

Speech and Language Therapists Attitudes Towards Patient Safety: A Descriptive Cross-Sectional Pilot Study

Dil ve Konuşma Terapistlerinin Hasta Güvenliğine Yönelik Tutumları: Betimleyici Kesitsel Pilot Çalışma

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ABSTRACT Objective: It is of utmost significance for speech and language therapists (SLTs) to possess information about the patient safety and to incorporate this knowledge into their day-to-day therapeutic practice. The purpose of this research was to gather information about the attitudes of SLTs towards patient safety. **Material and Methods:** Through an online Google Forms survey on patient safety, we collected data from 67 SLTs (mean age 27.41±5.7; 56 female and 11 male) practicing in Türkiye. We reached out all members of Language and Speech Therapist Associations (Dil ve Konuşma Terapistleri Derneği) in Türkiye and survey to through Google Forms to gather data. The data was analyzed using IBM SPSS. **Results:** The research results revealed that negligence and ignorance were the main factors affecting patient safety. There was no significant difference between age groups in education on patient safety, error reporting, team functioning, patient engagement, and SLTs curriculum. Upon comparing the survey questions based on the duration of SLTs' professional experience, it was found that therapists with more years of work experience were more inclined towards cooperation and more open to collaborating as a team in order to address patient safety issues. **Conclusion:** It is essential to provide education to SLTs on patient safety in order to provide better patient care. It will be possible to get more specific information through a qualitative investigation in the future, which will contribute to the expansion of the existing body of knowledge on the subject.

Keywords: Patient safety; speech and language therapy; health education; clinical practice

ÖZET Amaç: Dil ve konuşma terapistlerinin (DKT) hasta güvenliği hakkında bilgi sahibi olması ve günlük klinik pratiklerinde bu bilgileri kullanması önemlidir. Bu araştırmanın amacı, DKT'nin hasta güvenliğine yönelik tutumları hakkında bilgi toplamaktır. **Gereç ve Yöntemler:** Bu amaçla, hasta güvenliğine yönelik bir anket kullanarak 67 DKT'den (ortalama yaş 27,41±5,7; 56 kadın ve 11 erkek) veri toplanmıştır. Hazırlanan anket Google Formlar aracılığıyla Türkiye'deki Dil ve Konuşma Terapistleri Derneğinin tüm üyelerine gönderildi. Veriler IBM SPSS kullanılarak analiz edildi. **Bulgular:** Araştırma sonucuna göre, hasta güvenliğini etkileyen faktörlerin önemli ölçüde ihmalden ve bilgisizlikten kaynaklandığı belirlenmiştir. Hasta güvenliği, hata raporlama, ekip işleyişi, hasta katılımı ve DKT müfredatı konularında yaş grupları arasında anlamlı bir fark bulunmamıştır. DKTlerin mesleki deneyim sürelerine göre anket soruları karşılaştırıldığında, alanda daha uzun çalışmış terapistlerin hasta güvenliğine yönelik sorunların çözümünde ekip olarak çalışmaya daha yatkın oldukları belirlenmiştir. **Sonuç:** Yetkin hasta bakımının sağlanması için DKT'lere hasta güvenliği konusunda eğitim verilmesi önemlidir. İleride de nitel çalışmalar yaparak daha detaylı bilgi edinilmesi alandaki bilginin derinleşmesine katkı sağlayacaktır.

Anahtar Kelimeler: Hasta güvenliği; dil ve konuşma terapisi; sağlık eğitimi; klinik uygulama

The scientific discoveries of modern medicine have led to substantial improvements in health-care outcomes. Nevertheless, research conducted in nu-

merous countries demonstrates that along with these advantages, there are substantial hazards to patient safety. The healthcare industry is confronted with sig-

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nificant challenges that require a comprehensive comprehension of the extent of patient safety and the necessity for health care to adopt a culture of safety among all stakeholders.

While the curricula of many health-care professions are always evolving to incorporate the latest findings and information, patient safety knowledge is unique in that it is applicable to all practice areas and professions.¹ Patient safety refers to the proactive measures used to avoid errors in healthcare and minimize or eliminate damage to patients resulting from these errors. Ensuring patient safety has been a paramount concern for civilizations throughout history, with different measures and protections being employed in each era.² International Classification for Patient Safety conceptual framework is a perpetual cycle of learning and enhancement that prioritizes the prevention, identification, and mitigation of risks. Language and communication disorders experienced by patients are considered contributing factors/hazards for patient safety.³

Individuals with communication disabilities represent a diverse population, and the research addressing patient safety issues encountered by this group presents a wide range of literature concerning objectives, methodologies, and outcomes.⁴ In their review, Hemsley et al., investigated 27 papers related to patient safety. Only 4 of the papers mentioned about the adverse events or patient safety in patients with communication disabilities. In the rest of 23 research papers, the poor quality of healthcare in the hospital setting was mentioned and highlighted concerns regarding the quality of healthcare for patients with communication disabilities. As a result of their review they suggested that the quality of care was inadequate, as evidenced by issues related to insufficient and safe mealtime assistance and the lack of appropriate mealtime equipment, access to call bells, safe and comfortable positioning, adequate supervision to prevent falls, and a secure physical environment for individuals with reduced mobility or wheelchair users.⁴

The studies highlighted not only concerns regarding inadequate quality of care but also several “near-miss” incidents that were averted by the atten-

tiveness of parents or caregivers who returned to the hospital. Concerns and anticipations regarding adverse events were prominently observed among carers in various studies, highlighting the necessity for heightened vigilance by both family members and professional caregivers during hospital stays.

Research on patient safety in the field of speech and language therapy is significantly limited. However, research conducted in several other fields of healthcare suggests that patient safety can be improved through comprehending the cultural environment in which decisions regarding risks are made. Despite the lack of extensive work in the field of SLT, one particular area, the contributions of SLTs to the management of dysphagia, as well as their responsibilities in the intensive care unit with regard to patient safety, has been studied.^{5,6}

In Türkiye, there is no well-established patient safety and an error reporting (incident reporting) system. However, given the significance of patient safety in the healthcare sector, since the early 2000’s substantial measures have been implemented to address this issue. One important step in that direction was the establishment of the Patient Safety Association in 2006. The primary objective of this association was to promote the culture of patient safety and to achieve this they have organized three international conferences on patient safety.⁷

Patient safety is a priority for all healthcare professionals, including SLTs, who are responsible for providing health care. SLTs are independent professionals who specialize in diagnosing and treating issues related to language, speech, communication, voice and swallowing. Their primary responsibility is to actively engage in the prevention, diagnosis, and intervention of communication and swallowing disorders that hinder effective communication and diminish the overall well-being of individuals throughout all stages of life, from infancy to old age (Köklü, 2021 [Unpublished Master’s thesis, Anadolu Üniversitesi]). There is a strong probability that there may be problems with patient safety in the area of SLT.

SLTs encounter multiple risks associated with patient safety in the therapeutic setting. These might

manifest in several forms, including providing inappropriate intervention, delayed and/or inaccurate diagnosis of speech and language impairments, and misinterpretation of gathered data. Each of them is considered to be a patient safety risk, and it is the responsibility of the SLTs to handle them. Furthermore, it is imperative to provide patients with comprehensive knowledge regarding patient safety and encourage their active involvement in this crucial endeavor. To ensure patient engagement in patient safety procedures, it is necessary to establish the factors that enhance this engagement and promote collaboration between healthcare professionals and patients. Enhancing patient engagement may be achieved by enhancing the patient's ability to engage in self-care. The crucial stage in this process is to provide the patient with pertinent information and essential instruction regarding the assessment and intervention process. Therefore, enhancing the patient's comprehension abilities and awareness of the potential dangers associated with the diagnosis and treatment of the issue they are experiencing might empower the patient to actively participate in managing the condition.⁷ While the institution and employee still have duties, active engagement of the patient may provide excellent outcomes in clinical quality procedures.^{8,9}

While the existing research on patient safety is rather limited, there are studies that specifically focus on medical students, nurses, midwives and physical therapy and rehabilitation students.¹⁰⁻¹³ In the speech and language literature, there is an absence of research that concentrates on the procedures that ensure the safety of patients. The objective of this research is to ascertain the knowledge and attitudes of SLTs about patient safety.

MATERIAL AND METHODS

STUDY DESIGN

This is a descriptive and cross-sectional research conducted to investigate the knowledge of patient safety among SLTs. This study received ethical clearance from the Ethics Committee of Biruni University (date: December 22, 2023, no: 2023-KAEK-85-32). The study was performed according to the Declaration of Helsinki principles. The purpose of this re-

search was to examine the degree of knowledge and awareness of patient safety among SLTs who are actively practicing in the field. The survey questions for the study were based on the Patient Safety Attitude Scale (APSQ-III).¹⁰ APSQ-III consists of 30 items in 9 different sub-dimensions. The subdimensions of APSQ-III are patient safety training received, error reporting confidence, working hours as a cause of error, error inevitability, professional incompetence as a cause of error, disclosure responsibility, team functioning, patient involvement in reducing errors and importance of patient safety in the bachelor's degree curriculum. For the current study, we have adapted the APSQ-III questionnaire through translation from English to Turkish. Afterwards, 3 Doctor of Philosophy (PhD) level SLTs who were experienced in speech and language therapy and one medical doctor specialized in patient safety analyzed the items and created a new questionnaire based on the Turkish translation of the APSQ-III. The most important items related to SLT were chosen and the final version of the questionnaire to determine the knowledge regarding patient safety was created. As it is a pilot study, reliability and validity analysis were not carried out. Following the preparation of this survey, which was designed for SLTs and consisted of 20 items, three SLTs with PhDs provided expert comments, and the final version was ready for data collection.

Patient safety is assessed across five sub-dimensions. These are receiving patient safety training, error reporting, error inevitability, professional incompetence as a source of error, team functioning, patient engagement in error reduction, and the relevance of the patient safety course in the curriculum. Responses were recorded on a five-point Likert scale (5=strongly agree and 1=strongly disagree). Higher scores indicate better knowledge on patient safety.

Google Forms were used to collect data, which was then sent by e-mail to the Turkish Language and Speech Therapist Associations [Dil ve Konuşma Terapistleri Derneği (DKTD)] to reach SLTs in Türkiye (about 1000 members as of 2024). DKTD is a professional association to which only qualified SLTs are admitted as members, thus we used their SLT database to reach our participants. With the DKTD's

approval, the survey was distributed among the association's members. Participation in the study was entirely voluntary.

PARTICIPANTS

67 SLTs participated in the study. The power analysis for the number of required participants, which was 60, was based on a similar study involving physiotherapists.⁹

Inclusion criteria:

- Being a speech and language therapist.
- Working actively as a speech and language therapist.

Exclusion criteria:

- Not being a graduate of the speech and language therapy program.
- Not actively working as a speech and language therapist.
- Withdrawal at any stage of the study.

DATA ANALYSIS

IBM SPSS 25 (IBM, Armonk, NY, ABD) was used to conduct statistical analysis. Since the normality and/or homogeneity assumptions were not satisfied for the majority of the parameters evaluated, we used non-parametric Mann-Whitney U test to analyze our data. In addition, partial Spearman rank correlations were performed to analyze the association between participants' sociodemographic variables (age and years of experience) and patient safety education.

RESULTS

The total number of 67 SLT participated in our study, with a mean age of 27.41±5.7 (minimum 22; maximum 47). Table 1 shows the demographic characteristics of the participants. As seen in Table 1, we had 56 women and 11 men participants and 38 of them had bachelor's degree, 19 of them had Master's degree and 10 of them had PhDs in SLT. The majority of the participants were working in rehabilitation centers, followed by private clinics and hospitals. The participant group was divided into two categories according to age and years of experience in the field.

TABLE 1: Demographic characteristics of the participants.

Variables	Group	n	Percentage (%)
Age groups	Younger than 25	35	52.2
	Older than 25	32	47.8
	Total	67	100
Gender	Women	56	83.6
	Men	11	16.4
	Total	67	100
Education	Bachelor	38	56.7
	Master's	19	28.4
	PhD	10	14.9
	Total	67	100
Working place	Rehabilitation center	35	52.2
	Special clinic	15	22.4
	Hospital	11	16.4
	Other	6	9.0
	Total	67	100
Years of experience	Less than 3 years	33	49.3
	More than 3 years	34	50.7
	Total	67	100
Education on patient safety	Yes	24	35.8
	No	43	64.2
	Total	67	100

PhD: Doctor of Philosophy

In Table 2, the results of subdimensions of patient safety knowledge regarding age groups are given. There was no significant difference between the age groups in terms of the education they received ($p=0.819$). There is no significant difference in error reporting scores across age groups ($p=0.682$), indicating that error reporting behavior does not vary with age. The average rankings for team functionality are higher among young individuals, while older individuals have lower rankings. Nevertheless, this disparity is not statistically significant ($p=0.123$). There is no statistically significant difference between the age categories in terms of patient engagement ($p=0.414$). There was no statistically significant difference observed between the age groups in relation to the curriculum ($p=0.59$). The assessments of both age cohorts about the curriculum are comparable.

The analyses across age groups on several aspects of patient safety knowledge showed no overall significant differences ($p=0.279$), suggesting that age does not have a significant impact on perceptions and evaluations of these topics. However, the observation

TABLE 2: Subdimensions of patient safety regarding to age groups.

	Age group	n	Mean rank	Sum of ranks	U	p value
Training received	Younger than 25	35	34.51	1208.00	542.00	0.819
	Older than 25	32	33.44	1070.00		
Error reporting	Younger than 25	35	34.93	1222.50	527.50	0.682
	Older than 25	32	32.98	1055.50		
Team functioning	Younger than 25	35	37.33	1306.50	443.50	0.123
	Older than 25	32	30.36	971.50		
Patient engagement	Younger than 25	35	35.76	1251.50	498.50	0.414
	Older than 25	32	32.08	1026.50		
Curriculum	Younger than 25	35	34.46	1322.50	427.50	0.59
	Older than 25	32	31.31	955.50		
Total	Younger than 25	35	36.46	1276.00	474.50	0.279
	Older than 25	32	31.31	1002.00		

TABLE 3: Subdimensions of patient safety regarding to Years of Experience.

	Years of Experience	n	Mean Rank	Sum of Ranks	U	p value
Training received	-3	33	37.82	1248.00	435.00	0.109
	+3	34	30.29	1030.00		
Error reporting	-3	33	38.29	1263.50	419.50	0.074
	+3	34	29.84	1014.50		
Team functioning	-3	33	39.86	1315.50	367.50	0.011*
	+3	34	28.31	962.50		
Patient engagement	-3	33	37.29	1230.50	452.50	0.150
	+3	34	30.81	1047.50		
Curriculum	-3	33	38.00	1254.00	429.00	0.60
	+3	34	31.31	1024.00		
Total	-3	33	39.97	1319.00	364.50	0.013*
	+3	34	28.21	959.00		

*: Significant difference.

that younger people have higher average rankings in some areas, such as team functioning, may indicate small age-related differences.

In Table 3, the results of subdimensions of patient safety regarding years of experience were given. There was no statistically significant difference in years of experience across the education received ($p=0.109$). The disparity in error reporting does not exhibit statistical significance ($p=0.074$) as well; however, in this subdimension, the p-value is on the verge of becoming significant. This implies that there could be a little difference between the number of years of experience and the behaviors related to reporting errors. However, there is not enough statistically significant data to support this distinction. There is a notable disparity in the duration of experience

when it comes to the team functioning ($p=0.011$). This suggests that persons with greater experience tend to have lower average scores in team functioning, indicating a potential correlation between team functionality and duration of experience.

The study found no statistically significant difference in patient engagement ($p=0.150$), suggesting that the years of experience did not have a significant effect on perceptions of patient engagement. The analysis found no statistically significant difference in curriculum ratings ($p=0.60$), suggesting that the duration of experience did not have a major influence on participants' assessments of the curriculum. We observed significant differences between the length of experience and certain aspects of the patient safety. While there were significant relationships between

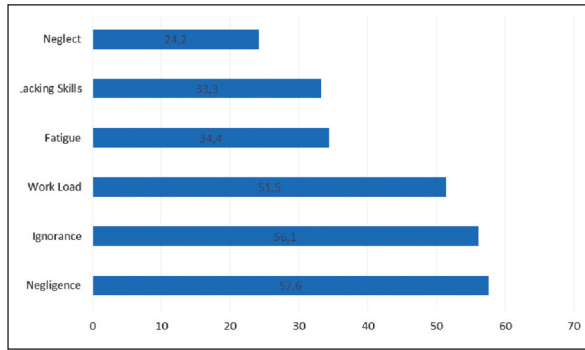


FIGURE 1: Reasons for patient safety violations.

length of experience and team functioning, there were no significant differences in other subjects (training, error reporting, patient participation, and curriculum). This indicates that the length of experience may have significant effects on some job performance and perception factors, but its effect is less in other areas.

Figure 1 shows the reasons for patient safety violations. It was found that the most relevant answers were negligence and ignorance.

DISCUSSION

Research on patient safety in the field of speech and language therapy is greatly limited. Nonetheless, research undertaken in various healthcare sectors indicates that enhancing patient safety can be accomplished by understanding the cultural context in which risk-related decisions are made. Although, SLTs in managing swallowing disorders and ensuring patient safety in the intensive care unit has been extensively studied and documented in the literature. SLTs caseloads include several other populations such as individuals with speech sound disorders, language disorders, fluency disorders and sound disorders. There is a gap in the literature for covering patient safety issues in those areas. Patient safety research in Türkiye is still in its early stages.

In this study, we aimed to determine what SLTs know and think about patient safety; therefore, we collected data from 67 SLT with the help of DKTD. Our study revealed that level of experience has a significant impact on knowledge and attitude towards patient safety. We found no significant difference related to age or other investigated parameters. Given

that this is a pilot study focusing on patient safety from the viewpoint of SLTs, it holds significance in terms of offering an original perspective to the field.

Patient safety, which is “freedom from unintentional or preventable injuries caused by medical care”, has been a problem for a long time and is an important part of the healthcare system.¹¹ Hence, it is crucial to be cognizant of the potential circumstances that may occur in speech and language therapy environments. Our findings support the idea that SLTs are not aware of the many situations that can result in patient safety violations and risks. For instance, if a therapist lacks knowledge about patient safety when treating individuals with swallowing difficulties, it could result in permanent and irreversible damage, whereas a SLT with expertise in this field significantly enhances the patient’s quality of life, as evidenced by a study where researchers found that the placement of a feeding tube, recommended by the multidisciplinary dysphagia team, resulted in improved patient safety.¹⁴ Similarly, adults with aphasia are prone to have patient safety issues. They face challenges in comprehending healthcare instructions and discussions as their language and communication abilities might be negatively affected by a cerebrovascular accident, which subsequently result in complications with discharge planning, medication management, and unplanned readmissions.¹⁵

Our findings indicate that SLTs participating in our study have difficulty in reporting errors in the working environment. This could lead to failure in improving clinical settings in which patients are treated, which will deteriorate the quality of the services presented to patients. This is in contrast with the research that indicates that the majority of students prioritize patient safety. Nevertheless, further efforts are required in the classroom to inform students about the cause of errors and the effects of extended hours of work on the patient’s safety. Students also need to learn how to report and address errors more confidently and effectively.¹⁶

Team functioning can be defined as how teams think, feel, and act.¹⁷ It was evident that level of experience has a significant impact on team functioning. However, in the current study, when SLTs have less than three years of experience, they have more

knowledge. This contradiction can be explained by the recent modifications in the SLT curriculum and the increasing focus on ensuring patient safety.

An examination of university education and curriculums of speech and language therapy programs in Türkiye revealed that 15 out of the 29 programs offer courses on quality and patient safety. In their study, Arslanoğlu and Arslan revealed a total of 44 distinct courses related to quality and patient safety at those fifteen universities.¹⁸ In the curriculum of fifty percent of the universities, there are classes that focus on quality and patient safety. Therefore, it can be noted that patient safety has started to gain attention in the area of speech and language therapy. It is clear that more studies and education is required to implement this knowledge in the clinical settings.

LIMITATIONS

When assessing the findings of our research, it is necessary to take into account the limitations of the methodology used. First, the voluntary nature of the survey was a limitation, even though DKTD sent an e-mail to all of members, only a small number of SLTs responded to the questionnaire. Another limitation is that 3 might be the possibility of self-reporting bias, as is the case with any surveys that use self-reported questionnaires.

As for further studies, to have a more in-depth understanding of the situation, a qualitative investigation may be necessary since a comprehensive and meticulous understanding of patient safety can be acquired through such an investigation.

CONCLUSION

Patient safety is an important part of SLT clinical practice. Consequently, with the assistance of DKTD, we gathered information from SLTs in order to accomplish our goal of determining what they know and think about patient safety. To have better quality in the clinical settings, having educated SLTs on patient safety is crucial. The findings that we obtained provide a starting point of the present status of attitudes and actions that speech and language therapies in Türkiye have toward patient safety. Qualitative studies regarding patient safety issues should be carried out to broaden the perspectives in this matter.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

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