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Patient Measure of Safety Scale: The Study of Adapting the 30 and 10-Item Form to Turkish

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Abstract

BACKGROUND/AIMS: Patients are an important source of information in reducing preventable harm that improves healthcare. Therefore, it is important to know the perceptions and thoughts of patients regarding the safety of health services. The aim of this study was to adapt the 10 and 30-item forms of the Patient Safety Precautions Scale (PMOS) to Turkish culture.

MATERIALS AND METHODS: The methodologically-designed study was conducted with 426 patients. To adapt PMOS to Turkish culture, language and content validity and construct the validity of scale were examined, and then reliability coefficients were calculated.

RESULTS: The overall Cronbach's alpha coefficient of scale was found to be 0.933 for PMOS-30 and 0.835 for PMOS-10. The mean scores of items ranged from 3.38±1.31 to 4.65±0.65. The item-total correlation values of items in the scale ranged from 0.427-0.883 for PMOS-30 and 0.435-0.859 for PMOS-10. The structure formed for PMOS-30 and PMOS-10 forms explains 76.620% and 57.260% of the total variance, respectively.

CONCLUSION: The Turkish version of the PMOS-10 and 30 scale is a valid and reliable tool. Hospitals can plan initiatives for safety improvements based on the findings from the PMOS-30 and PMOS-10 questionnaires.

Keywords: Patient safety, safety culture, patient involvement, patient feedback, hospital safety

INTRODUCTION

For all health systems in the world, patient safety is a crucial global public health issue. It is the basis of healthcare delivery and necessary to advance to a universal level of healthcare.[1] Patient safety requires intense organizational responsibility to prevent possible errors or when an error occurs, to identify, analyze, and correct them. All employes are responsible for identifying high-risk situations and reducing the hazards of undesirable incidents before errors occur.[2] Together with the responsibilities of healthcare professionals concerning patient safety, patient feedback and patient satisfaction regarding their care are crucial for ensuring patient safety and healthcare quality.[3,4] Patients can provide a unique perspective on safe care in hospitals. The relationship between hospitals' quality and safety practices (e.g. provision of resources, processes, practices, hospitalization, readmission, mortality, etc.) with patients' perceptions of care is very significant and becoming increasingly important for health systems to plan their interventions toward quality goals.[5,6]

It has been suggested in literature that current patient safety initiatives tend to reflect a narrow perspective that does not include perspective of patients and that there may be an inconsistency between these two.[7] Recent studies examining patients perspective on patient safety have shown that safety is different in their perspective.[8,9] Qualitative research has been conducted in hospitals to investigate the meaning of feeling safe to learn patients' perspectives, perceptions and experiences with respect to clinical safety. Results of these studies showed that patients' understanding of safety was different from that of health professionals. Safety for patients encompasses not only "error-free" but also continuity of care, psychological support, trust, effective communication and

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information to ensure safety in the clinical setting.[10,11] Therefore, it is critical to involve patients and their relatives in patient safety practices in order to increase awareness of patient safety issues and to raise public awareness.[12] However, public knowledge of patient safety is insufficient. Recently, the role of patients, who are most directly affected by patient safety, on patient safety has begun to be investigated. For example, patients must ensure that their medications are prescribed correctly for drug safety. They should be informed about the effects and side effects of drugs. Research has shown that the patient involvement is effective in preventing medication errors and side effects.[13] The Healthcare Research and Quality Agency has provided guidelines to patients to prevent medication errors and medication side effects as well as to minimize the risk of medical errors during hospitalization and surgery.[14]

To support patient participation, which is very important in ensuring patient safety and developing existing patient safety practices, it is necessary to determine the perception of safety of patients first. Patient participation in safety is receiving increasing attention internationally and is an evolving field. In recent years, various tools and guidelines have been developed to improve patient safety using a patient-centered perspective.[15] To increase patient safety in the hospital environment, most of these tools and guidelines are designed to evaluate patient feedback.[16] In Türkiye, there is no tool for patients to evaluate the health care they received. The Patient Safety Precautions Scale (PMOS) is the first questionnaire structured to measure patient perception of safety. PMOS was originally developed as 44 items.[4,16] Two shorter versions of the scale were created by Louch et al.[17]: PMOS-10 and PMOS-30. In this context, the aim of the research is to adapt the 10 and 30-item forms of the Patient Measures of Safety Scale to Turkish culture.

MATERIALS AND METHODS

Study Design

The methodologically designed study was conducted in two public hospitals located in the southern region of Türkiye. Research data were collected between February and June 2022.

Participants

All services except intensive care units, psychiatry, and coronavirus disease-2019 (COVID-19) isolation services were included in the research in the institutions where the research was conducted. In scale adaptation studies, it is recommended to take 10-15 people per item, or the sample should be at least 300-500 people according to International Test Commission guidelines. In this study, the scale consisted of 30 items, and 426 people participated in the study.

Inclusion criteriawere at least 18 years old and able to speak Turkish and patients hospitalized for at least three days.

Exclusion criteria: patients with cognitive impairment, psychiatric, and terminal illness were not included in the study.

Data Collection Forms

Patient Measures of Safety-PMOS-30-10 is a newly structured questionnaire designed to measure patient safety perception.[17] The questionnaire consists of three parts; the first part contains the Turkish version of Patient Measures of Safety-30 and 10 questionnaires. Scale, 30 items and organization and care planning; access to resources; communication and teamwork; ward type and layout; information flow; staff roles and responsibilities; staff education; equipment and delays consists of eight sub-dimensions with main headings. All items were measured using a 5-point Likert scale. The "I prefer not to answer/I do not know" option is also available. Items 4, 9, 15, 16 18, 19, 22, 23 and 29 in the scale are negative and reverse-coded. The patient's perceptions of patient safety are high when there is an increase scores of scale and sub-dimension. In addition, 30-item scale has a short form of 10 items (items 3, 4, 5, 11, 13, 14, 19, 25, 28 and 29) and consists of one dimension. The second part consists of two other items that are not included in the scale. It evaluates patients general perception of safety with two direct questions and one open-ended question; "How do you evaluate safety of this hospital?"; "Have you noticed any incidents that may harm patients?" (yes or no); "If yes, please explain" (open-ended question). In the third section, there is a socio-demographic characteristic form.

Language and Scope Validity

To avoid problems that may be related to translation, scale items were translated into Turkish by the researchers and three native English language experts who are fluent in both languages, knowledgeable in culture and terminology, and in Turkish. Researchers selected the most appropriate expressions from Turkish translations of questionnaire items and created a Turkish questionnaire and presented it to 10 experts. Language suitability, clarity, and intelligibility of each item for Turkish society were evaluated by the experts. The PMOS was given its final form in line with recommendations of the experts. For this, the original and its Turkish translation of the scale was presented to the expert group, and experts were asked to select one of the answers "not suitable (1)", "the item needs to be adjusted (2)", "appropriate but a small change is required (3)" or "very suitable (4)". The Davis technique was used to calculate the content validity ratios of scale items and content validity index of scale. In this index, content validity rates of items and content validity index of scale are expected to be above 0.80. In this study, the scope validity index value was found to be "0.90" for 7 items and "1" for the other 23 items. Scale was translated back into English by a Turkish linguist who had not seen the English version of the questionnaire before, knew both languages and cultures well, and was sent back to Gemma Louch and her approval was obtained. After going through the stages, it took its final form in Turkish.

Data Collection

During the data collection process, researchers visited hospitals every week and evaluated each clinic every three days, and patients who were hospitalized for at least three days were included in the study. Patients were requested to sign an informed consent form. Questionnaires were collected by the researcher in the form of distribution and retrieval using the sealed envelope method.

Ethical Considerations

First, permission was obtained from the scale owner, Gemma Louch. Ethics board permission was received from the Ethics Committee of the Akdeniz University Faculty of Medicine (approval number: KAEK-871, date: 01.12.2021) and permission of the institutions where the study was to be conducted was obtained. In addition, informed consent was obtained from patients who were to participate in the study.

Statistical Analysis

SPSS 23.0 and AMOS 20.0 package programs were used in data analysis. The mean and standard deviations for each item of the Turkish version of the questionnaire and weighted average were calculated. The Davis technique was used to calculate the language content validity index of the scale; exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were used for construct validity; and the Cronbach's alpha value was used for the internal consistency reliability test. The confidence interval was set at 95% and the significance level was $p<0.05$.

RESULTS

Socio-Demographic Results

The average age of the participants in the study is 35.80±9.98, 59.2% were women, 24.4% were primary school graduates, 57.4% lived in the district, 65.3% had income equal to their expenses, and 62.4% did not work. 46.9% of the participants rated safety of the hospital as good, and two people stated that they noticed an incident that could harm patients (Table 1).

Table 1. Some descriptive features of the participants (n=426)

Specifications	n	%
Gender		
Woman	252	59.2
Male	174	40.8
Educational status		
Literate	70	16.5
Primary school	104	24.4
Middle school	84	19.7
High school	92	22.6
University	76	17.8
Where he/she lives		
Province	8	1.9
District	330	77.4
Village	88	20.7
Income status		
Income less than expenses	24	5.6
Income equals expense	278	65.3
Income more than expenses	124	29.1
Employment status		
Working in the public/private sector	88	20.7
Self-employed	72	16.9
Unemployed	266	62.4
Overall patient perception of safety		
Bad	34	8.0
Sufficient	192	45.1
Good	200	46.9
Have you noticed any events that could have caused harm to patients?		
No	424	99.5
Yes	2	0.5
	Min.-Max.	**Mean ± SD**
Age	19-60	35.80±9.98

Min.: Minimum, Max.: Maximum, SD: Standard deviation.

Item Analyses

Within the scope of adapting PMOS to Turkish culture, construct the validity of scale was first examined and then the reliability coefficients were calculated. The item analysis results of PMOS are shown in Table 2. The mean scores of items ranged from 3.38±1.31 to 4.65±0.65. The item-total correlation values of items in the scale vary between 0.427-0.883 for PMOS-30 and 0.435-0.859 for PMOS-10. Overall Cronbach's alpha coefficient of scale was determined as 0.933 for PMOS-30, and when item was deleted, Cronbach's alpha coefficients varied between 0.926 and 0.934. Cronbach's alpha coefficient for PMOS-10 was determined as 0.835, and when item was deleted, it was seen that Cronbach's alpha coefficients varied between 0.783 and 0.835.

Table 2. Item analysis results of patient measure of safety (PMOS-30 and 10)

		PMOS-30		PMOS-10	
Items	**Mean ± SD**	**Item total correlation**	**When the item is deleted Cronbach' alpha**	**Item total correlation**	**When the item is deleted Cronbach' alpha**
Item 1	4.62±0.68	0.598	0.930		
Item 2	4.33±0.78	0.574	0.931		
Item 3	4.25±0.59	0.534	0.931	0.628	0.825
Item 4	4.12±1.14	0.480	0.931	0.458	0.833
Item 5	4.60±0.60	0.661	0.930	0.797	0.816
Item 6	4.15±1.23	0.817	0.927		
Item 7	4.63±0.68	0.570	0.931		
Item 8	**4.65±0.65**	0.615	0.930		
Item 9	4.21±0.95	0.561	0.931		
Item 10	4.61±0.70	0.570	0.931		
Item 11	4.59±0.72	0.565	0.931	0.681	0.811
Item 12	4.42±0.78	0.856	0.928		
Item 13	4.43±0.77	0.883	0.928	0.859	0.783
Item 14	4.35±1.11	0.576	0.930	0.635	0.829
Item 15	3.66±1.22	0.579	0.931		
Item 16	3.75±1.32	0.527	0.931		
Item 17	**3.38±1.31**	0.564	0.931		
Item 18	3.53±1.30	0.578	0.931		
Item 19	3.81±1.20	0.569	0.931	0.435	0.835
Item 20	4.15±1.27	0.813	0.927		
Item 21	4.14±1.28	0.817	0.926		
Item 22	3.62±1.28	0.427	0.934		
Item 23	3.76±1.27	0.435	0.933		
Item 24	4.26±1.17	0.715	0.928		
Item 25	4.16±1.21	0.749	0.928	0.795	0.815
Item 26	4.28±1.18	0.674	0.929		
Item 27	4.13±1.30	0.717	0.928		
Item 28	4.21±1.29	0.647	0.929	0.641	0.827
Item 29	3.90±1.15	0.619	0.929	0.683	0.810
Item 30	4.10±1.22	0.787	0.927		

PMOS-30: Patient Safety Precautions Scale-30, SD: Standard deviation.

Exploratory Factor Analysis

Adequacy of the research sample for factor analysis was tested with Kaiser-Meyer-Olkin (KMO) analysis, and its suitability for factor analysis was tested with Bartlett's test of Sphericity (BTS) analysis. The KMO coefficient was 0.939 for PMOS-30 and 0.891 for PMOS-10, and the BTS result was found to be significant (p=0.001). EFA was performed to examine the factor structure of the scale after determining these data were applicable to factor analysis. According to factor rotation results in the investigation of PMOS-30, it was determined that there were eight components with an eigenvalue above 1 for 30 items. For PMOS-10, there was only one structure with eigenvalue greater than 1 and scale items showed single-factor structure. Structure formed for PMOS-30, and PMOS-10 forms explains 76.620% and 57.260% of total variance, respectively. Factor loads of the sample ranged from 0.565-0.947 for PMOS-30 and 0.623-0.895 for PMOS-10 (Table 3).

Table 3. Explanatory factor analysis results regarding the patient measure of safety (PMOS-30 and 10)

	PMOS-30 item								PMOS-10 item
KMO	0.939								0.891
χ^2 (15)	16994.650								12948.016
p	0.001								0.001
Items	F1	F2	F3	F4	F5	F6	F7	F8	F1
Item 1	0.920								
Item 2		0.923							
Item 3	0.924								0.729
Item 4		0.878							0.830
Item 5					0.615				0.817
Item 6						0.935			
Item 7							0.932		
Item 8								0.947	
Item 9				0.778					
Item 10				0.733					
Item 11				0.722					0.766
Item 12						0.797			
Item 13	0.823								0.895
Item 14							0.785		0.746
Item 15				0.744					
Item 16				0.565					
Item 17				0.626					
Item 18				0.704					
Item 19	0.615								0.635
Item 20						0.867			
Item 21								0.891	
Item 22		0.656							
Item 23			0.584						
Item 24	0.890								
Item 25		0.924							0.850
Item 26						0.887			
Item 27			0.898						
Item 28	0.910								0.783
Item 29			0.702						0.623
Item 30					0.863				
Explained variance (%)				76.620				57.260	

PMOS-30: Patient Safety Precautions Scale-30, KMO: Kaiser-Meyer-Olkin.

Confirmatory Factor Analysis

In CFA, the eight-factor structure of PMOS-30 and the one-factor structure of PMOS-10 were tested and the goodness of fit statistics were examined. The goodness of fit index values in the sample are given in Table 4 for both forms of the scale and it is seen that the established models give acceptable goodness of fit index values.

Reliability Analysis

Participants mean PMOS-30 score was 125.61±18.86 and mean PMOS-10 score was 42.84±6.08. In study, Cronbach's alpha values for eight sub-dimensions of PMOS-30 were determined as between 0.660 and 0.936. Cronbach's alpha value for the total scale was 0.933; the PMOS-10 Cronbach's alpha value was determined as 0.835 (Table 5). Pearson correlation coefficient between long and short forms of the scale was 0.964 (p=0.001). All reciprocal correlations of total and eight sub-dimensions of the PMOS-30 scale were medium and high, positive and statistically significant (p<0.001) (Table 6).

DISCUSSION

The current study investigated the reliability and validity of the Patient Safety Measures-PMOS:30 and 10 Item-Form, a tool that allows patients to identify safety risks in hospital settings. The results of the study show that scales have acceptable validity and reliability and that each construct is adequately represented. Patient safety is a multidimensional concept. PMOS-30 assesses eight key areas of patient safety.[16]

Table 4. Confirmatory factor analysis results of PMOS-30 and PMOS-10

Fit indices	χ^2/df	p	CFI	SRMR	RMSEA	TLI
PMOS-30	4.812	<0.001	0.948	0.047	0.051	0.935
PMOS-10	4.125	<0.001	0.954	0.041	0.046	0.961
Good fit	<2	-	>0.97	<0.05	<0.05	>0.95
Acceptable fit	<5	-	>0.90	<0.08	<0.08	>0.90

PMOS-30: Patient Safety Precautions Scale-30, CFI: Comparative fit index, SRMR: Standardized root mean square residual, RMSEA: Root mean square error of approximation,TLI: Tucker-Lewis Index.

Table 5. Sub-dimensional values and reliability analysis results of patient measure of safety (PMOS-30 and 10)

Variables	Question number	Total, Mean ± SD	Item, Mean ± SD	Cronbach's alpha
PMOS-30	30	125.61±18.86	4.18±0.62	0.933
Communication and teamwork	6	25.97±3.51	4.32±0.58	0.812
Organization and care planning	4	16.53±2.73	4.13±0.68	0.660
Access to resources	3	11.80±2.67	3.93±0.89	0.723
Ward type and layout	7	27.78±4.50	3.96±0.64	0.871
Information flow	2	8.71±1.66	4.35±0.83	0.851
Staff roles and responsibilities	4	17.01±4.15	4.25±1.03	0.936
Staff training	2	8.99±1.68	4.49±0.84	0.898
Delays	2	8.79±1.72	4.39±0.86	0.791
PMOS-10	10	42.84±6.08	4.28±0.60	0.835

PMOS-30: Patient Safety Precautions Scale-30, SD: Standard deviation.

Table 6. Sub-dimensional correlation values of the Patient Safety Perception Scale

Scales		1	2	3	4	5	6	7	8	9	10
PMOS-30 items	r	-									
	p										
Communication and teamwork	r	0.953									
	p	0.001									
Organization and care planning	r	0.852	0.763								
	p	0.001	0.001								
Access to resources	r	0.837	0.750	0.744							
	p	0.001	0.001	0.001							
Ward type and layout	r	0.740	0.632	0.715	0.637						
	p	0.001	0.001	0.001	0.001						
Information flow	r	0.844	0.838	0.633	0.655	0.574					
	p	0.001	0.001	0.001	0.001	0.001					
Staff roles and responsibilities	r	0.869	0.876	0.622	0.680	0.580	0.905				
	p	0.001	0.001	0.001	0.001	0.001	0.001				
Staff training	r	0.747	0.699	0.539	0.658	0.676	0.650	0.632			
	p	0.001	0.001	0.001	0.001	0.001	0.001	0.001			
Delays	r	0.870	0.859	0.613	0.606	0.625	0.842	0.881	0.830		
	p	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001		
PMOS-10 items	r	0.964	0.948	0.802	0.804	0.744	0.844	0.851	0.784	0.875	-
	p	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	

PMOS-30: Patient Safety Precautions Scale-30.

Construct validity was used for the validity of the scales in our study. Therefore, EFA and CFA were performed. Before EFA, the KMO value and Bartlett test results were examined in terms of sample adequacy. If KMO measurements of 0.80 and above are obtained, this result shows that the sample adequacy of the factor analysis data is sufficient. The results of the Bartlett test show that items in scale are suitable for factor analysis.[18] Accordingly, the KMO test results for PMS-30 and PMS-10 were found to be 0.939 and 0.891, respectively, and the BTS test results were found to be significant in this study, showing that the sample size of the study was sufficient for factor analysis. The varimax rotation technique, which is one of the most commonly used vertical rotation techniques were used in EFA.[19] Higher the total variance explained by the factors in the analysis, stronger factor structure of the scale.[20] At least 30% of the total variance is expected to be explained in single-factor scales. It should be higher than 30% in multi-factor structures.[19] The eight-factor structures that arise on the PMOS-30 scale (76.62%) and one-factor structures that arise on the PMOS-10 scale (57.26%) account for the majority of the total variance. Therefore, it can be said that the factor structure is strong. The first criterion of factor analysis is that load values of items in factors are high. In the literature, it is stated that items with a correlation value below 0.30 are insufficient, items with a correlation value between 0.30-0.40 can be included in the scale, and items with a value above 0.40 have good distinguishing features.[21] In our study, it was found that there was no item with correlation value less than 0.30 and the lowest value was 0.565 for PMS-30 and 0.623 for PMS-10. In the next step, CFA was applied and the eight-factor structure of the PMOS-30 measurement tool and the one-factor structure of the PMOS-10 were tested. CFA provides information about whether the factors have sufficient relationships, whether the factors are independent from each other, which variables are related to which factors, and whether the factors are sufficient to explain the model.[19,22] In this respect, the eight-factor structure of the PMOS-30 is in an acceptable level in general with the collected data, and the eight-factor structure of the scale is confirmed. It is understood that the single-factor structure of PMOS-10 shows acceptable level of agreement with the collected data and this structure is confirmed.

Reliability analysis determines how accurately the scale measures the concept it represents and how consistent the answers given to the scale items are.[22] Cronbach's alpha coefficient was calculated to test internal consistency for reliability. The higher alpha coefficient, the higher internal consistency of the scale. The alpha coefficient should be between 0.60 and 0.80 to verify the reliability of the scale. However, if the alpha coefficient is between 0.80 and 1.00, the scale has a high level of reliability. A coefficient close to 1 indicates that the scale has a high level of internal consistency reliability.[19] The fact that the Cronbach's alpha value was 0.83 in both scales in this study indicated that the study was highly reliable. The two subdimensions with the lowest alpha coefficient are "Organization and maintenance planning" (0.660) and "Access to resources" (0.723). It can be said that these two subdimensions are quite reliable. In the original study of the scale, PMOS-30, (α=0.89) and PMOS-10 (α=0.79) were found to have good internal reliability. Measurements performed showed good reliability and validity and retained the psychometric properties of the original scale.[17] The validity and reliability of the PMOS questionnaire has been confirmed in studies in Australia,[5] Italy[23] and Iran.[24] The Persian version of PMOS validated in Iran has been identified as an appropriate tool for patients in Persian communities to assess their safety.[24]

In general, according to the results of the PMOS-30 questionnaire, the lowest average was "Temperature" (item: 17, mean: 3.38) and all averages were 4 except for "access to resources" (3.93) and "ward type

and layout" (3.96) fields. In the study, patients mostly agreed with the item "My treatment/procedure/operation always happened on time". The rate of patients' agreement with the item "Temperature" is at the lowest level. It is suggested that such a result was obtained because the institutions where the research was conducted are in the hottest region of Türkiye (summer average 40-45 °C). In the study, the general safety perception of patients was at a satisfactory level. Only 34 patients rated safety as badorvery bad. They cited 20 incidents that could cause harm. In a study by Schiavone et al.[23], patients' overall perception of safety was found to be satisfactory, and only 24 patients rated safety as bad/very bad. Thirty-one incidents that could cause harm have been identified.[23] These results are similar to our study.

The Patient Measures of Safety Scale is the first tool developed to systematically and routinely collect information from patients about the safety of their care.[16] This scale allows the healthcare service to proactively identify its strengths and weaknesses when it is used at the clinical level. In addition, it may be a guide for planning necessary initiatives to prevent errors from occurring. More knowledgeable patients with ongoing treatments, especially those who become familiar with the details of their treatment, may be more aware of errors or delays.[25] PMOS is a tool that guides how patients can fulfill this role and can reveal valuable data about improving patients' safety.[4] In terms of developing new methods to improve safety by evaluating patient safety and contributing factors in hospital settings from the perspective of patients, the current study is of vital importance. Current information on quality and safety comes mainly from the reports of healthcare professionals, but incident reporting systems suffer from under-reporting.[4,17] PMOS-30 or 10 might be used in addition to such other patient safety tools as incident reporting systems. By providing a mechanism for the systematic collection of this information, it might be helpful for healthcare organizations in their organizational learning.

Study Limitations

Being conducted with a patient population in only two hospitals is the most significant limitation of the study. Therefore, the tool needs to be used with larger patient populations. Besides, since this questionnaire administered to inpatients may be known to the staff, patients may hesitate to identify undesirable conditions. In this case, there might be a deficiency in incident reports/notifications.

CONCLUSION

According to the results of this study, PMOS-30 and 10 scales showed acceptable reliability and validity. PMOS might help to systematize the process of obtaining safety feedback from patients as part of patient safety practices. Using PMOS questionnaires, healthcare administrators can identify initiatives to improve safety and healthcare quality in hospital settings. For future research, it is recommended to investigate differences between clinics in different hospitals, to identify missing and erroneous situations, and to conduct interventional studies.

MAIN POINTS

- Measuring patients' perception of safety can contribute to the development of a safety culture.
- Patients' perceptions of safety can improve service quality and providing cost-effective care.
- Involving patients in reporting adverse events can help identify safety culture gaps and reduce medical errors.

ETHICS

Ethics Committee Approval: Ethics board permission was received from the Ethics Committee of the Akdeniz University Faculty of Medicine (approval number: KAEK-871, date: 01.12.2021) and permission of the institutions where the study was to be conducted was obtained.

Informed Consent: In addition, informed consent was obtained from patients who were to participate in the study.

Peer-review: Externally peer-reviewed.

Authorship Contributions

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DISCLOSURES

Conflict of Interest: No conflict of interest was declared by the authors.

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