

International survey of audiologists during the COVID-19 pandemic: Effects on the workplace

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Abstract

Objective: This study surveyed the effects of the COVID-19 pandemic on the audiology workplace.

Design: The study used a cross-sectional survey design for audiologists across the globe (n=337) using an online survey (June–August 2020) focusing on changes to the workplace during the pandemic.

Results: Participants represented varied work settings and audiology services. Only a third (31.5%) provided psychosocial support, which may be important during the pandemic, as part of their services. Almost all (97%) audiologists reported changes to their workplace, with 76.4% reporting reduced caseloads during the COVID-19 pandemic. When rating their current and anticipated work conditions, 38.7% reported reduced working hours although only 13.8% anticipated reduced working hours in 6-months' time. Audiologists ranked services such as access to hearing assessment, hearing device adjustment and maintenance, and general audiological support as being more important during the pandemic than services such as psychosocial, emotional and tinnitus support.

Conclusions: The COVID-19 pandemic has resulted in significant disruptions to audiological practice that highlights the need to adapt and incorporate new audiological practices including telehealth, to ensure patients have continued access to care and clinics remain sustainable during the ongoing COVID-19 pandemic and recovery phase.

Key Words

Audiology practice, Changes to workplace, COVID-19 pandemic

Introduction

The COVID-19 pandemic has affected all aspects of life including healthcare (Blumenthal et al., 2020). The occurrence, rapid spread and widespread impact of the pandemic took the entire world by surprise. Most people and industries including healthcare were unprepared for the consequences. Various forms of lockdowns during first, second and third waves of the pandemic has resulted in dramatic disruptions in health care service-delivery and in some instances a total absence of services classified as non-essential. For example, audiology services are typically offered in-person and very few audiology professionals and practices had the skills and equipment necessary to offer audiology services remotely using telehealth solutions (Ballachanda et al., 2020; Clark et al., 2020; Swanepoel & Hall, 2020). Adaption and response to these changes requires an understanding of how audiological services were affected during the pandemic and how audiologists responded to the changing needs of patients. This perspective could inform the required short- and medium- to long-term changes necessary by the profession of audiology.

A few recent studies have examined the change in hearing healthcare services due to COVID-19 pandemic. For example, the effect of lockdown on hearing disability or hearing health (Gaeta et al., 2020; Naylor et al., 2020), the effect of the pandemic on tinnitus severity and access to tinnitus services (Beukes et al., 2020; Aazh et al. 2020), and changes in hearing and tinnitus as a result of COVID-19 (Munro et al., 2020). A few recent studies have examined the impact of the COVID-19 pandemic on audiology practice. Gunjawate et al. (2020) examined the impact of COVID-19 on professional practice of audiologists and speech-language pathologists (n=211) in India using a cross-sectional survey. The survey highlighted that professionals displayed

adequate knowledge about COVID-19 outbreak, although the attitude towards the service delivery varied substantially. Moreover, the survey identified that measures towards infection control (e.g., hand-washing) was poor. In another study, Saunders and Roughley (2020) examined changes to audiology practices and also audiologists' opinion (n=120) about teleaudiology in the UK during COVID-19. At the time of survey (May-June 2020), less than 5% of audiologists provided usual care which was most often for vestibular care. Around 30% of participants reported to have used teleaudiology prior to COVID-19 restrictions, 98% reported to have used teleaudiology at the time of the survey, and 86% reported that they would continue to use teleaudiology after the restrictions are lifted.

The scope of earlier studies was limited to a particular geographical location (e.g., India, UK) examining a limited number of variables. The current study, in partnership with the International Society of Audiology (ISA), examined the impact of the COVID-19 pandemic on the audiology workplace from a global perspective. Other sections of the survey, not reported in this study, included the use of and attitude towards telehealth (Eikelboom et al., Submitted), and the mental health of audiologists during the pandemic (Bennett et al., Submitted).

Methods

Study Design and Ethical Considerations

This study used a cross-sectional survey design and was conducted from 23 June to 13 August, 2020. The study used descriptive as well as qualitative approaches for data analysis. Ethical approval (HUM023/0420) was obtained from the Faculty of Humanities Research Ethics

Committee, University of Pretoria, South Africa. All participants provided electronic consent before completing the survey.

Table 1: Demographic information of study participants (n=337).

Variable	N (%)
Gender	
▪ Male	77 (22.8)
▪ Female	260 (77.2)
Education	
▪ On job training, no professional degree	1 (0.3)
▪ Certificate course	13 (3.9)
▪ Bachelor's degree	66 (19.6)
▪ Master's degree	129 (38.3)
▪ Doctoral degree	128 (38)
Employment	
▪ Private practice – Small chain	50 (14.8)
▪ Private practice – Large chain	46 (13.7)
▪ Private practice – Single operation	46 (13.7)
▪ Private hospital or clinic	22 (6.5)
▪ Government hospital or clinic	78 (23.1)
▪ Other	95 (28.2)
World regions	
▪ Oceania	91 (27)
▪ Americas	88 (26.1)
▪ Africa	66 (19.6)
▪ Asia	48 (14.2)
▪ Europe	44 (13.1)

Study Participants

The study participants included 337 audiologists. Table 1 presents the study participants demographic details. The mean age of participants was 44.5 years (22-81 range), and the mean duration of audiology experience was 18.5 years (0-53 range). Seventy seven percent of the participants were females, representative of the typical gender distribution in audiology across the globe (Rogus-Pulia et al., 2018). Study participants were from different employment types including private practice (42.2%), private hospital or clinic (6.5%), government hospital or clinic (23.1%), or other settings (28.2%). Participants were from 44 different countries, although the majority were from five countries including Australia (n=81), United States (n=60), South Africa (57), United Kingdom (n=14), and Canada (n=13).

Data Collection

The data was collected using an electronic survey administered using the Qualtrics platform. The survey was distributed through the ISA and its affiliated societies to their members list. 461 self-selected audiologists attempted the survey, although only 337 respondents completed the survey with sufficient details for further analysis. Most of those who were not included in the analysis (n=124) only completed first few questions (about 2% of the survey). There was no observable pattern associated with non-completers and they were from a range of countries across the globe. ISA shared the survey to all its members (<https://isa-audiology.org/affiliates/members>) and also requested its affiliated societies to circulate it to their members. However, it is not possible to estimate the response rate as we are unable to confirm which all affiliated societies of ISA shared the survey link with their members. The survey included 50 questions with a mixture of structured and open-ended questions. The questionnaire focused on four elements, including: (a)

demographic information, (b) effects on the workplace, (c) use of and attitude to telehealth, and (d) mental health status. This study focuses on the effects on workplace and future manuscripts will include results of other elements. Results of the following three open-ended questions that were relevant to effects on the workplace were also included in this manuscript: (a) Do you believe that audiology services will go back to the way it was after COVID-19? (b) What aspects of audiology services might be different? and (c) What aspects of audiology services might be the same?

Data Analysis

The descriptive statistics were computed using the IBM SPSS software. Chi square analysis was performed to examine the association between employment type and changes to workplace using an online calculator (<http://www.quantpsy.org/>). The open-ended questions were analyzed using qualitative content analysis (Graneheim & Lundman, 2004). Analysis involved: (1) reading and clarifying participants' answers to survey questions; (2) identifying meaning units within the data (identifying individual words/phrases within the data, yet still retaining their original meaning and context; (3) coding meaning units by grouping together those most closely related; and (4) grouping coded meaning units into categories. Peer debriefing was used to improve the rigor of the qualitative content analysis. One research assistant completed the initial content analysis. Two members of the research team (RJB & RE) then crosschecked all of the analyzed data to strengthen the accuracy of the coding. Categories and meaning units were tabulated, with the number of participants contributing to each category provided.

Results

Scope of Work and Services Offered

Audiologists in the current study were working in a range of clinical practice areas (Figure 1). Over 70% of the participants were involved in providing adult hearing aid services, although the sample included audiologists who provided pediatric hearing aids (35.6%), adult implants (21.7%), pediatric implants (14.2%), worked in the hearing instrument industry (18.4%), and/or worked in the academic or research roles (34.4%). Moreover, audiologists in the study sample provided a range of services with over 60% of them providing hearing screening, hearing assessment, discussion of hearing loss and intervention options, hearing aid fitting, fine-tuning and review appointments (Figure 2). Less than half (47.8%) provided communication training and only one third (31.5%) provided psychosocial support. Here, psychosocial support refers to social and emotional support as a part of audiological rehabilitation program to address psychosocial consequences to individuals with hearing loss and their significant others. Other services (25.5%) provided included tinnitus assessment and management, vestibular assessment and management, and some non-clinical duties such as training and advice on policy making. These results show that the study sample included audiologists from a wide range of work setting and service provision.

Figure 1: Scope of audiological work (n=337).

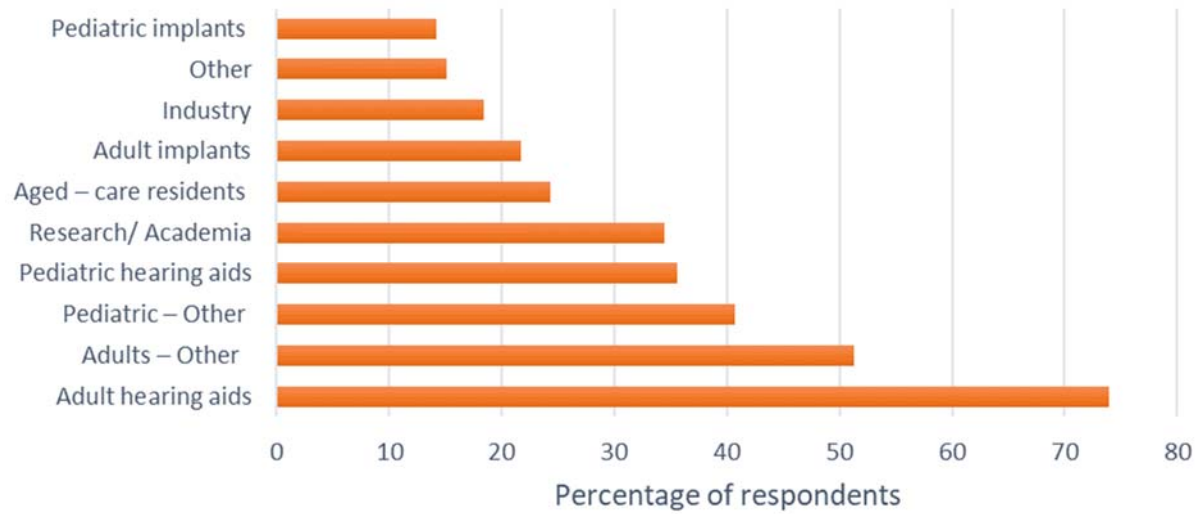
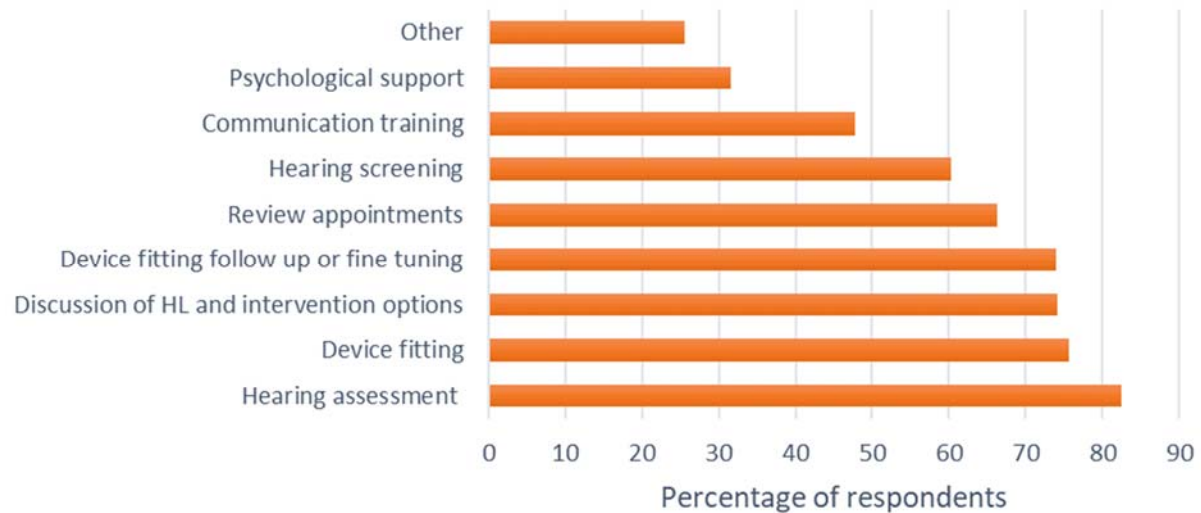


Figure 2: Types of audiological services offered by participants' audiology clinics at time of survey during the pandemic (n=337).



Effect of COVID-19 Pandemic on the Workplace

Among the study participants, 97% of audiologists reported changes within the workplace, and of these 76.4% reported a reduced number of patients during the COVID-19 pandemic (Figure 3). Nearly one quarter of the participants reported significant changes to workplace staffing: 17% had let go of staff and 9% of clinics had closed. Table 2 presents the effect of pandemic based on the employment type. No association was evident between employment type and changes to workplace (Chi square test; $X^2=12.9$, $df=10$, $p=0.22$).

Figure 3: COVID-19 pandemic affecting workplace (n=318)



Table 2: COVID-19 pandemic effects on the workplace across employment types (n=318).

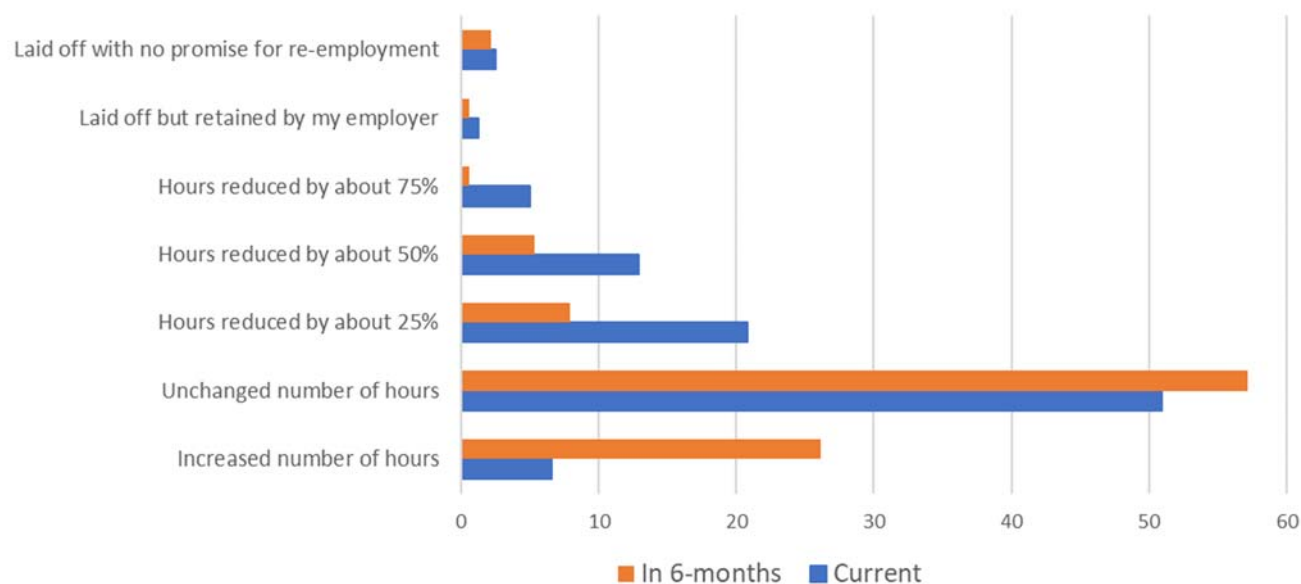
COVID-19 effect on the workplace	Employment type: Percentage (number)						
	Private practice – Small chain (n=48)	Private practice – Large chain (n=44)	Private practice – Single operation (n=46)	Private hospital or clinic (n=20)	Government hospital or clinic (n=75)	Other (n=85)	All (317)
No change, but with hygiene measures in place	14.6 (7)	15.9 (7)	13 (6)	15 (3)	10.7 (8)	18.8 (16)	14.7 (47)
Reduced number of patients but all staff retained	54.2 (26)	65.9 (29)	67.4 (31)	55 (11)	70.6 (53)	47.1 (40)	59.7 (190)
Reduced number of patients with some staff let go, only a few staff left, or clinic closed	31.2 (15)	18.2 (8)	19.6 (9)	30 (6)	18.7 (14)	34.1 (29)	25.6 (81)

Current and Perceived Future Work Status

Figure 4 shows the work status ratings by audiologists currently and what they anticipate in six months' time. When rating the current work status, just over half of the participants (50.9%) reported expecting unchanged number of working hours during survey response period (23 June – 13 August 2020), 38.7% reported expecting reduced working hours (reduced by 25 to 75%) and nearly 4% reported some layoffs in their work settings. A small number (6.6%) reported that they expected increased working hours. When rating the anticipated work status in 6-months' time, 57.2% reported unchanged number of hours, 26.1% reported increased number of hours,

13.8% reported reduced working hours, and 3% reported possible layoffs. These results indicate that the majority of audiologists are hopeful that their work status will improve in the future.

Figure 4: Current and perceived future work status in 6-months' time (n=318).



Tables 3 to 5 provide the main categories in the audiologists' responses to open-ended questions about the changes to audiology workplace following the COVID-19 pandemic. When asked about whether they believe that audiology services will go back to the way they were, the most common categories were related to possible tele-audiology approaches to continue services as well as improving accessibility (Table 3). Additional categories related to infection control measures, financial implications, as well as belief towards whether or not audiology services will return to the way it was. Of those who responded to the open-ended question, 39.6% believed that audiology services would return to normal, 52.9% believed that services would not return to normal, and 7.5% believed that services would return to normal to some degree. When answering the question about what audiology services might be different following the

pandemic, audiologists commented on various elements including service provision in general, restrictions and hygiene, business elements, clinical interactions and so on, although the most frequently occurring category was about the remote services using tele-audiology approaches (Table 4). Finally, when answering the question about what audiology services might be the same following the pandemic, respondents reported that most audiology services including the hearing assessment, aural rehabilitation, counseling, and other services would stay the same.

Table 3: Audiologists perception about whether the audiology services will go back to the way they were after COVID-19 (n=203).

Category	Description	Frequency
COVID-19 and tele-audiology: "Eye-openers" to new working approaches	Tele-audiology and COVID-19 have been "eye openers" to new working methods that improved audiology services and benefited clients (e.g., saving clients' travel, parking) and audiologists (e.g., working from home) faster and at a lower cost while being effective and creative. Audiologists will be prepared for a pandemic situation in the future.	46
More tele-audiology will be involved	People will continue to use tele services and audiology practice will use more tele-audiology after COVID-19.	51
Tele-audiology will improve access to audiology services	It should not go back to the way it was because tele-audiology increased access to services for clients who did not have access to audiology services before COVID-19.	13
Infection control and safety measures will remain	Audiology services will be back with increased infection control and social distancing and strict guidelines will be required. However, protective clothing may create fear in children; and using masks make communication difficult with poor rehabilitation outcomes.	39
Changes will happen gradually	The change will come gradually as considerable adjustments are needed over time. The audiology services will be back after a while (months to years)	20

	depending on the vaccine, herd immunity, observing safety rules, country, and clients' confident about going outside.	
Audiology services will be experiencing challenges	Audiology services should go back to the way it was in order to avoid negative impacts (e.g., poor follow-up and family involvement) on patient care as some clients (e.g., kids, school children, elderly, and clients with multiple disabilities) may not have access to or afford the Internet and devices for tele-audiology. Some clinics will force remote audiology services onto clients, even if clients prefer or require in-person services. Some audiologists will use tele-audiology as a pretense to providing sub-optimal services. Remote fitting hearing aids and cochlear implants will be challenging. Continuing the use of tele-audiology requires resources, infrastructure, tools, standards, training, and motivation.	32
Beliefs that audiology practice will return to the way it was before COVID-19	Audiologists believe that clients need audiology services and tele-audiology will not replace in-person permanently.	20
Acceptance of tele-audiology for the future	Clients and audiologists (especially younger ones) will embrace the tele-audiology and will be more positive towards it. However, accepting new technology will be slow and some resistance will be seen as a result of the basic need to human connection or unfamiliarity and a lack of understanding.	37
Economy/finance	There will be less audiological practices because some will not survive. Financial reimbursements for hearing aids will decrease and arrival of over the counter (OTC) instruments will change the marketplace. Using video conferencing for audiology appointments requires extra time cost for audiologists. Audiology will go back when economy recovers.	18

Table 4: Audiologists perception about what audiology services might be different following the COVID-19 pandemic (n=183)

Category	Description	Frequency
Remote services (audiology, ENT, management)	Tele-audiology will become accessible, the norm/mainstream, and ongoing for screening, testing, counselling, sale, fitting, rehabilitation, and follow-up. The phone will be used for several audiology services (e.g., initial discussion, checking medical details, handling hearing aids, problem solving). Awareness about tele-audiology will increase and start using it more often. Technology will be used for management and providing information.	185
Services	Counseling, support, service delivery, triage, rehab, and troubleshooting will be different, although audiology will be depending on the general conditions of the health systems. Services will (or will not) be patient-centered by regarding clients' needs with more options for clients (e.g., for appt type) rather than device-centered. Audiologists will develop more interactive methods to meet clients' needs. Some factors (e.g., legislation around data storage/privacy and clinical test requirements) will influence the options for hearing screening and assessment outside of face-to-face audiology appointments	39
Restrictions and hygiene	Number of individuals in an appointment will be decreased and more infection control (e.g., social distancing and PPE) will be applied.	31
Time, costs, and business	Length of appointments will change (shorter), and time is required for cleaning in between patients. The time frame between EMI and first fitting will change. Remote audiology services will be time and cost efficient for clients. We will see less wasted time and resources and will be selling less expensive hearing aids. Private funded clients will spend less on hearing aids. Smaller companies will go out of business, and job finding will be an issue.	22

Clinical interactions	<p>Client-audiologist interaction will change to more non-contact service.</p> <p>Audiologists will be extra careful with older clients. Frequency of follow-ups and relationships with clients will decrease. There will be less opportunity to build personal rapport, and we will have people who do not know how to interact with people.</p>	13
Expectations, needs, and preferences	<p>Audiology clients will expect less interaction and prefer more tele-audiology.</p> <p>Clients may not consider audiology as an essential service to make an appointment for their hearing problems. Clients may find themselves in different hearing environments (fewer background noise issues and need to connect to listening devices). Clients will be expected to be more independent (e.g., self-manage their hearing aids). Audiologists will provide tele-audiology to interested, rich, and educated clients who are experienced with technology.</p>	18
In-person appointments	<p>We will have fewer in-person appointments, and they will continue to be difficult. Aural rehabilitation programs will be easier in-person due to the need to include communication partners. The number of clients will be low, and walk-in appointments have to schedule.</p>	16
Assistive technologies	<p>Purchasing, acquisition, and adoption of hearing devices will change. Hearing aids will need to have remote programming capabilities, and better remote programming apps will be required. Repairing hearing aids will be affected as clients are reluctant to go to clinics for safety issues. Hearing aid industries attempt to remove audiologists from the process.</p>	10
Skills for using remote services	<p>Capabilities and competencies in providing remote services will be improved.</p> <p>Education for improving clients' confidence in communication via platforms will be available, and client's uptake of tele-audiology will be increased.</p>	7

Table 5: Audiologists perception about which audiology services might be the same following the COVID-19 pandemic (n=177).

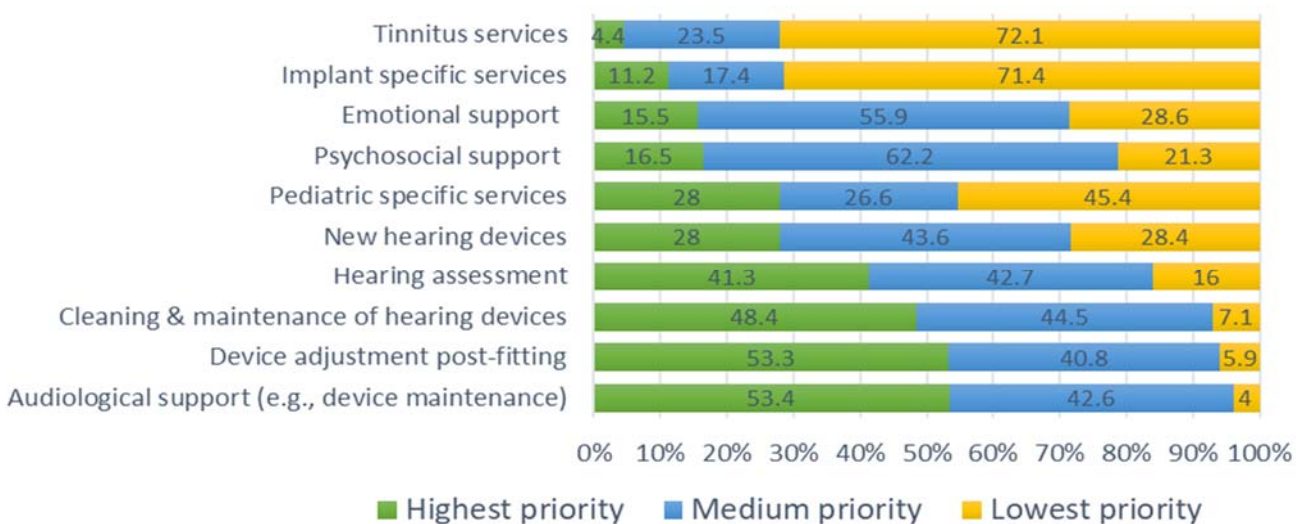
Theme	Description	Frequency
Hearing assessments	Hearing, balance, tinnitus, and pediatric diagnostic tests, as well as the otoscopy and screening might be the same.	112
(Re)habilitation and fitting hearing devices	The evaluation, programming, impression taking, and fitting of hearing aids and cochlear implants might be the same. Aural rehabilitation will be the same too.	54
Procedures and in-person appointments	Personal interaction with clients in in-person appointments might be the same. The follow-ups, time spent with clients, and those procedures requiring verification equipment will be the same. Explanation of use and maintenance of devices, hands-on tasks and helps also will be the same in in-person services. Without adequately trained staff, access to cheap and reliable otoscopy and middle ear measures will continue to be a problem for tele-audiology, so in-person appointments will continue.	28
Support and counselling	Counselling, support (e.g., psychosocial and emotional support), training, and community outreach might be the same.	20
Equipment, protocols, standards, and professionalism of service	Audiologists will remain patient-centered by providing individual care and compassion to their clients. Standards, protocols, expertise, and professionalism of service will be the same. Equipment needs, adaptation of electronic devices, and technology quality might be the same too.	17
Clients' needs	Most clients, more specifically elderly clients, might need to come to clinics because of the low ability/uptake of tele-audiology or personal preferences for face-to-face interaction.	8

Most Needed Audiological Services

Study participants were provided with a list of 10 specific audiological services and were asked to rank them based on most needed (rank=1) to least needed (rank=10) by patients during the

COVID-19 pandemic. These responses were categorized as highest priority (ranks 1-3), medium priority (ranks 4 to 7), and lowest priority (ranks 8-10) as illustrated in Figure 5. Access to hearing assessment, access to device adjustment post fitting, access to cleaning and maintenance, and access to audiological support such as device management or communication training received the more favorable rankings in terms of most needed audiological services. On the other hand, services such as access to psychosocial support, access to emotional support, access to tinnitus specific services, and access to hearing implant specific services received less favorable rankings in terms of most needed audiological services. Most notable findings here are that audiologists had lowest priority ratings for the need for psychosocial and emotional support as well as for tinnitus services.

Figure 5: Priorities placed on ten key audiology services during lockdown (n=225).



Discussion

This study examined the effects of the COVID-19 pandemic on the audiology workplace. In particular, this international cross-sectional survey provides insights on the (a) disruption to work (e.g., hours, job security, perceived future work status), and (b) required services during the lockdown.

Audiologists in the study sample were from a range of work settings and provided a range of services, although only one third (31.5%) provided psychosocial support which may be important during the pandemic. This low rate of psychosocial services reflects typical audiology work practices (Bennett et al., 2020b; Ekberg et al., 2014). The majority (97%) of audiologists reported changes to their workplace, which included 76.4% of participants reporting a reduced number of patients during the COVID-19 pandemic. In an earlier study, Saunders and Roughley (2020) found that more than 95% of UK-based audiologists self-reported changes to their usual clinical service delivery during the pandemic. Together, these results indicate that the pandemic has significantly influenced the audiology workplace. However, audiologists in the current study anticipated better work conditions in terms of working hours in 6 months' time. As indicated by the audiologists responses to the open text items (Bennett et al., Submitted; Eikelboom et al., Submitted), this may be because (a) audiologists anticipate that the pandemic will soon cease and work conditions will return to pre-pandemic states, and (b) audiologists have used the additional time made available due to lockdowns to adapt to the new working conditions (i.e., acquire personal protective equipment, adopt telehealth practices). Nevertheless, these findings suggest that audiologists remain positive about their future work. Since the time of the survey, second and third waves of the pandemic and new lockdowns have also continued to emerge around the

world, which was likely not anticipated. In another study, Gunjawate et al. (2020) reported poor knowledge of infection control by audiologists in India. These findings highlight need for the government and/or professional bodies to communicate timely and clearly with professionals about the current situation and continual adaptation to working conditions in the coming months.

Although many participants reported that audiological services including assessment and rehabilitation are likely to return to pre-pandemic procedures, when answering open-ended questions regarding the possible future impact of the COVID-19 pandemic on audiology services, a frequently occurring category was about teleaudiology approaches to service provision. Statements such as “eye-openers to new working approaches” and “teleaudiology will improve access to audiology services” demonstrate participants’ encouraging optimism for the potentially positive outcomes of this pandemic. Another study examining the opinions of audiologists during the pandemic also found that participants described how adoption of teleaudiology practices had resulted in positive changes to service delivery (Saunders & Roughley, 2020). However, these participants also highlighted that improvements to infrastructure and clinician training are needed for audiologists to be able to effectively provide teleaudiology services. These findings suggest that audiologists are more aware of, and starting to embrace new service delivery methods to continue to provide services as well as to improve access to audiological services (Ballachanda et al., 2020; Swanepoel & Hall, 2020).

Audiologists reported that their priorities primarily related to support and maintenance of existing patients. These services are the easiest to be delivered remotely, as much of it can be provided over the phone or through videoconferencing equipment, and evidence supports device

adjustment by telehealth (Beukes et al., 2019; Tao et al., 2018). Assessments and fitting new devices were next on the list of priorities, which despite the acknowledged perceived inadequacies of telehealth for these services (Figure 5), may reflect the fact that these services are essential when providing audiological rehabilitation services, and also for the financial viability of a clinic. It supports the earlier observation that more innovation is required in these areas (Beukes et al., 2019; Tao et al., 2018). Lower priorities were tinnitus, pediatric, implants and psychosocial and emotion support services. This may reflect that almost three quarters of the respondents were involved in adult hearing aid services, and that assessment and hearing aid fitting featured prominently in the services offered at their clinic. It has previously been reported that audiologists have some misgivings to providing psychosocial support to their clients (Bennett et al., 2020a, 2020b). Therefore, it is not surprising to see the low priority given to these matters. However, it would be interesting to examine the importance based on service users' perspectives. For example, a recent study by Beukes et al. (2020) identified that a large percentage of individuals noticed increased tinnitus distress during the pandemic although they had difficulty seeking professional services to manage their tinnitus. Furthermore, parents of children with hearing loss may view access to assessment of management of hearing loss critical even during the pandemic.

Overall, the COVID-19 pandemic has challenged the current healthcare practice both in terms of model of delivery and in terms of capacity (i.e., how quickly and to how many people served), which has important implications for the healthcare system (Blumenthal et al., 2020). Healthcare reform is clearly needed (King, 2020; Lal et al., 2021) and changes to healthcare policy after the pandemic is likely (Fuchs, 2020). One immediate change would be the use of telehealth to

expand essential services (Center for Disease Control and Prevention, 2020). For example, tinnitus support can be provided easily using teleaudiology models (Aazh et al. 2020; Beukes et al., 2018; Manchaiah & Beukes, 2020). More work is needed on other areas such as pediatric audiology service provision using teleaudiology. The current study highlights the need for services to adapt and embrace service delivery models, that include telehealth, to ensure patients have continued access to services responsive to the challenging times (Ballachanda et al., 2020; Clark et al., 2020; Swanepoel & Hall, 2020).

Study Limitations and Future Directions

Limitations of the study include the sample size which is relatively small for an international study. Although the study is global in terms of its reach, the majority of the participants who completed the survey were from a small number of English-speaking and high-income countries. Moreover, nearly one-quarter of participants who started the survey did not complete it. Additionally, issues surrounding self-selection may have resulted in a sampling bias. The timing of the survey may have some bearing towards the status of lockdown in different countries (e.g., partial versus full lockdown). For instance, there was a good representation of participants from Australia which experienced much less disruption when compared to other countries. However, the survey was conducted at a time during which most countries were under some social distancing and lockdown measures making the results comparable across regions. While the current study provides some preliminary results about how the pandemic affected the audiology workplace, future studies should examine how the pandemic continues to affect the audiology service delivery as well as how audiologists adapt (or not) to new challenges. In particular,

readiness to provide audiology services using the telehealth measures will be a much-needed direction for future research.

Conclusions

The COVID-19 pandemic has disrupted all aspects of our lives. Understanding of how the pandemic may have affected the audiology workforce is needed in order to ensure how to adapt to these changes. The current study, which is nested in a larger survey, examined the impact of the COVID-19 pandemic on the audiology workplace from a global perspective. The findings highlighted that most audiologists (i.e., 97%) reported changes to their workplace, with 76.4% reporting reduced caseloads during the peak of the COVID-19 pandemic. This in turn resulted in reduced working hours as well as layoffs. Various audiological services including tinnitus support, pediatric audiology services, services for those using implantable devices as well as psychosocial and emotional support were reported to be of low priority by audiologists who suggested that general audiological services such as access to hearing assessment, hearing device adjustment and maintenance were of higher priority. Overall, the study demonstrated that the COVID-19 pandemic has resulted in significant disruptions to audiological practice. The study highlights the need to adapt and incorporate new audiological practices including telehealth, to ensure patients have continued access to care. In addition, measures are also need to ensure clinics remain sustainable during the ongoing COVID-19 pandemic and recovery phase.

Disclosures

None to declare.

Acknowledgements

Authors like to acknowledge the International Society of Audiology (ISA) for distributing the survey to their members and affiliated societies and also Megan Knoetze for help in creating the online survey.

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