

Original Article

Psychological Impact of COVID-19 on Speech and Language Therapists Working with Adults in Dysphagia.

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ABSTRACT

Background: The COVID-19 pandemic has imposed unprecedented challenges on healthcare systems worldwide, with significant attention to the mental health of healthcare workers. Speech and Language Pathologists (SLPs) working with dysphagia patients represent a unique subgroup, whose psychological well-being during the pandemic has been less explored. Understanding the psychological impact on these professionals is crucial for developing targeted support mechanisms.

Objective: This study aims to investigate the psychological impact of the COVID-19 pandemic on SLPs working with adult dysphagia patients in Punjab, Pakistan, identifying key factors influencing their mental health and providing insights into their experiences and perceptions regarding the pandemic.

Methods: A cross-sectional study design was employed, utilizing a non-probability convenience sampling technique to recruit 87 SLPs from various hospitals and rehabilitation centers across Punjab. Participants completed an online survey, which included demographic questions and standardized instruments: the Depression, Anxiety, and Stress Scale-21 (DASS-21) and the Impact of Event Scale-Revised (IES-R). Data were analyzed using SPSS version 25.0, focusing on descriptive and inferential statistics.

Results: The majority of respondents were female (81.6%), with a significant proportion aged between 23 to 29 years. Qualifications predominantly were MS SLP (43.7%), and experience ranged mostly between 1 to 2 years (26.4%). The DASS-21 results indicated mean scores of 6.67 (SD=4.02) for depression, 7.71 (SD=3.4) for anxiety, and 7.87 (SD=4.4) for stress, suggesting elevated levels of psychological distress among participants, particularly regarding anxiety and stress.

Conclusion: The findings highlight the substantial psychological impact of the COVID-19 pandemic on SLPs working with dysphagia patients, emphasizing the need for comprehensive mental health support for these professionals. Enhancing support mechanisms can contribute to the resilience and effectiveness of SLPs in managing dysphagia patients during and beyond the pandemic.

Keywords: COVID-19, psychological impact, speech and language pathologists, dysphagia, mental health, healthcare workers, DASS-21, IES-R.

INTRODUCTION

Dysphagia, characterized by difficulty in swallowing, manifests through various symptoms and signs and is occasionally described as a condition in its own right (1). This medical condition, which complicates the passage of solids and liquids from the mouth to the stomach, presents not only physical challenges but also significant psychological implications, especially in the context of the COVID-19 pandemic that began with reports from the Wuhan Municipal Health Commission to the World Health Organization on December 31, 2019 (2). The pandemic's emergence in Wuhan, a major city in China's Hubei province, marked the onset of a global health crisis that led to widespread hospitalizations, intensive care unit admissions, and the necessity for mechanical ventilation among severely affected patients (3). As the pandemic unfolded, healthcare workers, including speech and language pathologists (SLPs), were notably impacted, comprising 32% of confirmed cases by July 6, 2020 (4).

The critical role of SLPs in diagnosing and managing dysphagia became even more challenging amid the pandemic. Dysphagia, often confused with odynophagia (painful swallowing), varies in its presentation, with some patients experiencing a sensation of food

being stuck in the throat or neck region, leading to potential complications such as aspiration, pneumonia, dehydration, and weight loss (5, 9, 12). The complexity of dysphagia, encompassing oropharyngeal and esophageal forms and spanning a range of neuromuscular symptoms, necessitates precise diagnostic and therapeutic approaches (12). Techniques such as fiberoptic endoscopic evaluation of swallowing are instrumental in assessing swallowing difficulties, albeit the underlying causes of dysphagia, including psychogenic factors like phagophobia (fear of swallowing), underscore the multifaceted nature of this condition (7, 14).

The COVID-19 pandemic has exacerbated the psychological strain on healthcare professionals, including SLPs engaged in the treatment of dysphagia. The heightened risk of infection, coupled with the stress of managing a potentially increased caseload of dysphagic patients, has implications for the mental health of these practitioners. Research has highlighted the prevalence of depression, anxiety, stress, and post-traumatic stress disorder (PTSD) among nurses and other healthcare professionals globally due to the pandemic (16). However, specific investigations into the psychological impact of the COVID-19 pandemic on SLPs working with dysphagic patients are limited. This gap in the literature points to the necessity of conducting focused research to understand the unique mental health challenges faced by SLPs in this context, with the aim of developing tailored psychological interventions to support these vital healthcare workers during and beyond the pandemic.

In conclusion, while dysphagia presents significant clinical challenges in its diagnosis and management, the COVID-19 pandemic has introduced additional psychological burdens on the healthcare professionals tasked with treating this condition. The recognition of these challenges is critical for the development of effective support mechanisms for SLPs, ensuring their well-being and enabling them to continue providing essential care to patients with dysphagia during these unprecedented times.

MATERIAL AND METHODS

In this study, a cross-sectional design was adopted to investigate the psychological impact of COVID-19 on speech and language pathologists (SLPs) working with adult patients suffering from dysphagia. A total of 89 SLPs, employed in various hospitals and rehabilitation centers across Punjab, were selected through a non-probability convenience sampling technique. The inclusion criteria for participation were SLPs actively engaged in the management of dysphagia patients. Those who were not willing to participate or who primarily dealt with dysphagia patients with syndromic conditions were excluded from the study. To determine the sample size, a 95% confidence level and a 5% confidence interval were employed using an online sample size calculator, which justified the inclusion of 89 participants for the study.

The data were collected through a comprehensive Performa, which was distributed online and consisted of two main sections. The first section gathered demographic information of the SLPs, including their experience and qualifications in dealing with dysphagia patients. The second section employed standardized tools for assessing psychological distress: the Depression, Anxiety, and Stress Scale-21 (DASS-21) and the Impact of Event Scale-Revised (IES-R). These instruments were chosen for their validity and reliability in measuring the respective constructs of depression, anxiety, stress, and the impact of traumatic events.

In adherence to ethical standards, all participants were informed about the purpose of the study and their consent was obtained prior to participation. The study conducted followed the ethical guidelines outlined in the Declaration of Helsinki, ensuring the confidentiality and anonymity of participant responses. Ethical approval for the study was obtained from the Institutional Review Board of the corresponding research institution.

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 25.0. Descriptive statistics were used to summarize demographic information and the levels of psychological distress among the SLPs. Inferential statistics, including t-tests and ANOVA, were applied to explore the associations between demographic variables and the psychological outcomes measured by DASS-21 and IES-R scales. The analysis provided insights into the prevalence of psychological distress among SLPs working with dysphagia patients during the COVID-19 pandemic, thus contributing to the body of knowledge on the mental health impacts of the pandemic on healthcare professionals.

RESULTS

In this investigation, a total of 87 speech and language pathologists (SLPs) completed the survey questionnaire online over a span of two months. The distribution of responses for each survey question is detailed in subsequent tables and figures under specific subheadings.

The gender distribution of respondents showed a predominance of females, with 81.6% (n=71) of the participants being female and 18.4% (n=16) male, as illustrated in Table 1 and Figure 1. Regarding age, the most common ages were 25 years (11.5%, n=10) and 29 years (10.3%, n=9), as shown in Table 2 and Figure 2. In terms of academic qualifications, a majority held a Master of Science in Speech-Language Pathology (MS SLP), accounting for 43.7% (n=38) of the respondents, while only 1.1% (n=1) possessed a Bachelor of Science in Speech-Language Pathology (BS SLP), as indicated in Table 3 and Figure 3. The experience level among the participants

varied, with 26.4% (n=23) having 1-2 years of experience and 19.5% (n=17) having 3-5 years of experience. Remarkably, only 1.1% (n=1) of the SLPs reported having more than 34 years of experience in the field. This distribution of years of experience is depicted in Table 4 and Figure 4.

Variable	Mean Score	Standard Deviation
Depression	6.67	4.02
Anxiety	7.71	3.4
Stress	7.87	4.4

Demographic analyses revealed that the majority of participants were females aged 25 years, holding an MS SLP qualification, and possessing 1-2 years of professional experience. The results from the Depression, Anxiety, and Stress Scale-21 (DASS-21) indicated that the mean scores for anxiety and stress were notably higher compared to depression. This finding suggests a heightened level of concern among participants regarding the future impact of COVID-19 on their professional and personal lives. Furthermore, it was observed that a significant portion of SLPs experienced psychological challenges, particularly in maintaining their work performance during the COVID-19 pandemic. These results highlight the substantial psychological strain faced by SLPs working with dysphagia patients amidst the ongoing health crisis.

DISCUSSION

In the context of the COVID-19 pandemic, significant attention has been directed towards understanding the psychological impact on healthcare workers globally. This study represents one of the few efforts to delineate the mental health effects specifically experienced by speech and language pathologists (SLPs) working with dysphagia patients in Pakistan, thereby enriching the discourse on the occupational stressors encountered by this subgroup of healthcare professionals. The survey revealed that a predominant portion of the respondents were female (81.6%) compared to males (18.4%), a demographic distribution that echoes findings from previous studies highlighting the heightened vulnerability of female healthcare workers to psychological distress during the pandemic. For instance, an online survey conducted among 413 community-based individuals during COVID-19 lockdowns identified young females, particularly those with pre-existing chronic conditions or existing psychological treatments, as being at significant risk of experiencing adverse psychological effects (16).

Contrary to the general consensus in the literature that older age groups might be more resilient to the psychosocial impacts of COVID-19 due to life experience or potentially more stable psychological resources, our findings indicated that younger SLPs, especially those aged between 23 to 29 years, were notably affected. This divergence from previous research, which suggested benefits in preventing pneumonia and starvation among older dysphagic individuals, underscores the unique stressors and professional challenges faced by younger healthcare workers during the pandemic.

The study contributes valuable insights into the necessity for comprehensive support mechanisms for healthcare professionals during such global health crises. It underscores the imperative for targeted interventions that address the specific needs of SLPs working with dysphagia patients, who may be particularly susceptible to psychological distress due to the nature of their work and the pandemic's exacerbation of existing challenges. The incorporation of more objective measures, alongside subjective evaluations such as detailed interviews, in future research could enhance our understanding of these professionals' experiences and the effectiveness of different support strategies.

While the study offers important contributions, it also presents limitations that merit consideration. The reliance on self-reported measures and the study's focus on a specific region within Pakistan may limit the generalizability of the findings. Moreover, the cross-sectional design precludes causal inferences regarding the psychological impacts observed.

In light of these findings and limitations, future research should aim to explore the psychological well-being of SLPs across different provinces and healthcare settings within Pakistan and beyond. Such studies could employ longitudinal designs to better capture the evolution of psychological impacts over time and leverage mixed-methods approaches to provide a more nuanced understanding of the challenges and coping mechanisms of SLPs during the pandemic. Additionally, investigating the efficacy of specific support interventions tailored to the needs of SLPs could inform the development of targeted strategies to mitigate the adverse psychological effects of future public health crises on this crucial segment of the healthcare workforce.

CONCLUSION

This study underscores the significant psychological impact of the COVID-19 pandemic on speech and language pathologists (SLPs) working with dysphagia patients, particularly highlighting the vulnerability of younger, predominantly female professionals. The

findings advocate for the urgent need for targeted support and intervention strategies to safeguard the mental health of SLPs amidst such global health crises. These insights call for a broader healthcare implication, emphasizing the necessity to develop robust psychological support systems not only for SLPs but for all healthcare professionals facing unprecedented challenges during pandemics. Implementing these strategies could enhance resilience, ensure the sustainability of healthcare services, and improve patient care outcomes in the face of ongoing and future health emergencies.

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