İzmir Kâtip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi 2024; 9(1): 57-63
DOI: 10.61399/ikcusbfd.1357493

İKÇÜSBFD

ARAŞTIRMA / RESEARCH

The Opinions and Working Experiences of Doctors from Different Branches of Medicine Working in Turkey Concerning Speech and Language Pathologists

Türkiye'de Çalışan Farklı Branşlardaki Doktorların, Dil ve Konuşma Terapistleri ile İlgili Düşüncelerinin ve Çalışma Deneyimlerinin İncelenmesi

Mümüne Merve PARLAK[1], Emrah KARACAOĞLU[2], Buse Nur KARABULUT[3], Seren DÜZENLİ ÖZTÜRK[4]

[1] *Ankara Yıldırım Beyazıt University, Faculty of Health Sciences, Department of Speech and Language Therapy, Ankara, Türkiye*
[2] *Sakarya Training and Research Hospital, Department of Speech and Language Therapy, Sakarya, Türkiye*
[3] *Sancaktepe Şehit Prof. Dr. İlhan Varank Training and Research Hospital, Department of Speech and Language Therapy İstanbul, Türkiye*
[4] *Izmir Bakırçay University, Faculty of Health Sciences, Department of Speech and Language Therapy, İzmir, Türkiye*

Geliş tarihi/Received: 08.09.2023
Kabul tarihi/Accepted: 02.10.2023

Sorumlu Yazar/Corresponding Author:

Mümüne Merve PARLAK, Asst. Prof.Dr.
Ankara Yıldırım Beyazıt University Ankara, Türkiye.

E-posta: mmervekolsuz@gmail.com
ORCİD: 0000-0002-1603-2360

Emrah KARACAOĞLU, SLP
ORCİD: 0009-0004-2245-9186

Buse Nur KARABULUT, MSc.
ORCİD: 0009-0007-6016-5498

Seren DÜZENLİ ÖZTÜRK, Asst. Prof.Dr.
ORCİD: 0009-0007-6016-5498

Abstract

Objective: This study aimed to examine the thoughts, knowledge, collaborative processes, and experiences of doctors in different branches of medicine, as these comprise the occupational groups in which speech-language pathologists/therapists (SLPs) work in interdisciplinary and multidisciplinary capacities.

Material and Method: A Google survey was created focusing on the opinions about and working experiences of doctors in different branches of medicine working in Turkey with SLPs. The questionnaire consisted of 18 questions and four parts.

Results: The study was conducted with 116 doctors, 28.4% of whom were neurologists, 28.4% were otorhinolaryngologists, 21.6% were pediatricians, and 21.6% were other specialists. Only 25.9% (n=30) have worked with an SLP before. Speech sound disorders, fluent speech disorders, and developmental language disorders were the most frequently chosen SLP study areas among all the specialties in which doctors in all branches of medicine work. The lowest number of doctors chose swallowing disorders, followed by cognitive communication disorders and X-linked language disorders, as the field of work of SLPs.

Conclusion: It was found that the number of SLPs working in doctors' institutions, the level of cooperation between doctors and SLPs, and doctors' knowledge about the working areas of SLPs were low. It has been observed that physicians' awareness, especially in swallowing and cognitive communication disorders, is lacking. A strong partnership between physicians and SLPs is vital for appropriate service delivery to patients. For this reason, the number of SLPs working in institutions should be increased, as should the level of knowledge among doctors in different branches of medicine concerning SLPs' services.

Keywords: Doctor, medicine, physician, speech and language pathologists, SLP.

Öz

Amaç: Bu çalışmanın amacı, dil ve konuşma terapistlerinin (DKT) disiplinler arası ve multidisipliner kapasitede çalıştıkları meslek gruplarını oluşturan farklı tıp dallarındaki doktorların düşüncelerini, bilgilerini, işbirliği süreçlerini ve deneyimlerini incelemektir.

Gereç ve Yöntem: Türkiye'de çalışan farklı branşlardaki doktorların DKT'lerle ilgili görüşlerine ve çalışma deneyimlerine odaklanan bir Google anketi oluşturuldu. Anket 18 soru ve dört bölümden oluşmaktadır.

Bulgular: Çalışma %28,4'ü (n=33) nöroloji, %28,4'ü (n=33) kulak burun boğaz (KBB), %21,6'sı (n=25) pediatrinin herhangi bir alanından ve %21,6'sı (n=25) diğer uzmanlık alanlarından olmak üzere toplam 116 doktor ile gerçekleştirilmiştir. Doktorların sadece %25,9'u (n=30) daha önce bir DKT ile çalışmıştır. Konuşma sesi bozuklukları, akıcı konuşma bozuklukları ve gelişimsel dil bozuklukları, tüm tıp branşlarındaki doktorların çalıştığı tüm uzmanlık alanları arasında en sık seçilen DKT çalışma alanları olmuştur. En az sayıda doktor yutma bozukluklarını, ardından bilişsel iletişim bozukluklarını ve X'e bağlı dil bozukluklarını DKT'lerin çalışma alanı olarak seçmiştir.

Sonuç: Doktorların kurumlarında çalışan DKT'lerin sayısının, doktorlar ile DKT iş birliği düzeyinin ve doktorların DKT'lerin çalışma alanları hakkındaki bilgilerinin düşük olduğu tespit edilmiştir. Özellikle yutma ve bilişsel iletişim bozukluklarında doktorların farkındalığının eksik olduğu görülmüştür. Hastalara uygun hizmet sunumu için hekimler ve DKT'ler arasında güçlü bir ortaklık hayati önem taşımaktadır. Bu nedenle, kurumlarda çalışan DKT'lerin sayısı artırılmalı ve farklı tıp dallarındaki doktorların DKT'lerin hizmetlerine ilişkin bilgi düzeyi yükseltilmelidir.

Anahtar Kelimeler: Doktor, tıp, hekim, dil ve konuşma terapistleri, DKT.

1. Introduction

Speech and language pathologists/therapists (SLPs) work with people of all ages, from infants to adults. They deal with human communication and language/speech and treat all voice, speech, swallowing functions, and language disorders, regardless of their causes (1, 2).

The profession of SLP in Turkey was legally classified as a type of healthcare profession on April 6, 2011. According to the law formalizing the position, SLPs must have graduated from a faculty or college providing undergraduate education in the field of speech and language therapy or hold a master's degree or doctorate in the field of speech and language therapy. They work for the prevention of voice, speech, and language disorders of individuals, and they provide rehabilitation services related to swallowing, language, and speech disorders diagnosed by relevant specialist doctors (3, 4). In the international literature, SLPs are defined as professionals responsible for lifelong prevention, differential diagnosis, evaluation, treatment, and scientific investigations of human communication disorders (5-7).

SLPs work in teams with relevant specialists (otorhinolaryngology, neurology, pediatrics, audiology, plastic surgery, physical therapy, etc.) in the evaluation process of disorders and direct patients to the relevant specialist. They follow the therapy paths of patients and work in a multidisciplinary manner (1, 8, 9).

Questionnaires based on physicians' opinions are considered useful tools for identifying, facilitating, and preventing diseases and for making recommendations to provide the best service delivery for the clinical context (10). Some limited studies, such as on the role of SLPs in the intensive care setting, the views of neurologists regarding aphasia, and the views of nurses about SLPs (11-13), have been published. Four studies have focused on doctors' views and knowledge about SLP. The initial study was conducted 36 years ago and investigated the overall perception of SLPs held by families, nurses, and doctors (14). The second study, conducted in 2021, looked at the opinions of various health personnel regarding SLPs (15). The third examined the opinions of internists and family physicians about SLPs (16). The fourth considered the level of awareness and knowledge of medical doctors about swallowing disorders (17). However, these studies did not examine the opinions and experiences of doctors in different branches of medicine on all fields of study concerning SLPs, notably otolaryngologists, neurologists, and pediatricians, with whom SLPs work the most. It is important to be guided by the relevant doctors when necessary, and those doctors must be aware of the working areas of SLPs.

This study aimed to explore the thoughts, knowledge, collaborative processes, and experiences of doctors from various branches of medicine. These doctors are the occupational groups that SLPs work within interdisciplinary and multidisciplinary teams.

2. Materials and Methods

This study was conducted with permission numbered 2021/195 obtained from the Sancaktepe Şehit Prof. Dr. İlhan Varank Training and Research Hospital Scientific Research Ethics Committee.

A Google survey was created focusing on the opinions and working experiences of doctors in different branches of medicine working in Turkey with SLPs. The survey questions were designed by the researchers based on some of the topics in the American Speech Language Hearing Association's (ASHA) Scope of practice in speech-language pathology and preferred practice patterns for the speech-language pathology profession websites (1,2). The questionnaire consisted of 18 questions and four parts, excluding the question asking for participants' consent. The first section requested consent, the second section gathered sociodemographic information, the third section evaluated participants' familiarity with SLPs, and the fourth section inquired about participants' current employment status with SLPs. While everyone who participated in the study could answer 15 of the questions, three could only be answered by people who have worked with SLPs before. The questions were designed in a mixed manner, open-ended, Likert-type, and optional multiple-choice answers.

In the sociodemographic information section, respondents were asked for their age, gender, education level, job title, years of experience, and place and branch of work.

In the information status section about SLPs, respondents were asked about the abbreviation of SLP, the distinction between SLP and audiology, their level of knowledge about SLP, and the types of disorders in which SLPs work. Participants were asked to rate their knowledge of what SLPs do between 0 (I do not know anything about it) and 10 (I know a lot about it) and the level of involvement of SLPs with each disorder between 0 (never) and 5 (always).

Using the Google survey application, the survey was sent to doctors working in different specialties, such as neurology and otolaryngology, through social media and WhatsApp. Data collection in this cross-sectional study was conducted according to Goodman's (1961) Snowball Sampling technique. The initial questions in the survey asked the participants whether they were volunteering and were willing to participate. Survey responses were collected between 01.10.2021 and 01.10.2022.

Working as a doctor in a private, public, or university hospital was the criterion for inclusion in the study. Since it was required to answer all questions except for three, no exclusions were made in the study's data.

The mean and standard deviation (SD) were used as descriptive statistics for those with a normal distribution. The data collected were analyzed using the Statistical Package for the Social Sciences (version 23) to display the frequencies of nominal and ordinal variables using descriptive statistics. The doctors who participated in the study were grouped according to their specialties. The findings were examined separately for all branches, including neurology, otorhinolaryngology, pediatrics, and other specialties. Doctors' opinions about the working areas of SLPs were ranked as mean.

3. Results

A total of 116 people, 54.3% were male (n = 63) and 45.7% were female (n = 53). As the study branched out, 28.4% were in neurology, 28.4% were in otolaryngology, 21.6% were in any field of pediatrics, and 21.6% were in other branches (Table 1).

Table 1. Sociodemographic Information

Age (mean±SD) years	37.491 ± 9.848
Gender % (n)	
Female	45.7 (53)
Male	54.3 (63)
Education % (n)	
Licensed	12.9 (15)
Master's degree	30.2 (35)
Doctorate	56.9 (66)
Title % (n)	
Assistant	30.2 (35)
Specialist doctor	49.1 (57)
Associate Professor	9.5 (11)
Professors	11.2 (13)
Years of work	12.57 ± 10.173
Place of work	
State hospital	50.8 (59)
University	37.1 (43)
Private hospital/private practice	12.1 (14)
Branch	
Neurology	28.4 (33)
Otolaryngology	28.4 (33)
Pediatrics	21.6 (25)
Other	21.6 (25)

Of all the participants, 59.5% indicated that they were aware of the meaning of "SLPs," while 6.9% stated that they had no knowledge of the difference between an SLP and an audiologist or that they were the same (Table 2). Four people stated that they did not know anything about what SLPs do and scored 0 points (Figure 1). Doctors stated that they knew a mean of 6.53 ± 2.444 points out of 10 about the work status of SLPs (Table 2).

Table 2. Doctors' Knowledge About SLPs And Employment Status With SLPs

Did you know that speech and language pathologist called SLP? % (n)	
Yes	59.5 (69)
No	40.5 (47)
Do you think SLPs and audiologist are the same professional group? % (n)	
Yes	12.1 (14)
No	81.0 (94)
I have no idea.	6.9 (8)
Do you know exactly what SLPs do?	
0 (I don't know anything about it) to 10 (I know a lot about it)	
All branches	6.53 ± 2.444
Neurology	7.00 ± 2.00
Ear Nose and Throat (ENT)	7.12 ±2.247
Pediatrics	5.72 ± 2.638
Other	5.92 ±2.783
Does SLP work in your institution?	
Yes	43.1 (50)
No	42.2 (49)
I have no idea.	14.7 (17)
Have you ever worked with SLPs before?	
Yes	25.9 (30)
No	74.1 (86)
A council where SLPs are on the team?	
Yes	10.3 (12)
No	89.7 (104)
At what level does your branch need to work interdisciplinary with SLP?	
0 (We don't need to work together at all) to 10 (we should always work together)	
All branches	7.43 ± 2.899
Neurology	8.73 ± 1.398
Otolaryngology	8.24 ± 2.077
Pediatrics	7.60 ± 2.771
Other	4.48 ± 3.405

Of all the participants, seven individuals (6%) believed that working with SLPs was not necessary at all, while 33 individuals (28.4%) believed it was absolutely necessary (Figure 2). All physicians stated that interdisciplinary work with SLPs was necessary at an mean of 7.43 ± 2.899 of 10 points (Table 2).

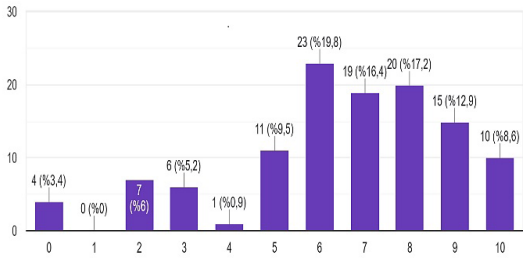

Figure 1. Do You Know Exactly What SLPs Do? 0 (I don't know anything about it) and 10 (I know a lot about it).

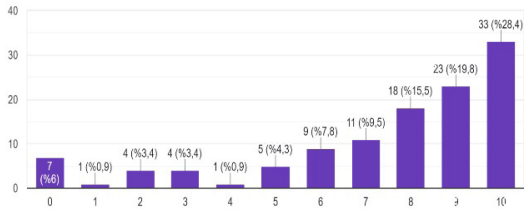

Figure 2. At What Level Does Your Branch Need To Work İnterdisciplinary With SLP?

Only 43.1% of the participants were sure that their institution had worked with SLPs, and 25.9% had worked with SLPs before. However, 10.3% of all participants attended councils where SLPs were team members. Among doctors working with SLPs (n=30), 66.7% refer to SLPs for therapy (Table 3).

Table 3. Questions for Those Who Have Worked With a SLPs Before

If you have worked with SLPs before, how many years have you been working together?	3.2 ± 4.382
For what purpose do you refer patients? % (n)	
Getting ideas	0.0 (0)
Evaluation	23.3 (7)
Therapy	66.7 (20)
Both assessment and therapy	3.3 (1)
All of them.	6.7 (2)
If you have worked with a SLPs before, which patients do you refer the most?	
Aphasia	9
Swallowing disorders	4
Voice disorders	7
Speech disorders	10

The participating doctors believed that SLPs work with swallowing disorders at an average of 2.55 ± 1.931 out of five points, followed by pediatricians at 2.24 ± 1.69, otolaryngology doctors at 2.94 ± 1.999, and neurologists at 2.85 ± 1.954 (Table 4).

Table 4. Doctors' Opinions on The Areas in Which and to What Extent SLPs Between 0-5 are Working

SLPs work, scored by doctors on a 0–5 point scale **0 (never) to 5 (always)**	**All branches** **Mean±SD (mean rank)**	**Pediatrics** **Mean±SD (mean rank)**	**Otolaryngology** **Mean±SD (mean rank)**	**Neurology** **Mean±SD (mean rank)**
Speech sound disorders (Articulation, phonological disorder)	3.61 ± 1.733 (1)	3.68 ± 1.773 (3)	3.36 ± 1.851 (2)	4.12 ± 1.409 (3)
Fluent speech disorders (Stuttering, cluttering)	3.60 ± 1.769 (2)	3.76 ± 1.786 (1)	3.39 ± 1.887 (1)	4.12 ± 1.431 (3)
Developmental language disorders (Delayed speech)	3.61 ± 1.723 (1)	3.72 ± 1.792 (2)	3.30 ± 1.776 (3)	4.15 ± 1.417 (2)
Acquired language disorders (Aphasia, TBI, etc.)	3.53 ± 1.727 (3)	3.64 ± 1.753 (4)	3.21 ± 1.799 (5)	4.24 ± 1.37 (1)
Cognitive communication disorders (Dementia, Right hemisphere damage)	3.13 ± 1.806 (8)	2.80 ± 1.803 (9)	3.06 ±1 .983 (6)	3.89 ± 1.46 (4)
Voice disorders (Vocal fold nodule, mutational falsetto etc.)	3.21 ± 1.782 (6)	3.36 ± 1.846 (8)	3.30 ± 1.896 (3)	3.73 ± 1.353 (5)
Swallowing disorders (Oropharyngeal dysphagia)	2.55 ± 1.931 (10)	2.24 ± 1.69 (10)	2.94 ± 1.999 (9)	2.89 ± 1.954 (9)
Motor speech disorders (Dysarthria, apraxia)	3.36 ± 1.81 (4)	3.40 ± 1.658 (7)	3.03 ± 2007 (7)	4.15 ± 1.72 (2)
Resonance disorders (lip +-cleft palate)	3.23 ± 1.829 (5)	3.60 ± 1.78 (5)	3.06 ± 1.967 (6)	3.69 ± 1.489 (6)
X-linked language deficits (Down's Syndrome, SP, etc.)	3.03 ± 1.798 (9)	3.40 ± 1.658 (7)	3.00 ± 1.888 (8)	3.36 ± 1.674 (7)
Alternative and supportive communication systems	3.20 ± 1.8 (7)	3.48 ± 1.828 (6)	3.24 ± 1.888 (4)	3.24 ± 1.803 (8)

Doctors in the neurology department believed that SLPs work with acquired language disorders (4.24 ± 1.37) or cognitive-communication disorders (3.89 ± 1.46) out of five possible points. According to otolaryngologists and pediatricians, "motor speech disorder" was the seventh most popular response; among neurologists, it was the second. Voice disorders ranked eighth among pediatricians and third among otolaryngology physicians (Table 4).

4. Discussion

In this study, the thoughts, knowledge, collaborative processes, and experiences of doctors in different branches, consisting of the occupational group in which SLPs work inter- and multidisciplinary, were examined. To the best of our knowledge, this is the first study that focuses on the multifaceted perceptions of doctors from different branches, especially otolaryngology, neurology, and pediatrics, regarding SLPs, such as their field of study, experience, and thoughts.

A total of 40.5% of the doctors participating in our study said that they did not know the SLP abbreviation. This may be because they have not heard or seen the SLP abbreviation before, owing to the low number of SLPs working in institutions and the low number of collaborations with SLPs. 12.1% of the doctors stated that the professions of SLPs and audiologists were the same. Initially, in our country, it was possible to be an SLP with a master's degree in audiology and speech disorders. It is important for participants to know this distinction because the title of SLP is now only available with a bachelor's degree (18).

In our study, it was determined that 43.1% of the doctors had an SLP in their institution. Considering that most of the participants worked in state or university hospitals, it is expected result that the number of SLPs working in institutions is low. The number of SLPs recruited by state and university hospitals is low in our country, and SLPs mostly work in the private sector. However, with the increase in the number of graduates and the appointment of SLPs to hospitals, the number of SLPs working in institutions and the cooperation of doctors with SLPs can increase. Only 25.9% of all doctors had worked with an SLP before. This result may be due to the low number of SLPs working in hospitals. McCauslin et al. also found that more than half of the family physicians participating

in their study could not determine how to refer patients to the services of SLPs (19). Likewise, the doctors participating in our study may not know how to make the necessary referrals because of the low patient orientation and SLP cooperation of doctors working in their institution.

In this study, swallowing disorders were selected as the lowest study area of SLPs by all participants and when calculated separately by branch, namely, neurology, otolaryngology, and pediatrics. The results were similar to those obtained by Kiyani and Butt, who found that medical practitioners lack knowledge and awareness about the work of SLPs in swallowing disorders (17). Although otolaryngology was the branch that gave the highest score to the question of working with a swallowing disorder in our study, otolaryngology doctors gave a low mean score of 2.94 points with swallowing disorder as the field of study of SLP. This result was interesting from our point of view because the areas where otolaryngologists and SLPs work most are voice and swallowing disorders (20, 21). Another reason for this result may be that, in our country, patients with swallowing disorders usually approach the otolaryngology department first, and some otolaryngology doctors think that only otolaryngology doctors work in this field since they are specialized in the field of swallowing. Physiotherapists have worked on swallowing disorders because of the late emergence of the SLP profession in our country. Therefore, Lesser et al. obtained results similar to the thoughts of the physicians that swallowing disorders may be related to physiotherapy. In addition, physical therapy doctors and some neurologists work with swallowing disorders in our country. Therefore, it may not be clear which branch is working on swallowing disorders, not only for otolaryngology but for all branches.

Speech sound disorders, fluent speech disorders, and developmental language disorders received high scores in all branches and were in first place as the study areas of SLPs. Lesser et al. also concluded that stuttering, a fluent speech disorder, was thought by doctors to have a strong relationship with speech therapy (14). This may be because these disorders are the first thing that comes to mind when SLP is mentioned, as it is known that SLPs perform all the processes from evaluation to therapy. However, X-linked language disorders that occur after medical conditions, such as Down syndrome and cerebral palsy, were found to have low scores in all branches. This result may be attributed to the doctors' thinking that these medical conditions do not require a direct SLP and may cause multiple disabilities. However, SLPs also work with all speech, language, voice, and swallowing disorders that occur as a result of these medical conditions (1). A cognitive-communication disorder, another field in the study of SLP, received low scores from all physicians and branches except neurology. This outcome may be due to the fact that cognitive disorders such as dementia are not thought of as disorders that require work with SLPs but only concern the neurology department. In addition, the finding may also be due to the small number of SLPs working with cognitive-communication disorders in our country and the small number of studies conducted by SLPs in the field of cognitive-communication disorders (22, 23). As the number of SLPs working in this field increases, the fact that SLPs work on cognitive-communication disorders may be more recognized, and patient referrals may also increase.

Among the doctors participating in our study, the otolaryngology doctors from the department were the ones who referred the most patients and thought that SLPs knew what they were doing the most. Otolaryngology doctors referred patients for voice, speech, and swallowing disorders. The collaboration of otolaryngologists and SLPs is important in both the evaluation and therapy processes for voice disorders. otolaryngology doctors are required in some instrumental evaluations and surgical approaches, and SLPs are required in clinical evaluation and therapy follow-up (21, 24). It is an important point for otolaryngology doctors to guide patients with speech disorders. Some patients or their relatives approach an otolaryngology doctor directly because they think that the speech disorder may be related to hearing or because they do not know SLP. In these cases, it is important to refer people with speech disorders from otolaryngology to SLP for both general screening and detailed evaluation and therapy.

Except for the alternative and supportive communication systems and swallowing disorders, it was observed by neurologists that they gave the highest scores to the 11 work areas of SLPs. Even though only seven of the thirty-three neurologists who participated in the study had previously worked with SLP, as the role of neurologists in the standard evaluation and therapy processes of neurogenic speech disorders is secondary (11), the high scores they gave to SLP study areas may be because they trust SLPs and know that it works effectively in these areas. Acquired language disorders were the most frequently cited SLPs by neurologists, followed by motor speech disorders. Other studies have shown that collaboration between neurologists and SLPs in this area is important, especially in aphasia, which is an acquired language disorder (11, 25). Cognitive communication disorders, such as dementia and right hemisphere disorders, received low ratings from doctors from other specialties, while neurologists gave the fourth highest rating for SLPs. This result shows that although neurologists do not work with SLPs in their institutions, they know the areas in which they cooperate with SLPs the most in their branches and believe that SLPs should work in these disorders.

This opinion was supported by the fact that neurologists gave a high mean score of 8.73 to the question regarding the level of cooperation their profession required with SLPs. These results suggest that an increase in the number of SLPs in institutions may result in increased cooperation between neurology and speech and language therapy departments, especially in the case of acquired language disorders, motor speech disorders, and cognitive communication disorders.

Pediatricians gave high scores to speech sound disorders, fluent speech disorders, and developmental language disorders, which are the areas where pediatricians can collaborate the most with SLPs. Besides, even doctors working in different pediatric branches thought that their profession required interdisciplinary work with SLPs. This result shows that pediatricians are open to working with SLPs and referrals, if possible. Pediatricians also gave the lowest scores to cognitive communication disorders, voice disorders, and swallowing disorders. Pediatricians should also work with SLPs for feeding and swallowing disorders during the pediatric period, pediatric vocal fold nodules,

and cognitive communication disorders resulting from traumatic brain injuries during the pediatric period (26, 27).

A limitation of this study is that it included only 116 respondents. It is not possible to determine if there are any significant differences between the respondents and non-respondents, which limits the generalizability of the results. Another important limitation of the study is that the psychometric properties of the questionnaire were not analyzed.

5. Conclusion and Recommendations

In this study, for the first time, the knowledge levels and opinions of doctors from different medical branches about SLPs' work areas were examined. This study found that doctors working in different branches of medicine were highly aware that SLPs focus on speech sound disorders, fluent speech disorders, and developmental language disorders. However, it was noted that they had limited knowledge about the work of SLPs, particularly in the areas of swallowing disorders and cognitive communication disorders. Doctors from various medical specialties should have knowledge of the domains in which speech-language pathologists (SLPs) work. They can refer individuals with these disorders to SLPs for early assessment and therapy. However, approximately one-third of the doctors working with SLPs referred to SLPs for evaluation only. A strong partnership between physicians and SLPs is crucial for providing appropriate services to patients who require assessments and interventions for language, speech, voice, swallowing, and cognitive communication disorders. In order to best serve patients in the healthcare sector, it is important to enhance doctors' understanding of SLPs and increase the presence of SLPs in hospitals. This will ensure that patients receive the quickest and most effective care.

6. Contribution to the Field

Increasing the cooperation of doctors with SLPs can be achieved by determining the SLP working areas where the awareness of doctors from different medical disciplines with which SLPs cooperate, especially neurology, otolaryngology, and pediatrics, is lacking and increasing awareness of these deficiencies. This can ensure that patients are referred to SLP early, evaluated, and received therapy.

Ethical Aspect of the Research

Ethical permissions were obtained from the Sancaktepe Şehit Prof. Dr. İlhan Varank Training and Research Hospital Scientific Research Ethics Committee with the date 29.09.2021 and the decision number 2021/195. Informed consent was obtained from the individuals.

Conflict of Interest

There is no conflict of interest regarding any person and/or institution.

Authorship Contribution

Concept: MMP, EK, BNK, SDÖ; **Design:** MMP, EK, BNK, SDÖ; **Supervision:** MMP, SDÖ; **Funding:** EK, BNK; **Materials:** EK, BNK; **Data Collection/Processing**: EK, BNK; **Analysis/Interpretation**: MMP; **Literature Review:** MMP, EK; **Manuscript Writing:** MMP; **Critical Review:** MMP, SDÖ.

References

1. Association, American Speech-Language-Hearing. Scope of practice in speech-language pathology [homepage on the Internet]. 2016 [cited 2023 Apr 4]. Available from: https://www.asha.org/policy/sp2016-00343/.

2. Association, American Speech-Language-Hearing. Preferred practice patterns for the profession of speech-language pathology. 2004 [cited 2023 Apr 14]. Available from: https://www.asha.org/policy/pp2004-00191/.

3. DKTD. Dil ve konuşma terapisti nasıl olunur? [homepage on the Internet]. [cited 2023 Apr 28]. Available from: https://www.dktd.org/tr/dil-ve-konusma-terapisti-ol-a.

4. Bakanlığı TS. Sağlık meslek mensupları ile sağlık hizmetlerinde çalışan diğer meslek mensuplarının iş ve görev tanımlarına dair yönetmelik. Ankara, Türkiye. 2014:20140522-14.

5. Dodd B. Evidence-based practice and speech-language pathology: Strengths, weaknesses, opportunities and threats. Folia Phoniatr. 2007;59(3):118-29.

6. Togher L, Yiannoukas C, Lincoln M, Power E, Munro N, Mccabe P, et al. Evidence-based practice in speech-language pathology curricula: A scoping study. Int J Speech Lang Pathol. 2011;13(6):459-68.

7. Parlak MM, Köse A. Investigation of the knowledge, experiences, and opinions of Speech and Language Pathologists on assessments and therapies for cognitive communication disorders in people with Alzheimer's disease-A cross-sectional survey in Turkey. Hacettepe University Faculty of Health Sciences Journal. 2023;10(1):45-57.

8. Parlak MM, Altan E, Saylam G. Dysphagia in individuals with dementia. Journal of Ear Nose Throat and Head Neck Surgery. 2022(30(2)):88-96. doi: DOI: 10.24179/kbbbbc.2021-86783.

9. Parlak MM, Bizbinar Ö, Köse A. The Effect of holistic therapy in Alzheimer's disease. Altern Ther Health Med. 2023:AT7591.

10. Passmore C, Dobbie AE, Parchman M, Tysinger J. Guidelines for constructing a survey. Family Medicine-Kansas City-. 2002;34(4):281-6.

11. Pauranik A, Pauranik N, Singh P, Lahiri D, Krishnan G. Aphasia in neurology practice: A survey about perceptions and practices. Ann Indian Acad Neurol. 2020;23(Suppl 2):S162.

12. DeZeeuw K, Lalonde Myers E. The role of speech-language pathologists in medical assistance in dying: canadian experience to inform clinical practice. Can J Speech Lang Pathol Audiol. 2020;44(2).

13. Alhamidi S, Alshahwan M, Tumala R. Knowledge and perception of registered nurses regarding the scope of practice of speech-language pathologists. Int J Environ Res Public Health. 2021;18(19):10534.

14. Lesser R, Hassıp S. Knowledge and opinions of speech therapy in teachers, doctors and nurses. Child Care Health Dev.1986;12(4):235-49.

15. Zikria M, Mumtaz N, Saqulain G, Naveed Babur M. The Role of Speech-language Pathologists in the Hospitals of Pakistan. Iranian Rehabilitation Journal. 2021;19(2):165-72.

16. Jeanne N, Phillips D, Molt L. Internal medicine and family medicine physicians' perceptions of speech-language pathology. J Med Speech Lang Pathol. 2011;19(4):49-57.

17. Kiyani SA, Butt AK. Dysphagia; Awareness & knowledge of medical practitioners and understanding of role of SLP in its assessment & management: JRCRS. 2014; 2 (1): 25-29. Journal Riphah College of Rehabilitation Sciences. 2014;2(1):25-9.

18. Hacettepe Üniversitesi. ''Dil ve Konuşma Terapisi Programı''. [cited 2023 Apr 29]. Available from https://akts.hacettepe.edu.tr/program_detay.php?prg_oid=410c62643eac135f013ed6f88b192acf&birim_kod=639&programduzey=2&submenuheader=2&durum=&prg_kod=639#gnl1.

19. McCauslin LS, Florance CL, Rabidoux PC, editors. Evaluation of physician understanding of aphasia and the role of the speech pathologist. Clinical Aphasiology: Proceedings of the Conference 1980; 1980: BRK Publishers.

20. Leslie P, Scholten I, Stanschus S. International multidisciplinary perspectives on swallowing. Perspectives on Swallowing and Swallowing Disorders (Dysphagia). 2004;13(2):7-18.

21. Boominathan P, Desai V. Synergy between speech language pathologists and ENT surgeons to promote patient care. Journal of Laryngology and Voice. 2012;2(2):51.

22. Parlak MM, Babademez MA, Tokgöz SA, Bizpınar Ö, Saylam G. Evaluation of swallowing function according to the stage of Alzheimer's Disease. Folia Phoniatr Logop. 2022;74(3):186-94.

23. Munis ÖB, Parlak MM, Köse A. Analysis of the consistency of information received from Alzheimer's disease patients and their families in the quality of life and depression scales. Turkish Journal of Clinics and Laboratory. 2021;12(4):372-8.

24. Schwarz M, Ward EC, Seabrook M, Davis J, Whitfield BC. Outcomes from an extended scope of practice speech-language pathology service for low risk ENT outpatients: a 5-year service review. Int J Speech Lang Patho. 2022;24(1):3-11.

25. Brady MC, Godwin J, Enderby P, Kelly H, Campbell P. Speech and language therapy for aphasia after stroke: An updated systematic review and meta-analyses. Stroke. 2016;47(10):e236-e7.

26. Prasse JE, Kikano GE. An overview of pediatric dysphagia. Clinical pediatrics. 2009;48(3):247-51.

27. Sherman V, Martino R, Bhathal I, DeVeber G, Dlamini N, MacGregor D, et al. Swallowing, oral motor, motor speech, and language impairments following acute pediatric ischemic stroke. Stroke. 2021;52(4):1309-18.