular: Çalışma sonuçları değerlendirildiğinde, katılımcıların dörtte üçü sağlık sorunu yaşadıklarında hastaneye başvurduklarını beyan etmişlerdir. Buna karşılık katılımcıların yarısından fazlası sağlık profesyonelleri tarafından tedavi ve bakımları konusunda bilgilendirilmediklerini bildirmişlerdir.

Sonuç: Hasta güvenliği ile ilişkili sorunlarla baş etmenin önemli bir unsuru da hastaların tutum ve davranışlarının dikkate alınmasıdır. Sonuç olarak, sağlık profesyonellerinin tedavi ve bakım süreçlerinde hasta ile ilgili olası güvenlik endişelerine yönelik çözüm önerileri geliştirmeleri önemlidir.

Anahtar Sözcükler: Güvenlik problemleri; hasta güvenliği, hasta tutum ve davranışları.