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Charles Ellis Jr., PhD is a Professor in the Department of Communication Sciences and Disorders at East Carolina University (ECU). Dr. Ellis is a licensed and certified speech-language pathologist who received his Bachelor of Science and Master's degree from The University of Georgia, Athens, GA. and Doctor of Philosophy degree from the University of Florida, Gainesville, FL. Dr. Ellis' academic concentration focuses on adult neurogenic disorders and he teaches courses related to aphasia and cognitive disorders. He leads the Communication Equity and Outcomes Laboratory where his research is designed to understand outcomes associated with adult neurologically based disorders of communication and factors that contribute to the lack of equity in service provision and outcome disparities that exist among African Americans and other underrepresented minority groups. Dr. Ellis has published extensively in the areas of Parkinson's disease, stroke, traumatic brain injury, and health disparities and minority health issues. Dr. Ellis is the former Language Editor for the Journal of Speech-Language-Hearing Research 2017-2018. Dr. Ellis was awarded the American Speech-Language-Hearing Association Certificate of Recognition for Special Contribution in Multicultural Affairs in 2011. In 2014 he awarded Fellowship of the American Speech-Language Hearing Association (ASHA). Email: jnbaslh@nbaslh.org

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ABOUT THE *JOURNAL*

The *Journal of the National Black Association for Speech-Language and Hearing (JNBASLH)* is a peer-reviewed, refereed journal that welcomes submissions concerning communication and communication disorders from practitioners, researchers or scholars that comprise diverse racial and ethnic backgrounds, as well as academic orientations.

JNBASLH editorial board welcomes submissions from professionals or scholars interested in communication breakdown and/or communication disorders in the context of the social, cultural and linguistic diversity within and among countries around the world.

JNBASLH is especially focused on those populations where diagnostic and intervention services are limited and/or are often provided services which are not culturally appropriate. It is expected that scholars in those areas could include, but not limited to, speech-language pathology, audiology, psychology, linguistics and sociology. Articles can cover any aspect of child or adult language communication and swallowing, including prevention, screening, assessment, intervention and environmental modifications. Special issues of *JNBASLH* concerning a specific topic may also be suggested by an author or through the initiation of the editors.

Aims & Scope

Topics accepted for publication in *JNBASLH* could include, but is not limited to, the following:

- Communication breakdowns among persons due to culture, age, race, background, education, or social status
- Use of the World Health Organization's International Classification of Functioning, Disability, and Health (ICF) framework to describe communication use and disorders among the world's populations.
- Communication disorders in underserved or marginalized populations around the world
- Service delivery frameworks for countries' minority populations, including those who are minorities for a variety of reasons including race, religion, or primary language spoken.
- Dialectical differences and their effects on communication among populations
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- Provision of communication services in low income/resource countries
- Provision of communication services in middle income/resource countries
- Provision of communication services to immigrant and/or refuge populations
- Effects of poverty on communication development and the provision of services
- Education/training issues in serving diverse populations
- Ethical issues in serving diverse populations
- Role of religion in views of communication disability and its effect on service delivery

Submissions may include:

- Research papers using quantitative or qualitative methodology
- Description of clinical programs
- Theoretical discussion papers
- Scientifically conducted program evaluations demonstrating
- Clinical forums
- Works using disability frameworks or model's effectiveness of clinical protocols
- Critical clinical literature reviews
- Case studies
- Tutorials
- Letters to the editor

Submission of Manuscripts

All manuscripts should be accompanied by a cover letter (e-mail) in which the corresponding author:

- Requests that the manuscript be considered for publication;
- Affirms that the manuscript has not been published previously, including in an electronic form;
- Affirms that the manuscript is not currently submitted elsewhere;
- Affirms that all applicable research adheres to the basic ethical considerations for the protection of human or animal participants in research;
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All manuscripts must be submitted electronically and should follow the style and preparation presented in the *Publication Manual of the American Psychological Association* (Sixth Edition, 2010; see Journal for exceptions to APA style). Particular attention should be paid to the citing of references, both in the text and on the reference page. Manuscript submissions and inquiries should be addressed to: nbaslh@nbaslh.org.

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Manuscripts must be written in English. Authors are referred to recent copies of the journal and are encouraged to copy the published format of papers therein.

Text should be supplied in a format compatible with Microsoft Word for Windows (PC). All manuscripts must be typed in 12pt font and in double-space with margins of at least 1-inch. Charts and tables are considered textual and should also be supplied in a format compatible with Word. All figures, including illustrations, diagrams, photographs, should be supplied in .jpg format.

Authors must write clearly and concisely, stating their objectives clearly, defining their terms, and substantiating their positions with well-reasoned, supporting evidence. In addition, they are encouraged to review articles in the area they are addressing which have been previously published in the journal and, where they feel appropriate, to reference them. This will enhance context, coherence, and continuity for readers.

All submissions are considered by the editorial board. A manuscript will be rejected if it does not fall within the scope of the journal or does not meet the submission requirements.

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EDITOR'S NOTE

It is my privilege to publish **Volume 15, Issue 2** of the Journal of the National Black Association for Speech Language and Hearing (*JNBASLH*); **COVID-19 Special Issue**. Members and friends of NBASLH submitted a collection of works describing the impact of COVID-19 on educational, clinical and research environments. We are excited to report that this is the first issue including the "Student Perspective" submission category of papers. Six published papers from students enrolled in communication sciences and disorders pro-grams offer great insights into the challenges and opportunities that students have faced during the COVID-19 pandemic. This issue also includes a thoughtful essay regarding the spread of COVID-19 in Black communities and the impact on the field of speech-language pathology. In addition, the issue offers a tutorial designed to address teaching concerns that have emerged during the abrupt change to online teaching. Further, the issue includes a paper which utilized national data to explore the impact of depression among individuals with communication issues during the isolation created by state-at-home guidelines. Final-ly, the issue includes several thoughtful and insightful commentaries related to the impact of COVID-19 on the field of speech-language pathology at large. Despite the challenges of COVID-19, the authors of these works found the necessary time to produce important works that can be utilized to guide the profession and further discussion regarding best practices related to research, education and clinical practice. I sincerely thank all the contributors to this interesting issue of JNBASLH and anticipate that you will enjoy reading these inter-esting works.

Charles Ellis, Jr. PhD CCC-SLP
Editor
JNBASLH

CORONAVIRUS PANDEMIC IMPACT ON AN INTERNATIONAL STUDENT: A PERSPECTIVE

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Amidst spring break, on March 11, 2020, the World Health Organization (WHO) officially declared the coronavirus outbreak a global pandemic. Ever since, almost every aspect of our normal life has been affected. Adapting to these unprecedented conditions drastically changed our daily routine and imposed adverse effects on us at multiple levels.

Schools and universities suspended in-person classes and moved to online instruction. Faculty and staff transitioned all learning to online in a very short period of time, when everything was planned to be carried out differently. While their efforts to make our Zoom and WebEx classes as engaging as possible are greatly appreciated, nothing can replicate the classroom experience. As an international student, studying abroad is not just about the academics; it's about the broader learning experience. I came to the United States of America to broaden my perspectives, experience and appreciate on-campus diversity, establish connections and building friendships, as well as to grow professionally and become a more competent practitioner in my area of interest.

The university I am attending, East Carolina University (ECU), is working tirelessly to keep us informed, updated, and involved. ECU has put great effort to make the transition to online instructions smoother for students. Academically, instructors were able to deliver the intended content remotely. However, research in the area of speech-language pathology, when often data collection through direct experimentation is needed, has been affected. For example, studies that require the use of instrumentation or direct follow-up were temporarily and indefinitely discontinued.

As the pandemic spread throughout the world, most countries took radical measures to limit the virus spread. Lockdown procedures were implemented through enforcing social distancing and the use protective masks whenever we go out, which was not done unless deemed absolutely necessary. Also, the shortage on disinfectants and personal protective equipment created panic. As closed borders and travel bans became the norm, and as the situation became more uncertain with each passing day, I became worried about my own wellbeing as well as that of my loved ones in my home country thousands of miles away.

Feeling like I'm missing out on the real student experience, along with the uncertainty of the situation, both in my home country and in the U.S., I decided to stay connected with my family and friends to get and offer the support we all needed in these unprecedented times. Using videocalls, social media, and group chats, we have managed to stay connected and involved. My friends meet every other week to talk about virtually anything, and perhaps to offer a safe space for anyone to share what they are going through. We realized our emotional and mental wellbeing is essential for us to move forward and deal with the current situation.

As an international student in a lockdown in a foreign country, the situation is overwhelming, to say the least. However, I am thankful I am able to stay safe, healthy, and connected. I am grateful to my university, professors, family, and friends for offering me support during these times. Hopeful for it to end soon, my thoughts go to everyone affected by this pandemic.

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A STUDENT PERSPECTIVE ON CLINICAL AND ACADEMIC TRANSITIONS DURING THE COVID-19 PANDEMIC: TRIALS AND REWARDS

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— ABSTRACT —

In this paper, the experiences of a first-year graduate student SLP major during the COVID-19 pandemic are described. Their academic and clinical transitions to online education and telepractice are recounted along with the perceived benefits and barriers associated with these instructional and clinical delivery methods.

Keywords: COVID-19, graduate student learning, clinical education, telepractice

Background

As a first-year graduate student majoring in Speech-Language Pathology, there are many "firsts" that occur. It is the first time to write lesson plans for a session, the first time to evaluate and treat clients, and the first time to utilize knowledge gained from many years of study and apply it as a beginning clinician. When the Fall 2019 semester began, students in Speech-Language Pathology graduate programs across the country experienced a taste of what it was really like to work with clients in the field. However, their experiences would drastically change in March 2020 when the COVID-19 pandemic made its way throughout every state. Businesses, jobs, primary schools, and universities all were moved to an online setting, which initiated many significant changes. The purpose of this paper is to describe the experiences of a first-year graduate student and her clinical and academic transitions during the COVID-19 pandemic.

Most programs were forced to find other means of providing clinical hours for their students in ways such as Simucase, which provides students with online simulated/virtual cases in their designated field. Telepractice, which provides students with an opportunity to serve their clients over a webcam instead of in person, was also introduced as a method of delivering evaluation and treatment services. When the COVID-19 pandemic began, many graduate students showed concerns or fears for not only the current semester, but also the rest of their graduate student careers. The concerns of most students were somewhat calmed at the thought that telepractice would provide insight into a new and effective way to achieve a therapeutic experience while gaining clinical hours to further their education.

The Benefits and Challenges of Telepractice

Telepractice typically involves the delivery of long-distance or remote speech-language pathology and audiology services via electronic communication and information technologies (ASHA, 2020; Towey, 2012). Telepractice can be used as a tool to monitor, diagnose, treat, and counsel patients in circumstances where in-person care is not feasible, or when

telepractice is more convenient or economical. An ASHA survey conducted in May 2020 revealed that most students and many faculty members had no prior experience with telepractice before COVID-19 (only 9.6%); however, more than 60% of them indicated that they now are routinely providing services via telepractice (Volker, 2020).

There are some benefits and limitations that present themselves when delivering therapy via telepractice. The most important benefit of telepractice is that the clinician and client can see and hear each when the technology is working optimally. Equally important is the convenience factor in which the client and the clinician may stay in their home to receive and deliver services. Another benefit of telepractice is that it can be conducted from any location, which eliminates the need for cancelled appointments due to weather- or illness-related issues. Additionally, as per best practices, services rendered via telepractice can be done so in a HIPPA-compliant manner. Some limitations of telepractice include the breakdown of verbal and nonverbal ways of communicating. For example, when working with certain clients, such as persons who stutter, it is crucial to have a rhythm to communication when speaking to others. When conducting therapy over a webcam, it can be difficult to tell when someone has a lag when they are finished talking. It also can be difficult to determine if you have heard the words the person has stated correctly. Nonverbal communication is also affected because it is difficult to tell if the client is making direct eye contact or not, which could inhibit them from meeting this targeted goal.

The Transition to Online Courses

Not only was clinical practice interrupted for graduate students by COVID-19, but class time and delivery format were affected as well. Classes offered in graduate school provide crucial information that is needed to help form a successful clinician. Face-to-face classes allow students to ask questions easily, communicate with peers more effectively, interact with their instructors, and retain information about a specific topic with minimal distractions. When all classes were moved to an online format in the middle of March 2020, students were faced with numerous challenges. Group work could not be completed as easily as in person. Most communication between our cohort and clinical faculty was halted to an extent and students could not access resources on campus like they typically would (such as assessment and treatment materials). In the early stages of the pandemic, some of our class lectures were delivered in the form of narrated PowerPoints in an asynchronous online format. However, more than half of our courses were offered synchronously (live) via Zoom or WebEx.

Online classes provided some beneficial aspects as well. Students could complete their work on their own time without having to drive to campus to be present for class. Assignments were modified by faculty to fit the online format which was sometimes helpful since directions could not be stated as clearly in many instances. Additionally, because of the extended time they had at home, some students were able to maintain their financial circumstances by obtaining outside/off-campus jobs.

Concluding Remarks

COVID-19 had a large impact on the life of graduate clinicians in many aspects and it is still expected to affect how the Fall 2020 semester occurs. Classes will still be online for many universities and clinical placements for students are not determined due to the uncertainty of the virus. Having this experience has allowed students to demonstrate the flexibility that is required when becoming a speech-language pathologist. Students have also learned to become more independent and confident by overcoming sudden changes and they have been given the opportunity to work with clients in a new way that many people do not have the chance to do throughout their entire career. The pandemic experience has created many trials and rewards which will ultimately produce stronger clinicians for the future.

References

American Speech-Language-Hearing Association. (2020). Telepractice. Available at: https://www.asha.org/practice-portal/professional-issues/telepractice/.

Towey, M. (2012). Speech telepractice: Installing a speech therapy upgrade for the 21st century. *International Journal of Telerehabilitation*, 4, 73–78.

Volker, N. (2020). What COVID-19 teaches about online learning. Asha Leader, 25(5), 46-55.

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AN INSIDE PERSPECTIVE OF THE IMPACT OF COVID-19 ON HIGHER EDUCATION AND CLINICAL EXPERIENCES

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According to the United Nations, governments worldwide shut down colleges and universities, resulting in approximately 90% of the world's student population being at home by mid-April, in response to the COVID-19 pandemic (Stancati, 2020). All students were forced to continue learning remotely. Although the same information that was taught in a traditional classroom was being offered, remote learning requires a different level of discipline and perseverance. Many Communication Sciences and Disorders (CSD) and Audiology (AuD) graduate students still live at home or had to return home due to the impact of COVID-19. With many family members working from home, the learning environment for most students was significantly changed.

Because the living situations of students varied significantly, some reported frequent challenges in finding a quiet area at home to attend their classes, complete assignments, or study. Relatives living in the same homes were great supports and often come to check on you. However, they frequently forgot their loved one (student) was in class or attempted to assign time-consuming house-chores that you may not have time to do while completing your schoolwork. With all the change and uncertainty happening around us, it almost felt as if we were no longer in school. Personally, this past semester required a lot more discipline and self-determination to complete my assignments to the best of my academic abilities.

Since I only had night classes, I developed a routine of completing my assignments at night or early morning when everyone in my household was still asleep. Some nights I was able to squeeze in a practice test or review a chapter from my Praxis books. We all had to adapt to the current changing environment around us and find a new normal. For some of my peers, finding their new norm posed more unanticipated challenges. With the abrupt halt of clinical externships and delayed shift to teletherapy, some of my peers were unable to stay on track and accrue the weekly hours to fulfill the graduation requirements. Our experiences aligned with the recent publication, COVID-19 and the Mad Dash to Telepractice: A Tutorial to Establish Community-Based Telerehabilitation for Aphasia Using WebEx Videoconferencing that noted "The recent COVID-19 pandemic has forced the field of Speech-Language Pathology (SLP) to rapidly develop and implement new models of service provision…" (Ellis, Briley, & Mayo, 2020, p.44).

Many students across the nation are still facing this same challenge. National NSSLHA held a live chat Q & A for students pertaining to COVID-19 Certification and Accreditation https://www.asha.org/Events/live/COVID-19-Certification-and-Accreditation-Q-A-for-Students/. The most recurring question that arose during this forum was whether ASHA was willing to increase the number of hours that's obtainable from clinical simulations. Although many people asked for this change, ASHA stated that the Council for Clinical Certification (CFCC) would not increase the number of hours that's acquired from any clinical simulations (COVID-19 Guidance From CFCC, n.d.). Before COVID-19, ASHA allowed 75 of the 400 required hours to be obtained from clinical simulations, such as Master Clinician and Simucase.

During the Q & A, a student posed the following questions: "In your honest opinion, what are the implications of this circumstance on our careers? Do you think our lack of in-person experience will affect how future employers view us? How do you suggest we combat this?" (National NSSLHA Live Chat, 2020). Gretchen Ehret Hoshaw, the ASHA Associate Director of Certification, responded that the CFCC is trying to prevent negative implications for this year's graduates from happening, therefore that is why the 75-hour limit for clinical simulation hours will continue to be enforced. Ms. Hoshaw further stated that they do not want future employers to view this year's graduates as being less prepared than any other graduating class because there were less direct contact hours (National NSSLHA Live Chat, 2020). I appreciate ASHA's consideration in protecting the appearance of 2020 graduates to ensure that we are not viewed as underprepared, but I wish more solutions were provided to help students.

The decision to not change the number of simulated clock hours affected graduation for some of my peers, as they did not officially graduate with the rest of the cohort during the Spring graduation. Those students had to complete an extra semester of teletherapy to meet the clinical hour mandate for graduation. A possible solution for students whose clinical experiences are suspended is allowing them to continue seeing clients on their caseload from their placements or university clinics through teletherapy under the supervision of their supervisors. When my university moved us to remote learning, clinical externships and the speech clinic were suspended pending further direction and instruction from the NYS guidelines and the CDC. While the first-year graduate students resumed seeing clients from the speech clinic remotely a few weeks later, second-year graduate students were only obtaining hours through virtual simulations. If these students were given the opportunity to continue their clinical externships through teletherapy, they would have met the clinical clock hour requirement to graduate with their peers, while also gaining valuable clinical experiences.

Future implications for students obtaining clinical experiences remotely should begin by using teletherapy. By implementing teletherapy, students will be provided a caseload which will allow them to accrue the required clock hours and clinical training. Telepractice gives students the opportunity to work with clients that they otherwise may not have had the opportunity of evaluating and/or treating in their university clinic or clinical externships. Google Meets, TheraPlatform, and Webex are viable options for teletherapy, but Webex and other HIPAA compliant teleconferencing platforms are the best options and they have a wide range of features conducive to meeting the need of our clients (Ellis & colleagues, 2020). With the rapid advancement of technology and uncertainty of future graduate clinical experiences, training and experience in teletherapy are distinguishing skills for future students to obtain.

References

Ellis, C., Briley, P., & Mayo, R. (2020). COVID-19 and the Mad Dash to Telepractice: A Tutorial to Establish Community-Based Telerehabilitation for Aphasia Using WebEx Videoconferencing. *Journal of the National Black Association for Speech-Language and Hearing*, 15(1), 44-50.

Telerehabilitation for Aphasia Using WebEx Videoconferencing COVID-19 Guidance From CFCC. (n.d.). Retrieved from https://www.asha.org/Certification/COVID-19-Guidance-From-CFCC/

National NSSLHA Live Chat: COVID 19-Certification and Accreditation Q&A for Students. (2020). Retrieved from https://www.asha.org/Events/live/COVID-19-Certification-and-Accreditation-Q-A-for-Students/

Stancati, M., Brody, L., Fontdegloria, X., & Cipriano, G. (2020). The Pandemic Sent 1.5 Billion Children Home from School. Many Might Not Return. *Wall Street Journal*. Retrieved from https://www.wsj.com/

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COVID-19: THE ULTIMATE TEST OF ACADEMIC RESILIENCE

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Resilience is defined as positive adaptation despite challenging or threatening circumstances (Martin, 2005). The resilience "toolkit" includes elements of positive psychology, which enhances satisfaction, motivation, and productivity in the workplace. However, how is the strength of one's resilience measured? I propose the strength of one's resilience is measured when encountering difficulty. Consequently, this season of the coronavirus (COVID-19) pandemic is the ultimate test of academic resilience. Students can choose to allow the difficult circumstances to determine their academic progress or use this season as an opportunity to establish new healthy strategies.

The global pandemic with high contagion potential and exponentially increasing incidence in the United States led to the declaration of a public health emergency by the Trump administration on January 31, 2020. State governments mandated shelter-in-place orders across the nation. Schools and companies closed its doors to limit the spread of viral infection. College and graduate students were prevented from returning to campuses, resulting in sudden changes in work routines, social life, and family organization (Ornell et al., 2020). Increased isolation, anxiety, and fear were met with decreased access to community and support. Many students respond by withdrawing, becoming stagnant, and disengaging from their schoolwork. These responses are described by Martin (2005) in the "Student Motivation and Engagement Wheel", where decreased adaptive dimensions and increased impeding dimensions create a negative cycle of decline in motivation and productivity. Students thrive when they believe in their capacity to work successfully (self-efficacy), receive reward for their performance (mastery orientation), feel their work is useful (value of work), and can plan (planning) and manage their work (work management). Nevertheless, students' motivation decline with increased anxiety, uncertain control, and disengagement.

As a second-year doctoral student, I experienced a declination in motivation and productivity with changes brought by the COVID-19 pandemic. I struggled with maintaining self-efficacy, value of work, planning, and work management with the changes in work environment and decreased accountability. As time progressed, I gained awareness of contributing factors to my decreasing motivation. I developed new strategies to restore adaptive dimensions and reverse the declination of motivation. I recognized that I am not alone and began to reach out to other students who were encountering the same struggles. I sought community and accountability with graduate students in my university by creating a group on Microsoft Teams. We committed to daily check-in meetings to create a feeling of "showing up to work" using video conferencing. We shared our goals, struggles, and questions, and received advice from one another. These meetings increased my engagement and value of work. I soon began to establish a new weekly schedule, removing the sources of anxiety and isolation, and establishing positive, adaptive behaviors.

The COVID-19 pandemic can cause setbacks in many students' academic progress. Yet, I believe this season is a test of students' academic resilience. Rather than sinking back in fear and becoming overcome by circumstances, it is an opportunity to develop resilience skills. Students and professors must avoid impeding dimensions and increase adaptive dimensions of motivation and engagement.

REFERENCES

Martin, A. J. (2005). The role of positive psychology in enhancing satisfaction, motivation, and productivity in the workplace. *Journal of Organizational Behavior Management*, 24(1-2), 113-133.

Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and COVID-19: mental health burden and strategies. *Brazilian Journal of Psychiatry*, (AHEAD).

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"I CAN'T BREATHE": A DOCTORAL STUDENT PERSPECTIVE TO COVID-19

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— ABSTRACT —

Motivation and mental health can be worsened when doctoral students try to maintain productivity and meet graduation requirements during a deadly pandemic. This perspective discusses the impact of COVID-19 on motivation to complete educational responsibilities within in a doctoral program. "*I Can't Breathe*" is used as a metaphor to illustrate the feelings of the added pressures and demands that COVID-19 placed on educational expectations.

"*I Can't Breathe*." These were George Floyd's last words when he was wrongfully murdered by police and also used as the primary symbol for on-going protests denouncing police brutality against Blacks. In like manner, *I Can't Breathe* describes the feelings of doctoral students when the novel coronavirus (COVID-19) forced university campuses to close early, paused research studies, and transitioned classes to online only. It forced us into self-isolation and increased the pressures of finding the motivation to complete educational responsibilities with limited to no face to face social interaction. These actions exacerbated mental health challenges faced by some graduate students in conjunction with the demands and pressures of challenging programs.

I Can't Breathe is symbolic of these students' cry for help with balancing their mental health while also finding the motivation to be productive graduate students.

It is not surprising that graduate school has been consistently linked to negative mental health outcomes for students obtaining advanced degrees. Every student has a unique combination of motivating factors, motivation that generally drives them to complete their personal and professional goals (Hegarty, Brasco, & Fang, 2012). While graduate school's constant educational responsibilities can decrease motivation, this can be worsened when students try to maintain productivity and meet graduation requirements during a deadly pandemic. Communication Sciences and Disorders (CSD) doctoral students such as myself are not immune to these challenges (Crais and Savage, 2020). We are subject to maintain a progressive work-life balance that can decrease motivation and while at the same time creating a façade of perfection that prevents us from addressing personal challenges that can delay or prevent our graduation. Unfortunately, a pandemic could be a catalyst that further weakens or destroys student motivation and productivity.

As a CSD doctoral student, my motivation was wavering before COVID-19 because obtaining a doctorate often increases anxiety and exhaustion. However, my motivation remained steadfast from working on campus and interacting in person with my peers, advisors, and mentors. I valued the connectedness I had with peers and faculty and being able to use on-campus resources and research labs to complete my work. Moreover, daily schedules of on-campus meetings and events increased my motivation and productivity. Crossing daily meetings, projects, and tasks off of my schedule made me feel accomplished and successful.

When COVID-19 hit, it hindered my success and

productivity by decreasing my motivation. I was forced to work remotely. Classes and meetings were held only online and access to on-campus resources and labs was forbidden. Uncertainty surrounding this new illness elevated my mental anxiety and exhaustion. Instead of my cherished in-person interactions, I had to find a sense of connectedness through excessive screen time from Zoom study sessions, WebEx meetings, and Microsoft team chat threads. My decline of motivation to complete my educational responsibilities required additional time than normal and I battled completing tasks with the pressures of maximizing "extra" time.

Although quarantine was necessary, it has dampened doctoral students' productivity, mental health, and motivation. Professors and advisors need to recognize this and act. Without this acknowledgment, graduate students will continue to scream *I Can't Breathe*.

References

Crais, E., & Savage, M. H. (2020). Communication sciences and disorders PhD graduates' perceptions of their PhD program. *Perspectives of the ASHA Special Interest Groups*, 5(2), 463-478. doi:10.1044/2020_persp-19-00107

Hegarty, N., Brasco, R., & Fang, L. L. (2012). What motivates students in graduate school? an empirical study. *Business Education & Accreditation*, 4(2), 39-47.

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THE IMPACT OF COVID-19 ON DOCTORAL CANDIDATES

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As universities began to close their campuses due to COVID-19, the focus was primarily on transiting to online courses. University emails, newspaper articles and academic blogs all talked about the difficulty of quickly transitioning to online courses to ensure the students were successful. Gradually other aspects of the university were focused on other areas, such as the use of telehealth for clinics that offered students clinical experiences. It was important to continue to provide clinical opportunities for students as well as continue to serve current patients. One aspect that seemed to be overlooked was the impact COVID-19 would have on the research of doctoral students.

As a doctoral candidate, the last few semesters prior to graduation typically focus on completing a dissertation. Many areas of research in speech-language pathology require the recruitment of human subjects and face-to-face interactions with the participants. As COVID-19 forced states into lockdown, the ability to recruit and run subjects for research was halted. Research that relied on services offered at hospitals, such as magnetic resonance imaging (MRI), was no longer viable for the foreseeable future. At first, there seemed to be less concern on the impact COVID-19 would have on completing dissertation research. The hope was that soon researchers would be allowed back in the hospitals and research labs to continue their research. As the months progressed, the likelihood of that goal diminished. Target subject numbers that once seemed feasible to obtain prior to graduation were no longer within reach. Doctoral candidates and their committee members were now faced with the decision to extend the students program or to modify their dissertation projects to allow them to graduate on time.

I quickly found myself in the same position. As COVID-19 closed the campus of my university, I was not immediately concerned with the impact it would have on my dissertation research. I was confident that within a few months I would be able to continue to run MRI scans and reach my targeted recruitment numbers. I was naïve to think that my research progress would not be impacted by COVID-19. Within a few months, I realized my research timeline was no longer going to be achievable. I began to discuss my options with my mentor. Would I have to extend my program if I can't reach my targeted subject numbers? When will I even be able to resume my research? My mentor, program director, and dissertation committee members were all incredibly supportive and helped me navigate these unusual circumstances. A decision was made to revise my research aims and reduce my recruitment numbers. These decisions will impact the power of study and may have implications on future publications but will allow me to graduate on my original expected graduation date. I feel confident with this decision given the support I have from my mentors in the department. Hopefully research in all fields of study will resume in the near future. However, the long-term implications of COVID-19 on research for doctoral students is unknown.

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THE SPREAD OF COVID-19 AMONG BLACKS: HOW DOES IT IMPACT SPEECH-LANGUAGE PATHOLOGISTS (SLPS)?

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— ABSTRACT —

As the COVID-19 pandemic persists and data becomes available, there is an urgent need to identify and address the reasons Black communities are disproportionately impacted by the virus. While comorbidities among Blacks are part of the problem, we argue that focusing solely on this issue ignores the root causes that lead to the high COVID-19 cases and fatality rates among minorities. Our analysis shows that examining the structural determinants of health, such as income, access to healthcare, built environment, and social exclusion, are crucial to understanding why this specific minority group has been affected so severely by COVID-19. The direct impact of COVID-19 on the role of the speech-language pathologist (SLP) in healthcare settings along with the need to focus on lifelong cultural humility is discussed. Specific suggestions on how to educate SLPs on the structural barriers to care among Blacks are provided.

Keywords: speech-language pathology; health inequities; COVID-19; cultural humility.

Introduction

With the outbreak and spread of COVID-19, many speech-language pathologists (SLPs) are on the frontlines working in healthcare settings where they are expected to provide care for patients with COVID-19. SLPs provide assessments and therapeutic services related to speech, language, swallowing, cognition, and dysphagia for clients diagnosed with COVID-19. SLPs encounter difficult work conditions which include limited personal protection equipment (PPE), supporting overburdened staff members, and being placed at risk with potential contact with high viral concentrations during swallowing evaluations (Law, 2020). In addition, SLPs meet the needs of patients and communities as part of interprofessional teams (American Speech-Language Hearing Association [ASHA], 2020).

As the COVID-19 pandemic persists and data becomes available, there is an urgent need to identify and address the reasons Blacks are disproportionately affected. Recent data shows that 24.3% of COVID-19 fatalities are concentrated among Black patients, despite only representing 12.4% of the population (APM Research Lab, 2020). Blacks are dying at twice the population rate expected. Moreover, although Blacks only represent 18% of the population as a whole, 33% of COVID-19 hospitalized patients are Black, raising significant concerns regarding the over-representation of Blacks among COVID-19 cases (National Center for Immunization and Respiratory Diseases [NCIRD], 2020). Blacks have more co-morbidities than Whites which places them at risk for greater rates of complications and fatalities (Hlavinka, 2020). At the same time, data shows that 40% of Blacks have high blood pressure (Heart.org, 2016). Compared to Whites, Blacks experience higher death rates and higher prevalence rates of chronic conditions in the United States (Cunningham et al., 2017).

While this high rate of associated diseases among Blacks has been known for some time now, health disparities have continued for the last 60 years despite efforts to reduce them (Landrin & Coral, 2009). Although the Affordable Care Act (ACA), enacted in 2010, increased the overall number of insured people, it did not guarantee all Americans had the same access, quality and financial means to pay for health care services. The expansion of Medicaid and other provisions of the ACA lowered the uninsured rate to 6% for Blacks and 4% for Whites (The Henry J. Kaiser Family Foundation, 2020), which is not sufficient for greater access and better health outcomes especially among high risk populations. Focusing predominantly on co-morbidities and insurance among Blacks, ignores contributing factors that have led to high rates of COVID-19 within the Black community. It is crucial to address the underlying structural factors resulting in the high number of cases and fatalities nationally. This paper will examine the impact of COVID-19 by first addressing the social determinants of health to curb its impact on Black communities based on healthcare disparities, income/employment, the built environment, and social exclusion. Second, we will discuss the role of the SLP in healthcare settings, the need to practice cultural awareness/humility, and the importance of awareness regarding the provision of health care services for minority communities. Finally, the social determinants of health will be discussed in order to understand why Black communities are disproportionately impacted by COVID-19.

Addressing the social determinants of health to curb COVID-19

The World Health Organization (WHO) defines the social determinants of health as, *"the daily conditions in which people are born, grow, work and live,"* as the root cause of inequities because they are determined by policy choices (WHO, 2008). Although immediate circumstances such as food choices, biological factors, and behavior are easily understood as related to health outcomes; it is structurally embedded or 'upstream' determinants such as public policies, socio-economic position, ethnicity, occupation and income that set into motion pathways towards subpar or optimal health. Understandably, proximal conditions such as health behaviors and health outcomes are easier to study and operationalize through statistical methods and ascribe blame for the high rate of COVID-19 among Blacks than health inequities. This reasoning is faulty. To overcome health inequities the focus should be on the root causes of unequal distribution of resources and injustice.

Healthcare Disparities

There are countless studies demonstrating the significant health disparities that exist within the USA and these inequities start early in life for minority groups. To understand better why Blacks are vulnerable to COVID-19 several healthcare disparities that already exist in these communities must be examined (for a detailed understanding of racial and ethnic health disparities, see Institutes of Medicine, 2003). According to the Centers for Disease Control and Prevention (CDC, 2020) older adults and people of any age with underlying health conditions are at a higher risk for COVID-19. This includes those who have chronic lung disease or moderate to severe asthma, individuals with heart conditions, immunocompromised individuals (included but not limited

to those receiving cancer treatment, smokers, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening conditions), severe obesity (body mass index [BMI] of 40 or higher), diabetes, chronic kidney disease undergoing dialysis, and liver disease.

Well known disparities exist among Blacks in comparison to Whites in terms of health. These health disparities include health behaviors and chronic diseases such as asthma, diabetes, and hypertension. Unfortunately, disease and death are not randomly distributed among the United States population; instead it varies by race and socioeconomic status (SES).

Differences in health care risk behaviors also exist, such as diet and physical activity. It is also recognized that although diet and physical activity vary among races, these disparities in health-risk behaviors contribute to disproportionate rates of obesity. Obesity often leads to further health complications such as diabetes, hypertension, and other diseases. These conditions place Blacks at a higher risk of being susceptible to COVID-19 complicated deaths than other groups.

Income and employment

Income is a key indicator of health disparities. Disease and death are not randomly distributed among the US population. Instead they vary with race and socioeconomic status. Income is also associated with employment. The pandemic is a reminder that minority populations comprise a large part of the essential workers. Risk of infection is usually greater for workers in this industry due to the nature of their work. These workers are required to be at their place of employment despite outbreaks in their communities, and some workers may need to continue working because of their economic circumstances (Center for Disease Control and Prevention, 2020). Recent data shows that minorities provide or represent 57% of cleaning services, 45% of public transit workers, and 40% of healthcare workers (Rho, Braum, & Fremstad, 2020). These jobs entail greater risk for transmission due to the number of people workers must interact with on a daily basis. Further, most of these positions are insecure, without full benefits. Additionally, 44% of Black American adults have reported a pay cut or job loss due to the pandemic, compared to 38% of White Americans (Lopez, Rainie, & Budiman, 2020). Moreover, the generation of wealth and social mobility for Blacks has been encumbered by a long history of discrimination and segregation involving employment, housing, and education (Brown, 2020).

The built environment

Access to housing and quality of living conditions also has a significant impact on health. When affordable housing is available, it is often substandard with poor ventilation and/or other factors that facilitate transmission of illnesses. Even before the COVID-19 crisis, there were multiple reports of severe maintenance issues in subsidized housing with little done to resolve this issue based on reports (Goodman, Baker, & Glanz, 2018). Unsurprisingly, substandard living conditions exacerbate clinical factors. Conditions within households increase the severity of diseases such as asthma (e.g. through allergens in the air), as well as those found in the general environment (e.g. through proximity to factories and highways).

Even more concerning, asthma is frequently associated with the built environment and Blacks have the highest asthma rates in the USA (Asthma & Allergy Foundation of America and the National Pharmaceutical Council, 2005), while also being three times more likely to die from asthma than Whites (Asthma & Americans, n.d). This finding is supported by increasing evidence-linking susceptibility to COVID-19 to exposure to air pollution. For example, according to the Asthma and Allergy Foundation of America and the National Pharmaceutical Council (2005), the highest number of emergency room visits and hospital stays due to asthma are experienced by Blacks both with genetics and the environment increasing asthma risk. In addition, a family history of asthma, increases an individual's risk for developing it. Other environmental pollutants attributed to increased risk for asthma due to allergens in the air, includes but is not limited to, dust mites, pets, tobacco smoke, cockroaches, and mold which is linked to increased susceptibility to COVID-19 following exposure to air pollution (Wu, Sabath, Braun, & Dominici, 2020).

Social exclusion

Marginalization is another factor that has direct effects on health by depriving individuals from critical resources. Other areas of deprivation include labor market discrimination and housing segregation, among other issues. Racism is also associated with poor health outcomes. The added stress of racism discrimination and perceptions of inequality, have psychological effects reducing access to health services (Brown, Yamey, & Wamala, 2014). Lack of access to care only partially explains the disparity in care. Many Blacks avoid accessing health services due to distrust of the health system. This distrust has extensive historical roots (Corbie-Smith, Thomas, & St. George, 2002) and is worsened by lack of representation among health providers. In New York State, the representation of minorities in the health field is dire. A 2008 report analyzed underrepresented minority physicians found that only 8% of physicians were from these groups (Armstrong, Martiano, &

Moore, 2006). Similarly, 11.8% of registered nurses were Black (CHWS.org, 2012).

Systemic discrimination in healthcare is another key contributor to poor health resulting from institutional practices and unconscious bias (Williams & Rucker, 2000). Blair and colleagues (2013) demonstrated that clinicians' implicit bias negatively affects perceptions of care among minority patients, especially Blacks. The same bias is worsened in emergency situations such as COVID-19, when health workers make quick decisions yet have little time to reflect and correct their unconscious biases.

The field of speech-language pathology is an example of a healthcare discipline that lacks diverse representation within the profession. White professionals make up the majority of SLPs in the United States (Ebert, 2013). Only 7.5% of the American Speech-Language-Hearing Association (ASHA) members belong to a racial minority group. As of 2018, the demographic profile of ASHA member and nonmember certificate-holders in speech-language pathology indicates that 92% identify as White. Approximately 8% of ASHA's certificate-holders belong to a racial minority group, which is important to note when thinking about our role within health care settings and impact on care of Blacks.

Role of the SLP in Health Care Settings

SLPs play a direct and critical role within the health care system. In fact, during the pandemic SLPs were considered frontline workers according to Governor Andrew Cuomo of the State of New York. He made the determination that essential workers were those employees whose jobs were involved in the COVID-19 response (Cuomo, 2020). This included patients with swallowing disorders and the scope of practice of SLPs. SLPs within the healthcare systems focus on the diagnosis and treatment of clients that have speech, language, cognitive, and swallowing difficulties. Yet, their roles are poorly understood, particularly in marginalized and minority communities.

COVID-19 has had an unprecedented impact on how SLPs provide service delivery as well as the patients served. As healthcare providers it must be noted that each patient has unique characteristics and medical challenges. Part of the role of SLPs in healthcare is recognizing the communities served and the impact of social determinants on patient health and care. SLPs must be aware of the health disparities that currently exist as well as the impact of income/employment, the built environment, and social exclusion for specific individuals. It is important for SLPs to be aware of these social determinants of health to provide effective care to clients during assessment and treatment. Chung et al. (2016) presents guidelines for clinicians to address social determinants of health through screening and surveillance. The process of screening and surveillance includes asking about the concerns of patients, identifying risk factors and social issues, and referring patients to appropriate organizations and agencies. Schickedanz et al. (2019) conducted a study analyzing clinician attitudes towards screening for social determinants. Although many clinicians recognized the benefits of screening and addressing social determinants, major barriers were time constraints, training, and knowledge of resources. SLPs are equipped with training to integrate the client expertise as part of their decision making process in utilizing evidence-based practice. Knowledge of patient resources will require a SLPs to rely on the expertise of other health professionals on the interprofessional team. Their decisions during patient care requires a clear understanding of patient-centered care and interprofessional practice approaches. Patient-centered care and interprofessional practice approaches should include effective communication with patients and families, understanding individual needs, and goals of care (Centers for Medicaid and Medicare Services [CMS], 2020).

The Importance of Being Aware of Specific Groups

Gaining an understanding of the specific needs and challenges different clients face must be rooted in the cultural awareness and humility of SLPs. Cultural awareness and humility is critically important when working with communities of color and more specifically Blacks. The field of SLP must move away from the commonly used concept of *cultural competence to cultural humility*. The word "competency" implies a training model that results in mastery of a certain topic or skill (Trevalon & Murray-Garcia, 1998). Cultural competency should never be represented as a mastered skill. A shift to cultural humility as a lifelong dedication to the evaluation and critique of self is a more appropriate and accurate term (Tervalon & Murray-Garcia, 1998), and should be the gold standard for working interprofessionally. In this way, cultural humility should be thought of and taught as a transformational skill, as opposed to focused information about various cultures (Foronda, Baptiste, Reinholdt, & Ousman, 2015). Cultural humility skills and characteristics include openness, self-awareness, egoless, supportive interactions, and self-reflection and critique (Foronda, Baptiste, Reinholdt, & Ousman, 2015; Tervalon & Murray-Garcia, 1998).

Offering clinicians a transferable skill with the opportunity to engage with other disciplines will challenge SLPs and other health care providers to find commonality and increase understanding between personal and professional beliefs (Ortega & Coulborn

2011). A solution to finding commonalities may be in exposing SLPs to working with individuals in public health, social sciences, nursing, occupational therapy, and physical therapy to gain a better understanding of various roles on the patient care team

To truly address the needs of Blacks, SLPs may need to confront their own lack of understanding Black culture. Knowing the history and systems that lead to health disparities can provide the correct perspective when providing client care to those on the negative end of the disparity gap. Such a change will necessitate addressing one's own cultural humility and the need to learn more about communities and individuals based on their lived and learned experiences. Increasing individual cultural humility can lead to improved care for our all clients and improve systemic issues within the healthcare system. COVID-19 served as a catalyst to unveil some of the social determinants of health that made Blacks vulnerable to being disproportionately impacted by COVID-19.

Conclusion

The high rate of COVID-19 among Blacks, is unfortunately not surprising and further illustrates the existing inequities in the United States. It is critical that all levels of society address this issue. Within the field of speech-language pathology, cultural awareness and humility as an ongoing part of our training and clinical care is warranted. Providing culturally-sensitive care must occur at the undergraduate level and continue at the graduate level as a part of continuing education throughout a clinician's career. SLPs must become active participants and advocates on interprofessional teams that demand and provide better access to health services by and for Blacks. To advocate, promote, and provide better access to health care, knowledge of issues that put Blacks at high-risk for COVID-19 is requisite. Further, reflecting on and addressing their own cultural awareness and humility on an ongoing basis will reduce unconscious bias and promote excellence in care.

References

APM Research Lab (2020, June 20). The color of Coronavirus: COVID-19 deaths by race and ethnicity in the U.S. https://www.apmresearchlab.org/covid/deaths-by-race

Armstrong, D.P., Martiniano, R., & Moore, J. (2006). *A profile of New York's underrepresented minority physicians*. Albany, NY: Center for Health Workforce Studies. https://www.albany.edu/news/pdf_files/minority_physicians_report.pdf

ASHA (2020, June 1). SLP service delivery considerations in health care during Coronavirus/COVID-19. https://www.asha.org/slp/healthcare/slp-service-delivery-considerations-in-health-care-during-coronavirus/

Asthma and African Americans. (n.d). The U.S. Department of Health and Human Services: The Office of Minority Health. https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=15

Asthma and Allergy Foundation of America and the National Pharmaceutical Council (2005). *Ethnic Disparities in the Burden and Treatment of Asthma*. Reston, VA: National Pharmaceutical Council.

Blair, I.V., Steiner, J. F., Fairclough, D. L., Hanratty, R., Price, D. W., Hirsh, H. K., Wright, L. A., Bronsert, M., Karimkhani, E., Magid, D. J., & Havranek, E. P. (2013). Clinicians' implicit ethnic/racial bias and perceptions of care among Black and Latino patients. *Annals of family medicine*, 11(1), 43–52. https://doi.org/10.1370/afm.1442

Brown, S. (2020, May 06). How COVID-19 Is Affecting Black and Latino Families' Employment and Financial Well-Being. Retrieved June 28, 2020, from https://www.urban.org/urban-wire/how-covid-19-affecting-black-and-latino-families-employment-and-financial-well-being

Brown, G.W., Yamey, G., & Wamala, S. (2014) *The Handbook of Global Health Policy*. West Sussex: John Wiley & Sons.

Centers for Disease Control and Prevention (2020). *Coronavirus Disease 2019: Racial and Ethnic Minority Groups*. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html

Chung, E. K., Siegel, B. S., Garg, A., Conroy, K., Gross, R. S., Long, D. A., ... & Yin, H. S. (2016). Screening for social determinants of health among children and families living in poverty: a guide for clinicians. *Current problems in pediatric and adolescent health care*, 46(5), 135-153.

CHWS.org (2012) A profile of active registered nurses in New York. https://www.chwsny.org/wp-content/uploads/2012/04/nyrn2012_Final_reduced1.pdf.

CMS (2020). Guidance for Infection Control and Prevention of Coronavirus Disease 2019 (COVID-19) in Nursing Homes(REVISED). https://www.cms.gov/files/document/qso-20-14-nh-revised.pdf

Corbie-Smith, G., Thomas, S., & St. George, D. (2002). Distrust, Race, and Research. *Archives of*

Internal Medicine. 162(21): 2458- 2463.

Cunningham T.J., Croft J.B., Liu Y., Lu H., Eke P.I., Giles W.H. (2017).Vital Signs: Racial Disparities in Age-Specific Mortality Among Blacks or African Americans — United States, 1999–2015. *MMWR Morb Mortal Wkly Report*, 66, 444–456. http://dx.doi.org/10.15585/mmwr.mm6617e1External.

Cuomo, A.M. (2020). Memorandum: Executive Chamber State Operations. https://www.pef.org/wp-content/uploads/2020/03/UPDATED-COVID19-Statwide-Non-Essential-Memo-1.pdf

Ebert, K. D. (2013). Perceptions of racial privilege in prospective speech-language pathologists and audiologists. *Perspectives on Communication Disorders and Sciences in Culturally and Linguistically Diverse (CLD) Populations,* 20(2), 60-71.

Foronda, C., Baptiste, D.L., Reinholdt, M.M., Ousman, K., (2015). Cultural humility: a concept analysis. *Journal of Transcultural Nursing*. 27 (3), 210-217.

Goodman, J.D., Baker, A., & Glanz, J. (2018). Tests showed children were exposed to lead. The official response: Challenge the Tests. *The New York Times*. https://www.nytimes.com/2018/11/18/nyregion/nycha-lead-paint.html

Heart.org (2016, October 31). High blood pressure and African Americans. https://www.heart.org/en/health-topics/high-blood-pressure/why-high-blood-pressure-is-a-silent-killer/high-blood-pressure-and-african-americans

Hlavinka, E. (2020, May 1). COVID-19 killing African Americans at shocking rates. *Medpage Today*, https://www.medpagetoday.com/infectiousdisease/covid19/86266

Institute of Medicine. 2003. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: The National Academies Press. https://doi.org/10.17226/10260.

Landrine H., & Corral I. (2009). Separate and unequal: residential segregation and black health disparities. *Ethnicity & Disease*. 19(2):179-84.

Law, B.M. (2020, April 1). 'Not just dots on a map': SLPs speak their truth from the COVID-19 battlefront. *The ASHA Leader*. Retrieved from https://leader.pubs.asha.org/do/10.1044/not-just-dots-on-a-map-slps-speak-their-truth-from-the-covid-19-battlefront/full/

Lopez, M., Rainie, L., & Budiman, A. (2020, May 05). Financial and health impacts of COVID-19 vary widely by race and ethnicity. Retrieved June 28, 2020, from https://www.pewresearch.org/fact-tank/2020/05/05/financial-and-health-impacts-of-covid-19-vary-widely-by-race-and-ethnicity/

NCIRD (2020, June 4). COVID-19 in Racial and Ethnic Minority Groups. https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html

Office of Minority Health. (n.d.). Retrieved from https://minorityhealth.hhs.gov/omh/browse.aspx?lvl=4&lvlid=15

Ortega, R. M., & Coulborn, K. (2011). Training child welfare workers from an intersectional cultural humility perspective: a paradigm shift. *Child Welfare,* 90 (5), 27 – 49.

Rho, H.J., Brown, H., & Fremstad, S.A. (2020). *Basic Demographic Profile of Workers in Frontline Industries*. Washington, DC: Center for Economic and Policy Research.

Schickedanz, A., Hamity, C., Rogers, A., Sharp, A. L., & Jackson, A. (2019). Clinician experiences and attitudes regarding screening for social determinants of health in a large integrated health system. *Medical care*, 57(Suppl 6 2), S197.

Tervalon, M., & Murray-Garcia, J. (1998). Cultural Humility Versus Cultural Competence: a critical distinction in defining physician training outcomes in multicultural education. *Journal of Health Care for the Poor and Underserved*, 9 (2), 117-125.

The Henry J. Kaiser Family Foundation (2020, March 5) Uninsured Rates for The Nonelderly By Race/Ethnicity. https://www.kff.org/uninsured/state-indicator/rate-by-raceethnicity/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

Williams, D.R. & Rucker, T.D. (2000). Understanding and addressing racial disparities in health care. *Health Financing Review*. 21(4):75-90.

Wu X., Nethery R.C., Sabath B.M., Braun, D., & Dominici, F. (2020, January 1) Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study. medRxiv. https://www.medrxiv.org/content/10.1101/2020.04.05.20054502v2.

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TEACHING IN COMMUNICATION SCIENCES AND DISORDERS DURING COVID-19: A TUTORIAL

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— ABSTRACT —

During the first quarter of 2020 universities across North America quickly transitioned from in-person on-campus instruction to remote learning. While many instructors familiar with the pedagogy and practice of distance education were able to make the transition with limited disruption to their planned educational content other instructors struggled. Moving forward to the fall 2020 semester instructional faculty are facing an unclear academic landscape. It is unclear if there will be a return to in-person instruction, a continuation of remote learning/distance education or some combination thereof. This brief tutorial provides information on the pedagogy of teaching beyond in-person instruction and a roadmap for instructors to create academic content that can be provided under three different scenarios, in-person instruction, hybrid learning or remote learning.

Keywords: course design, hybrid, flipped, blended instruction

By March of 2020 SARS-CoV-2 (COVID-19) was declared a global pandemic (WHO, 2020). Subsequently many universities in the United States closed, finishing the term via remote learning (Crawford et al., 2020). The educational continuity provided following the transition to online learning is described by Hodges et al., (2020) as emergency remote teaching (ERT). ERT is a temporary shift in instructional delivery during a crisis situation. The temporary nature of ERT implies the online methods will terminate once the emergency has passed (Hodges et al., 2020). The content provided during ERT was not designed for that purpose. Thus, online presentation of content designed for in-person delivery may negatively affect student learning. Additional research in the coming months and years will evaluate the effect of COVID-19 and ERT on educational outcomes during the first half of 2020.

In contrast to ERT, online education is purposefully designed (Hodges et al., 2020). The robust pedagogy of online education includes careful instructional planning and design of systematic methods and models to create original and curated content for student learning (Cennamo & Kalik, 2019). High quality online education has five primary components a) authentic and relevant course materials connected to practice in the discipline b) a variety of multimedia resources c) an opportunity for students to create digital content individually and collaboratively d) an opportunity for students to regularly reflect on their

learning e) and a clear explanation of the purpose of the activities, the technologies and the assessments that occur during the course (Martin et al., 2019).

As instructional faculty prepare for a return to campus there is no consensus as to whether courses initiated as face-to-face will remain such for the entire academic term. Further, due to the guidelines for social distancing of 6ft (2 meters), the recommended use of face coverings and recommendations to not share items (Pearce, 2020) it may be difficult for in-person instruction to occur in the manner practiced pre- COVID-19. These factors represent a problem for instructional faculty as they design courses for the upcoming term. A reliance on in-person content delivery may leave the unprepared instructor facing a second episode of ERT. There are however, three methods to prepare for and resolve this problem. One is to design a blended course, the second is to design a hybrid course. The third option is to design a fully online course.

This text will provide a brief description of the pedagogy behind these three instructional models followed by a description of the pedagogy and purpose of the flipped classroom. The purpose of this work is to provide discourse regarding the implementation and delivery of course content during the time of COVID-19. The text concludes with an example of how a graduate level course can be structured using the provided techniques. The techniques presented here are suitable for use with both graduate and undergraduate courses.

Instructional models blended, hybrid and online Courses

In a blended course some class sessions are face-to-face, and others are comprised solely of online content. The online materials presented in the blended course are used to support and supplement, not replace the face-to-face instruction. In a hybrid course, the learner attends in person classes, but receives new material as online content. In the hybrid course the online content is not a supplement. It replaces portions of the content the instructor would typically provide. The hybrid course can occur entirely in a virtual environment with learners attending live lectures using an online meeting platform (e.g. Zoom, WebEx, Teams etc.,). The final method, online learning is a contrast to both blended and hybrid learning.

The best online learning experiences include well planned components of the RASE model *resources* (R) expertly curated digital resources such as educational videos, e-books, simulations and interactive multimedia content used to enhance the instructor provided lectures; *activities* (A) instructor designed opportunities for learners to apply the knowledge they have gained and create products that demonstrate their learning; *supports* (S) institutional technological support for the learning management system, along with student-to-student, student-to content and student-to-instructor support from page navigation to trouble shooting; and *evaluations* (E) explicit opportunities for student comments on activities and assignments through informal (what did you learn today responses to activities) and formal faculty designed questionnaires (Churchill, King, & Fox, 2013). The online learner consumes prepared lectures and curated modular content that is self-paced and self-contained. The learner may demonstrate learning mastery through traditional examination or by creating practical content. The online instructor remains an integral part of the learning experience by grading assignments and providing feedback on work products, commenting on and directing student learning, and communicating with students individually or in small groups over the course of the instructional term.

The Flipped Classroom

Regardless of the type of instruction, face-to-face, blended, hybrid or fully online, in the traditional classroom model the learner listens to lectures during the class period and completes the homework or additional learning assignment outside of the classroom. Rutherfoord & Rutherfoord (2013) describe the flipped classroom this way. Prior to class the learner consumes the instructional content and completes a pre-assessment of the presented material. The instructor evaluates the learner's responses and designs activities to target weak or missing foundational concepts. The activities are completed during the class period with instructor supervision.

Learners work individually or in small groups to develop the specific knowledge and apply the required skills to demonstrate mastery of both the theoretical concept and its practical application. The learner turns in the assignment at the end of class for additional comment and instructor feedback. The guided in-class practice is sometimes considered a superior method of learning compared to the unguided homework practice. Learning research suggests the flipped classroom is successful due to three key components a) the learner develops a deep foundation of factual knowledge before b) practicing the newly learned knowledge in a conceptual framework and c) organizing the new knowledge through guided practice that facilitates learner retrieval and application of the new material (Bransford, Brown & Cocking, 2000). In short, during the instructor directed class activity learner errors and content misconcep-

tions are redirected along the intended path to the practical application of the novel concept. Instructor and learner discussions of alternative options occur in real time as the learner follows a guided model to the desired result.

Create modular learning content

The instructor seeking to create a course that can be effectively and efficiently moved to a hybrid or online presentation model without resorting to ERT will need to design the course following a modular design. Donnelly & Fitzmaurice (2005) describe the three modular course design components:

1. Define the learning outcomes
2. Choose the methods (teaching content, learner activities) required to attain the outcomes
3. Assess student learning and gather student feedback on the learning process.

By applying these components to a class in Communication Sciences and Disorders, the instructor can design a course that could be implemented in a variety of instructional formats. The next section provides a brief step by step example of course design for a graduate level Articulation and Phonological Disorders course that has been taught as a face-to-face course, an online course and a hybrid course. The course is designed as a flipped classroom with learners consuming content prior to the class meeting, completing guided practice during the class meeting and creating an independent project each week to demonstrate mastery of content.

Designing the course

Step 1. Define learner outcomes: It is estimated that between 2.3% to 24.6% of school-aged children have speech delay or speech sound disorders (Black, Vahratian, & Hoffman, 2015; Law, Boyle, Harris, Harkness, & Nye, 2000; Shriberg, Tomblin, & McSweeny, 1999; Wren, Miller, Peters, Emond, & Roulstone, 2016). Of those identified with a speech sound disorder (SSD) a majority are between the ages of 3 -10 years. More boys than girls are identified with SSD (Shriberg et al., 1999; Wren et al., 2016) and a higher proportion of African American children 5.3% than White children 3.8% are identified (Shriberg et al., 1999). Finally, children identified with poor speech sound production skills in kindergarten have a 2.5 times greater likelihood of having a reading disorder than peers with no history of SSD (Peterson, Pennington, Shriberg, & Boada, 2009). Therefore, a learner who is competent in the diagnosis and treatment of SSD must know the following.

A. Typical Acquisition of Speech
   a. Universals of speech acquisition
   b. Ages and stages of speech acquisition
   c. Phonetics, phonemes, allophones

B. Regional and socio-ethnic variation in speech
   a. Minimal pairs, open vs closed syllables, onset, rime and word meaning
   b. Phonetic variation and homophones
   c. Morpho-phonology, stress, sub- and supra-segmental aspects of speech

C. Speech Sound Disorder versus speech difference
   a. Circle back to ages and stages
   b. Phonological processes
   c. Non-linear phonology and mapping phonology to orthography for literacy

The content presented in the previous paragraphs would have been provided to the learners in a brief 5-minute video recorded lecture along with the text you see above. At the conclusion of the lecture the instructor would provide a video tour of the online content. This tour is the same whether the students are in a face-to-face class or fully online because all of the content is housed in the same online location. The simple outline presented above shows three core concepts and the three supporting components identified as the foundational course knowledge. This outline serves as the homepage for the learners. Clicking on the first word of each line takes the learner to the next level of content. All outside readings and assignments are linked to this outline as illustrated in the next section. The only difference between the text presented here and the learner's online content view is the omission of due dates for assignments and a course calendar.

Step 2. Choose the methods (teaching content, learner activities) required to attain the outcomes

To demonstrate competence in this course the learner must demonstrate knowledge of the following concepts. First that all spoken languages are composed of sounds that distinguish word meanings e.g., /pit/ and /bit/ are different words; second the meaningful contrasts of those sounds is relative to that language e.g. /pit/ is actually produced as /p^h it/ by native English speakers. The little /h/ is the puff of air (aspiration) native speakers learn without thinking about. Leaving the puff of air off will make the /p/ sound in /pit/ sound like /b/ as in /bit/ to a native speaker. The final required concept is knowledge of the rules of sound order and syllable creation. These

rules are learned in the same relative sequence over time by all children regardless of their native language (Ladefoged & Johnson, 2014). For example, vowels are acquired first, followed by stops and nasals. These are language universals (Ohala, 1980).

The textbook chosen for this course provides learners with general knowledge on these concepts however mastery is demonstrated through applied practice activities. Instructions for the activities are provided along with an example. Class discussion and questions are an integral part of the in-class work. Learners may work independently or in small groups (3-5). In-class work can be completed online via a web meeting application. The next section provides examples. Learners complete the italicized activities prior to the class meeting and the bolded activities during the class meeting.

Typical Acquisition of Speech

a. Universals of speech acquisition *(Review instructor provided lecture on the International Phonetic Alphabet (IPA) -15 minutes; Go to the online Interactive IPA and listen to the production of the vowel sounds as produced in the words heed, hid, hayed, head, had, hod, whod, hood, howed, hawed, hoyd, hide, heard. Are these General American English productions consistent with your own? Explain why or why not. Based on your current knowledge of articulation can you describe why your productions are the same as or different from the ones you heard on the site. Upload your answers to your online notebook.)*

   i. **Use the International Phonetic Alphabet (IPA) to describe the order of speech sound acquisition for the sounds of General American English from front to back and top to bottom of the IPA chart**

   ii. **Describe, verbally or in writing, the articulatory production of the sound /u/ from lungs to lips**

b. Ages and stages of speech acquisition *(Review instructor provided lecture on the ages and stages of speech acquisition vegetative sounds to first words-20 minutes; Watch video of 6 month old typical child and 6 month old child with pervasive developmental disorder participating in an interdisciplinary assessment [Speech, Occupational Therapy, Physical Therapy]; Read Liberman and Mattingly, 1985 and Galantucci, Fowler &Turvey, 2006); In 500 words or less compare the arguments proposed by each and determine based on your present level of knowledge who presents the more compelling argument. Upload your APA formatted document to your online notebook.)*

   i. **Using the IPA as a guide describe, from the perspective of the Motor Theory of Speech, why the word for mother and father in most languages of the world is composed of a front stop or front nasal and a lax vowel (e.g. mama, dada)**

   ii. **Using the Motor Theory of Speech as a guide, describe why the late 8 sounds of English are difficult for some children to acquire.**

c. Phonetics, phonemes, allophones *(Review instructor provided lecture-15 minutes on sounds and syllables, phonemes and allophones; Watch video on phonetic transcription from the Virtual Linguistics Campus-12 minutes; Provide an example of three phonemes and their allophones. Upload your examples to your online notebook.)*

   i. **Describe and provide an example of broad transcription and narrow transcription**

   ii. **Listen to 2-minute recording of a child speaking and transcribe what you hear**

   iii. **Listen to a 2-minute video of a child speaking and transcribe what you hear**

   iv. **Compare and contrast your impression with online (live transcription), a recording and a video? What are the benefits and drawbacks of each version? Share your results with a peer in class. How are the results the same, different?**

The material presented in these modules follows the RASE recommendation for online learning, *resources, activities, support, evaluation*. **R**esources are available on each page which contains clickable links, so the learner does not have to navigate away from the page to link to any of the content. **A**ctivities are described above. **S**upport is provided by the university computer services department. Learners have access to a 24-hour help desk when they are away from campus. During the class period, support is also provided by the instructor and peers. **E**valuation of student learning and preferences is discussed below.

Step 3. Assess student learning and gather student feedback on the learning process.

As illustrated in the italicized portion above each student completes some fact-based activity prior to the start of class. The activities are turned in 24 hours prior to class, providing the instructor time to evaluate the learner knowledge and to modify, if necessary the classroom learning activities. All the learning activities presented above can be completed virtually or in a face-to-face setting.

The first component in assessing learning is to determine what knowledge students are bringing to class. The first module, universals of speech acquisition and the IPA, requires the learner to have some background information on phonetics and speech acquisition. This knowledge is foundational. Weaknesses and incomplete or error learning must be remediated prior to moving forward as the remainder of the course is scaffolded from this foundational knowledge. Module 2 requires learners to integrate knowledge from the Motor Theory of Speech to the information in Module 1. Finally, Module 3 requires the student to recognize how their perceptions and those of their peers influence each other's judgment of accurate speech sound production. By evaluating all three of these skills: the learner's knowledge of the IPA and child development; the learner's ability to acquire and apply an unfamiliar theory; the learner's ability to recognize their linguistic bias (the phoneme and allophone exercise), the instructor has an idea of what the student's already knew and what they need to learn to be successful in the course. This evaluation of student learning is not a static test of what the student can recall. It is an evaluation of their ability to use all the available resources to answer theoretical and practical questions. These are the exact tasks the learners will perform as practicing clinicians.

The final component of the three modules series listed above is the comparison of two videos. One is a recording of a typically developing and the other is a child with SSD. Over the course of a week the learners complete a full transcription of both children participating in standardized and non-standardized speech production tasks. Learners write a brief report of the results and make a diagnostic statement of the presence or absence of SSD. The brief reports are graded based on a standardized rubric provided to all students at the beginning of the course. Testing examinations are a component of this course. Learners complete timed tests on material consistent with the PRAXIS examination.

The final component of this course is learner feedback to the instructor. At the conclusion of each class session learners are required to complete an online check-out ticket that asks the following questions: The activity that most challenged my thinking today was_____ because_____. The activity that I did not find useful was_____ because_____. The thing we did not do that I believe would help my learning is_____ because_____. From the material we have covered so far I am most concerned about my knowledge of _____because_____. The check-out tickets provide the student an opportunity to reflect on their learning and share the most and least successful aspects of the learning experience.

Conclusion

The information provided in this brief tutorial is designed to provide instructors with a roadmap to design a modular course that can be presented in a face-to-face, a blended, a hybrid or an online format. The tutorial presented for an example a flipped graduate level Articulation and Phonological Disorders course from a Communication Sciences and Disorders curriculum. The tutorial presented the five key components to effective online teaching using the RASE model, providing appropriate **resources**, creating learning **activities**, providing instructional and technological **support** and **evaluating** learning; and the three key alignments required to create a modular course, defining learning outcomes, choosing the teaching and learning methods, assessing student learning and gathering student feedback. By combining these instructional components, the instructor tasked with creating course content during the time of COVID-19 will have the necessary tools to provide the course content with fidelity regardless of the mode of instruction.

References

Black, L. I., Vahratian, A., & Hoffman, H. J. (2015). *Communication disorders and use of intervention services among children aged 3–17 years*; United States, 2012 (NHS Data Brief No. 205). Hyattsville, MD: National Center for Health Statistics.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). *How people learn (Vol. 11)*. Washington, DC: National academy press.

Cennamo, K., & Kalk, D. (2019). *Real world instructional design: An iterative approach to designing learning experiences*. New York, NY: Routledge.

Churchill, D., King, M., & Fox, B. (2013). Learning design for science education in the 21st century. *Zbornik Instituta Za Pedagoška Istrazivanja/Journal of the Institute of Educational Research*, 45(2).

Crawford, J., Butler-Henderson, K., Rudolph, J., & Glowatz, M. (2020). COVID-19: 20 Countries' Higher Education Intra-Period Digital Pedagogy Responses. *Journal of Applied Teaching and Learning (JALT)*, 3(1).

Donnelly, R., & Fitzmaurice, M. (2005). Designing modules for learning. *Emerging issues in the practice of university learning and teaching*, 99-110.

Galantucci, B., Fowler, C. A., & Turvey, M. T. (2006). The motor theory of speech perception reviewed. *Psychonomic Bulletin & Review*, 13(3), 361-377.

Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). The difference between emergency remote teaching and online learning. *Educause Review*, 27.

Ladefoged, P., & Johnson, K. (2014). *A course in phonetics*. New York, NY: Nelson Education.

Law, J., Boyle, J., Harris, F., Harkness, A., & Nye, C. (2000). Prevalence and natural history of primary speech and language delay: Findings from a systematic review of the literature. *International Journal of Language and Communication Disorders*, 35, 165–188.

Liberman, A. M., & Mattingly, I. G. (1985). The motor theory of speech perception revised. *Cognition*, 21(1), 1-36.

Martin, F., Budhrani, K., Kumar, S., & Ritzhaupt, A. (2019). Award-winning faculty online teaching practices: Roles and competencies. *Online Learning*, 23(1), 184-205.

Ohala, J. J. (1980). The application of phonological universals in speech pathology. In *Speech and Language* (Vol. 3, pp. 75-97). Elsevier.

Pearce, K. (2020). What is Social Distancing and How Can it Slow the Spread of Covid-19. March 13, 2020.

Peterson, R. L., Pennington, B. F., Shriberg, L. D., & Boada, R. (2009). What influences literacy outcome in children with speech sound disorder? *Journal of Speech, Language, and Hearing Research*, 52, 1175-1188.

Rutherfoord, R. H., & Rutherfoord, J. K. (2013, October). Flipping the classroom: Is it for you?. In *Proceedings of the 14th annual ACM SIGITE conference on Information technology education* (pp. 19-22).

Shriberg, L. D., Tomblin, J. B., & McSweeny, J. L. (1999). Prevalence of speech delay in 6-year-old children and comorbidity with language impairment. *Journal of Speech, Language, and Hearing Research*, 42, 1461–1481.

WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020 (https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020) accessed May 26, 2020.

Wren, Y., Miller, L. L., Peters, T. J., Emond, A., & Roulstone, S. (2016). Prevalence and predictors of persistent speech sound disorder at eight years old: Findings from a population cohort study. *Journal of Speech, Language, and Hearing Research*, 59, 647–673.

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RACIAL DISPARITIES IN THE EFFECTS OF POST-STROKE ISOLATION: THE UNINTENDED CONSEQUENCES OF SOCIAL DISTANCING ON ADULTS WITH COMMUNICATION DEFICITS

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— ABSTRACT —

This study investigated the prevalence and severity of depression among individuals with chronic communication disorders (CCDs). The study was designed to examine disparities among racial and ethnic groups who are traditionally less likely to receive mental health services. Evidence informs the unintended impact of social distancing on individuals with CCDs. Chi-squared tests and ordered logistic regression models evaluated the association severity of depression, chronic communication disorders and race/ethnicity controlling for income, insurance and demographic characteristics. Results indicated that individuals with CCDs have significantly higher levels of depression than those without CCD. African Americans with CCD have higher levels of depression than other CCD groups. Individuals with insurance, higher income, larger households and who see a speech pathologist or therapist had significantly lower depression levels. This study found a higher prevalence of depression among African Americans living with chronic communication disorders. Recently issued "shelter-in-place" directives forcing Americans to isolate to prevent the spread of COVID-19, have heightened the risk of depression among racial-ethnic minorities living with CCD. Combined with the innate tendency for individuals with CCD to be isolated from society, clinicians should take additional measures to ensure persons with aphasia (PWA), particularly those from racial-ethnic minority backgrounds, are monitored closely to ensure they maintain stable emotional well-being.

Keywords: COVID-19, depression, stroke, communication disorders

Introduction

Beginning in March of 2020, shelter-in-place and stay-at-home orders were issued throughout the United States to stop the rapid spread of the Novel Coronavirus, 2019 (COVIDCOVID-19). As the coronavirus advances across the country, more Americans are staying in their homes and avoiding social interaction. While "social distancing" is considered essential to slowing the spread of the virus and easing the burden on the beleaguered health infrastructure, isolation can have negative effects on mental and emotional health (Franck, et al. 2016). Isolation has been linked to heightened level of anxiety, depression and negative behavioral tendencies (Chow, et al. 2017). However, the pathways by which social networks and social supports influence mental health are not uniform across groups in society. Gender differences in support derived from social network participation have been observed (Kawachi & Berkman 2001). Individuals with low income or reduced socioeconomic status are more likely to experience higher levels of mental distress. The exposure of African Americans to greater inequalities within social and economic environments has been linked to psychological distress, depression and anxiety (Watkins, et al. 2006).

Individuals with functional communication deficits also exhibit higher incidences of mood disorders such as depression. Studies find that the incidence of depression among those with CCD is 62 to 70 percent higher than those without CCD (Worrall, et al. 2016). Furthermore, the severity of the deficit is directly related to the decline in mood state (Shehata, et al. 2015). While the social isolation and reduced social support that results from impaired communication is linked to increased risk of depression, research has yet to consider the unintended consequences of the COVID-19 quarantine among this vulnerable group. The reduced social contact and increased isolation resulting from shelter-in-place mandates could exacerbate feelings of loneliness. Social distancing places individuals with communication deficits at greater risk for mental and emotional distress.

While it is too early to evaluate the impact of the COVID-19 quarantine on the mental health of Americans, early evidence suggests that the unprecedented strict quarantine measures in China resulted in a wide variety of psychological problems, such as panic disorder, anxiety and depression (Qui, et al. 2020). This study examined the relationship between depression severity and communication deficits identifying those factors that contribute to the relative risk of worsening depression. Given the strong association between race/ethnicity and depressive tendencies, analysis tests for disparate tendencies among African Americans and Hispanics with CCD. In advance of the phased re-opening of society, results will highlight potential unintended consequences of social distancing on individuals with communication deficits and disorders.

Theoretical Framework: Research indicates that COVID-19 spreads primarily among people who are in close contact (within about 6 feet) for a prolonged period. Evidence suggests that that infected persons who do not display symptoms may still transmit the virus. The rapid spread of this virulent virus necessitated the closing of businesses, places of worship and schools throughout the country. The need to social distance left individuals to remain at home, physically isolated.

The focus of this study was on adults with post-stroke communication disorders. Individuals with post-stroke chronic communication disorders often experience isolation and social exclusion at the infrastructural, interpersonal, and personal levels due to the nature of their condition (Parr 2007). These issues were common even prior to the onset of COVID-19 and have the potential to magnified during the pandemic. Social exclusion and isolation can manifest in physical, emotional and psychological outcomes and often hinder treatment of their condition (Shehata, et al. 2015). However, the impact of a pandemic-induced quarantine on the emotional health of individuals with CCD is not known. Already isolated by their hindered communication, how will individuals with chronic communication deficits contend with increased isolation and ostracization?

While it is too early to determine the extent of the impact, this study will explore the prevalence of depression among adults with CCD. Not only with it explore the prevalence and severity of depression, but it will also evaluate relative risk factors for depression exploring potential demographic disparities among NHIS respondents with CCD.

Methods

Data: Data from the National Health Interview Survey (NHIS) includes information on the health of the civilian noninstitutionalized population of the United States. Collected by the National Center for Health Statistics (NCHS), NHIS monitors the health of the United States population through the collection and analysis of data on a broad range of health topics. A major strength of this survey lies in the ability to display these health characteristics by many demographic and socioeconomic characteristics. NHIS contains data on health conditions, events and health services utilization collected annually. NHIS is well-suited for this study given its inclusion of a

wide variety physical, mental and emotional health indicators. This study used individuals 18 years and older who completed the adult sample questionnaire.

Key Outcome Variables:

Race/Ethnicity: Binary indicators for African American Hispanic ethnicity are included in the model. Roughly 20 percent of the sample was African American, and 12 percent was Hispanic. While racial and ethnic groups do not present statistically different levels of depression (Wyman, et al. 2020), they are more likely to experience conditions or hardships that lead to depressive symptoms (Bailey, et al. 2019). Depressive tendencies are often exacerbated by sociodemographic characteristics, preexisting vulnerabilities, social support, and trauma-specific factors. For example, 86 percent more African Americans experienced depression post hurricane Katrina than whites (Ali, et al. 2017).

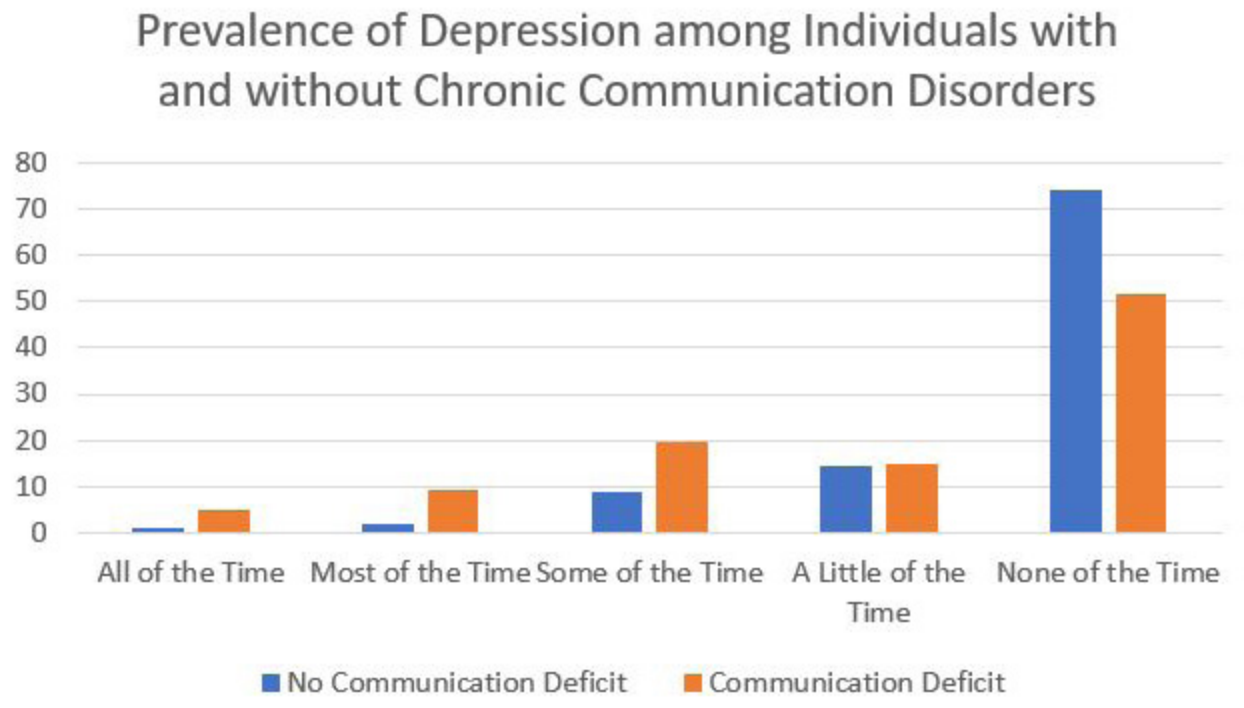
Age: Respondents ranged in age from 18 to 85 with an average age of 47. While age has not been shown to significantly correlated with depression severity, studies show conflicting results regarding the age-related trajectory of depression (Snowdon 2001).

Sex: The sample is 54 percent female and 46 percent male. Studies indicate that depression is more prevalent among women than men due to the higher risk of first onset, not to differential persistence or recurrence. These gender differences usually emerge in puberty with other experiences related to changes in sex hormones have little influence major depression (Kessler, 2003).

Depression Level: The level of depression is measured using five levels indicating how frequently respondents report feeling "So sad nothing cheers you up, past 30 days." Responses are limited to five frequency levels including (1) all the time (2) most of the time, (3) some of the time, (4) a little of the time and (5) none of the time. Below, Figure I illustrates the prevalence of depression levels among individuals with and without CCD. Those with CCD have over five times higher prevalence of feeling depression either all of most of the time. While nearly 75 percent of non-CCD adults report never feeling depressed, only half of those with CCD are never depressed.

Income/Poverty Ratio: Rather than using the exact income amount to control for socioeconomic differences, this study utilizes the ratio of a family's income to the Federal poverty threshold in the prevailing year. Values range from zero, indicating no earned income, to 20, indicating an income roughly 20 times higher than the poverty threshold. Numerous studies have documented the relationship between higher income and lower prevalence of depression, but the mitigating impact of post-stroke communication disorders is unclear (Miech & Shanahan 2000).

Figure I. Prevalence of Depression among Individuals with and without Chronic Communication Disorders



Family Size: The NHIS defines a family as an individual or a group of two or more related persons who are living together in the same occupied housing unit (i.e., household) at the time of the survey. In some instances, unrelated persons sharing the same household may also be considered as one family, such as unmarried couples who are living together. In this study, family size ranged from one to 13 with an average of three people in a family. While previous studies showed no association between household size and depression, the impact of household size on depression among those with communication disorders has not been determined (England & Sim, 2009).

Insurance: Each respondent indicated whether, at any point in the previous 12 months, they did not have health insurance coverage. Most respondents had health insurance coverage for the entire year. Only 0.05 percent report being without insurance during the past year. Evidence suggests that depressive symptoms are more severe among the uninsured. Additionally, individuals without health insurance experience a higher risk of developing severe depressive symptoms than those with health insurance (Zimmerman, et al. 2018)

Chronic Communication Disorder: NHIS does not specifically identify any specific type of communication disorder. To identify those respondents with post-stroke chronic communication disorders, two survey elements were used. First, respondents had a stroke-related problem that was classified as chronic. Second, respondents classified their degree of difficulty communicating using usual language as "A lot of difficulty" or "Cannot do at all/unable to do." Over 450 respondents, 0.17 percent of the sample, met both requirements indicating that they suffered from a chronic stroke-related disorder and experienced a high degree of difficulty communicating using usual language. It is not possible using the NHIS data to determine whether the communication difficulty is a direct result of stroke, the classification describe provides the closest approximation that can be obtained. All patients classified as suffering from a post-stroke chronic communication disorder had experienced a stroke, had a stroke-related chronic condition and difficulty communicating.

Seen/talked to therapist: Each NHIS respondent indicates whether they have seen or talked to a physical therapist, speech therapist, respiratory therapist, audiologist or occupational therapist in the previous year. While only 10 percent of the sample has sought treatment from a clinician, it is necessary to control for potential receipt of care for a communication deficit. A summary of all key outcome variables is reported in Table 1.

Table I: Descriptive Statistics for NHIS 2018 Adult Sample

	N	Mean	Median	Std Dev	Min	Max
Black	62765	0.116	0	0.320	0	1
Hispanic	62765	0.157	0	0.364	0	1
White	62765	0.744	0	0.432	0	1
Age	62765	46.645	44	17.950	18	85
Female	62765	0.539	1	0.498	0	1
Depression Level	62765	4.590	5	0.807	1	5
Income/Poverty	62765	3.894	3.054	3.160	0	20.426
Size of family	62765	3.003	3	1.738	1	13
No health coverage past 12 months	56540	0.047	0	0.211	0	1
Chronic Communication Deficit	62765	0.007	0	0.083	0	1
Seen to therapist, past 12 months	62750	0.113	0	0.317	0	1

Empirical Analysis: Since the response variable, level of depression, is ordinal in nature, group-level differences were tested using the chi-squared score test for proportional odds assumption. These tests evaluated the independence of depression level and race, ethnicity, gender, insurance status, communication deficit and receipt of treatment in the previous 12 months. Because chi-squared tests can be highly sensitive to sample size differences, an ordered logit model is used to fit the ordinal response variable. Ordered logit models are based on the cumulative probabilities of the response variable: in particular, the logit of each cumulative probability is assumed to be a linear function of the covariates with regression coefficients constant across response categories. Ordinal logit models provide inference regarding the ability of independent variables to predict the dependent as well as the unit contribution of continuous independent variables to changes in outcome variable. In this study, the ordered logistic regression model examined the odds of experiencing depression more frequently with None of the Time" serving as the reference category.

Results

The results of the chi-square tests are reported in Table II below. As indicated, all results are highly significant, suggesting that the level of depression is not independent. In other words, depression levels among African American, Hispanics, females, uninsured people and those with CCD are systematically different than depression levels in the general population. These differences indicate that depression level is likely related to ethnicity, gender, insurance status and/or communication disorders.

The results of the logistic regression are displayed in Table III on page 35. The results suggest that being female, older and without health insurance increases the odds of being in a lower depression category—more frequently depressed. Women and older individuals, particularly those without insurance, will experience depression more frequently. As expected, family size, income and receipt of therapy/treatment decrease the odds of being in a lower ordered category. Those individuals with larger households and higher income levels are less likely to experience frequent depression as are those who have seen a clinical professional in the previous year. African American and Hispanics have lower odds of experiencing a high frequency of depression. This is congruent with previous studies suggesting that the prevalence of depression among minority groups is between five and 10 percent, compared to 17 percent in the general population. However, studies relying on self-reported depressive symptoms may be biased by under reporting resulting from stigmatization of mental illness in some racial and ethnic groups.

Those with a post-stroke chronic communication disorder have higher odds of experiencing frequent depression. The isolation and narrowing of social networks that often occur post-stroke have been linked to depression, anxiety and feelings of loneliness. African Americans and Hispanic, however, have different post-stroke depression frequencies. Hispanics with CCD have lower odds of frequency depression than those non-Hispanics without CCD. This could be due to an enhanced system of social and community support provided during recovery. Conversely, African Americans with CCD have significantly higher odds of experiencing frequent depression compared to the reference group. These findings could indicate

Table II: Chi-Square Test of Independence between Level of Depression and Demographic Group

Chi-Square Test for Categorical Independence		
	Chi-Square	**Prob**
Seen a therapist, past 12 months	2385260	<.0001
Uninsured, past 12 months	959314	<.0001
Chronic Communication Disorder	1110848	<.0001
Female	2568916	<.0001
Hispanic	262100	<.0001
African American	521613	<.0001
Categorical Reference: Level of Depression		
1- All of the time, 2- Most of the time, 3- Some of the time, 4- A little of the time, 5- None of the time		

Table III: Ordered Logit Model Testing Relative Risk for Depression

Chi-Square AIC	2263718.01* 415148275			
	Ordered Logistic Estimates			
	Estimate	Std. Err.	Chi-Square	Odds Ratio
Black	-0.00054*	0.000	1.54	1.00
Hispanic	-0.0308*	0.000	5268.92	0.97
Age	0.00184*	0.000	51555.29	1.00
Female	0.4277*	0.000	2065441.50	1.53
Income/Poverty	-0.126*	0.000	5174916.61	0.88
Family Size	-0.0778*	0.000	761136.13	0.93
No health insurance coverage	0.3967*	0.001	431405.10	1.49
Chronic Communication Deficit	0.8195*	0.002	218532.14	2.19
Seen Speech Pathologist/Therapist	-0.5811*	0.000	1946799.49	1.79
Black*Chronic Communication Deficit	0.2124*	0.003	3733.49	
Hispanic*Chronic Communication Deficit	-0.8101*	0.005	26504.79	

Dependent Variable: Frequency of Depression in the Last 30 Days
*= Significant at 95%
Probabilities modeled are cumulated over the lower Ordered Values.

increased odds of depression, severity of depression of both among this group suggesting a different circumstance for racial and ethnic groups post-stroke.

Discussion

The goal of this study was to examine the depression, communication disorders and potentially confounding factors. Results indicated that depression, particularly frequent depression, was more common among those with chronic, post-stroke communication disorders. Race, ethnicity, gender, insurance status and receipt of treatment were also highly correlated with the level of depression. Given the isolating nature of post-stroke CCD, regression analysis tested for disparities among African American and Hispanics with CCD. While Hispanics with CCD showed lower frequency of depression, African Americans with CCD were significantly more likely to experience frequent depression. Risk magnitudes for African Americans with CCD were equivalent that of family size and income. Additionally, females—a group more prone to depression—were also at increased risk.

Research shows that stroke survivors are isolated or tended to stay isolated—a factor that is predictive of depressive symptomatology (Morris, et al. 1990). While causality is outside the scope of this study, it cannot be determined whether social isolation is the outcome of depression or whether depression leads individuals to isolate themselves, it is clear that more research into the relationship between communication disorders, race/ethnicity and depression risk is needed. Furthermore, clinicians, caregivers, family members and SLPs who treat those with CCD should be aware of the racial disparities in depression risk and heighten their efforts to ensure stable emotional well-being. Assessments of depressive symptomatology and address of social isolation poststroke would be an important, low-cost implementation into treatment protocol. Results from this study suggest that family size, income and treatment decrease the probability of severe depression. While these elements might not be present in the lives of all post-stroke survivors, financial support, close social networks and professional care should be provided to the extent possible.

This study has several limitations which should be noted. First, given the available data, it was not possible to directly identify patients with communication disorders caused by stroke. Individuals who had 1) experienced a stoke and 2) reported a chronic

communication deficit were considered to have post-stroke CCD. However, it is possible that the communication disorder existed prior to the stroke event or that the CCD was entirely unrelated to stroke. Nevertheless, the identified group did report difficulty communicating and would likely be at greater risk for depressive symptoms irrespective of the cause of their disorder.

Second, the NHIS does not directly indicate whether respondents had been treated by a SLP or any professional trained to directly work with speech and language. Instead they indicate whether respondents have seen or talked to a physical therapist, speech therapist, respiratory therapist, audiologist or occupational therapist in the previous year. It is likely that post-stroke recovery would include one or all of the aforementioned forms of rehabilitation, but it is not possible to determine whether the clinical intervention was targeted at speech or another physical aspect. Furthermore, it is not possible to determine if the treatment was related to post-stroke impairments. While the inclusion of this control does capture the willingness to seek treatment and the ability to utilize health services, it lacks the specificity needed for further interpretation.

Third, it was not possible to control for home-based healthcare, domestic nursing care or residence in a nursing home or rehabilitation facility. Family size, defined as the number of related individuals living together in a single housing unit, was used as an indicator of the household community, but it did not capture the immediate social network outside the home.

Finally, communication disorders can vary widely in severity and impact. There are varying degrees of impairment and difficulty using, processing and formulating language. It was not possible. While it is logical, given earlier results, to questions the association between the severity of the disorder and the frequency of depression, it was not possible to control for the degree of the deficit or the relative ability to communicate. However, the association between then degree of impairment and frequency of depression symptoms should be explored in future research.

Results indicated that African Americans with CCD have higher odds of experiencing more frequent depression, while Hispanics with CCD have lower odds. While the causality behind these results is outside the scope of this analysis, it could stem from varying cultural identities and how these cultural identities are related to mental health (Tikhonov, et al. 2019). One possible explanation could consider the relationship between racial identity, psychological distress and the way that mental ill is perceived (Wilson, et al. 2017). While racial and ethnic identity has been shown to play a role in disability, rehabilitation and recovery, the exact nature of its influence is not well understood (Alston, et al. 1996).

Conclusions

It is too early to determine the full impact of the coronavirus pandemic, but it has reshaped nearly every aspect of life nearly instantaneously. Not only will the way Americans receive healthcare be forced to change in a post-COVID-19 world, but the types of care they will need are also likely to change. This study has explored one potential unintended consequence of the COVID-19 quarantine—depression—and how the mandated social isolation could affect individuals with post-stroke, chronic communication disorders. Already limited in their ability to participate in society, those with CCD were forced into an increasingly severe state of isolation as the coronavirus spread throughout the county.

The goal of this study was to examine depression among individuals with communication deficits and explore additional risk factors for depression severity. Using data from the 2018 NHIS, results indicated the African Americans, females and those without insurance had the highest risk for depression or increasing severity of depression. Among those, African Americans with appeared to be the most vulnerable to depression or worsening depression frequency. In other words, being an African American with CCD puts you at similar risk for depression as those with income or family loss.

These results should serve to inform clinicians of the potential for increased depression or depression severity post-COVID. Those who treat patients with post-stroke communication disorders should be mindful of the increased risk for depression among these patients and the potential impact of mandated social isolation. When the world begins to emerge from a global lockdown, the impact of isolation, increased solitude and loneliness will remain. It is importation that these concerns not go overlooked and be addressed as a fundamental component of their treatment.

References

Ali, J. S., Farrell, A. S., Alexander, A. C., Forde, D. R., Stockton, M., & Ward, K. D. (2017). Race differences in depression vulnerability following Hurricane Katrina. *Psychological trauma: theory, research, practice, and policy*, 9(3), 317.

Alston, R. J., Bell, T. J., & Feist-Price, S. (1996). Racial identity and African Americans with disabilities: Theoretical and practical considerations. *Journal of Rehabilitation*, 62(2), 11.

Bailey, R. K., Mokonogho, J., & Kumar, A. (2019). Racial and ethnic differences in depression: current perspectives. *Neuropsychiatric disease and treatment,* 15, 603.

Chow, P. I., Fua, K., Huang, Y., Bonelli, W., Xiong, H., Barnes, L. E., & Teachman, B. A. (2017). Using-mobile sensing to test clinical models of depression, social anxiety, state affect, and social isolation among college students. *Journal of medical Internet research*, 19(3), e62.

England, M. J., Sim, L. J., & National Research Council. (2009). Introduction and magnitude of the problem. In Depression in Parents, Parenting, and Children: Opportunities to Improve Identification, Treatment, and Prevention. *National Academies Press* (US).

Franck, L., Molyneux, N., & Parkinson, L. (2016). Systematic review of interventions addressing social isolation and depression in aged care clients. *Quality of Life Research*, 25(6), 1395-1407.

Kawachi, I., & Berkman, L. F. (2001). Social ties and mental health. *Journal of Urban health*, 78(3), 458-467.

Kessler, R. C. (2003). Epidemiology of women and depression. *Journal of affective disorders*, 74(1), 5-13.

Miech, R. A., & Shanahan, M. J. (2000). Socioeconomic status and depression over the life course. *Journal of health and social behavior*, 162-176.

Morris, P. L. P., Robinson, R. G., & Raphael, B. (1990). Prevalence and course of post-stroke depression in hospitalized patients. *Int J Psychiatry Med*, 20, 327-342.

Parr, S. (2007). Living with severe aphasia: Tracking social exclusion. *Aphasiology*, 21(1), 98-123.

Qiu, J., Shen, B., Zhao, M., Wang, Z., Xie, B., & Xu, Y. (2020). A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations. *General psychiatry*, 33(2).

Shehata, G. A., El Mistikawi, T., Al Sayed, K. R., & Hassan, H. S. (2015). The effect of aphasia upon personality traits, depression and anxiety among stroke patients. *Journal of affective disorders*, 172, 312-314.

Snowdon, J. (2001). Is depression more prevalent in old age?. *Australian & New Zealand Journal of Psychiatry,* 35(6), 782-787.

Tikhonov, A. A., Espinosa, A., Huynh, Q. L., & Anglin, D. M. (2019). Bicultural identity harmony and American identity are associated with positive mental health in US racial and ethnic minority immigrants. *Cultural Diversity and Ethnic Minority Psychology*.

Watkins, D. C., Green, B. L., Rivers, B. M., & Rowell, K. L. (2006). Depression and black men: Implications for future research. *Journal of Men's Health and Gender*, 3(3), 227-235.

Wilson, S. L., Sellers, S., Solomon, C., & Holsey-Hyman, M. (2017). Exploring the link between Black racial identity and mental health. *Journal of Depression and Anxiety*, 3, 1-4.

Worrall, L., Ryan, B., Hudson, K., Kneebone, I., Simmons-Mackie, N., Khan, A., ... & Rose, M. (2016). Reducing the psychosocial impact of aphasia on mood and quality of life in people with aphasia and the impact of caregiving in family members through the Aphasia Action Success Knowledge (Aphasia ASK) program: study protocol for a randomized controlled trial. *Trials*, 17(1), 153.

Wyman, M. F., Jonaitis, E. M., Ward, E. C., Zuelsdorff, M., & Gleason, C. E. (2020). Depressive role impairment and subthreshold depression in older black and white women: race differences in the clinical significance criterion. *International Psychogeriatrics*, 32(3), 393-405.

Zimmerman, M., Balling, C., Chelminski, I., & Dalrymple, K. (2018). Understanding the severity of depression: Which symptoms of depression are the best indicators of depression severity?. *Comprehensive psychiatry*, 87, 84-88.

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COVID-19 AND NEUROLOGICAL OUTCOMES: IMPLICATIONS FOR SPEECH-LANGUAGE PATHOLOGISTS IN REHABILITATION SETTINGS

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— ABSTRACT —

COVID-19 is caused by a novel coronavirus that has resulted in a disease condition that was initially thought to be primarily focused on the respiratory system in its most severe form. However, as the medical community has learned more about COVID-19, it has become clear that the disease is a multi-system condition with wide-ranging levels of severity from complete asymptomatic infection to death. Among those multi-system problems include the onset of neurological disorders that require specialized speech-language pathology services. Whereas there has been a primary focus on managing the respiratory ailments and infectious nature of COVID-19, there are atypical neurological aspects of the condition that will require specialized speech-language pathology services (SLP). Consequently, more must be learned about the onset of neurological disorders resulting from COVID-19 and potential future implications for the field of SLP.

Keywords: COVID-19, neurological disorders, rehabilitation

Background

In early months of 2020, a global pandemic was declared due to the health devastation caused by a novel coronavirus (COVID-19). Believed to have originated in Wuhan, China, COVID-19 is a highly infectious disease that has spread quickly around the world. By the end of June 2020, there have been approximately 10 million confirmed cases of COVID-19 worldwide and roughly 500,000 confirmed deaths resulting from the disease (World Health Organization, 2020). Similarly, in the US and as of the same date, approximately 2.5 million Americans have been diagnosed with COVID-19 and more than 120,000 have died from the disease (The COVID Tracking Project, 2020).

The first cases of COVID-19 were identified in December 2019 and were initially believed to be pneumonia of unknown origin (Guan et al., 2020). Fever was a common medical issue as 89% of all patients experienced fever before they were discharged from the hospital. Sixty-eight percent of all patients presented with a cough, 5% nausea and vomiting, and 4% diarrhea (Guan et al., 2020). The majority were characterized as non-severe and the presence of co-existing disease conditions (hypertension, diabetes, heart disease) were present in 21% with higher rates (39%) of co-existing conditions among those with severe COVID-19. The disease spread rapidly throughout China in the first two months with varying degrees of illness severity (Guan et al., 2020). The first COVID-19 death in the US is now believed to have occurred as early as February 6, 2020 in Santa Clara County, CA (Santa Clara County Public Health, 2020) and before national reports of what were thought to be initial cases in a Kirkland, WA skilled nursing facility weeks later (Arentz, et al., 2020). The original the epicenter of COVID-19 in the US, New York, has reported approximately 400,000 cases of COVID-19 and among those have been over 25,000 deaths as of the end of June 2020 (The COVID Tracking Project, 2020).

Individuals with COVID-19 frequently experience fever, cough, and devastating respiratory issues including shortness of breath (Guan et al., 2020). In its most severe form, individuals with COVID-19 require ventilator support to address their respiratory issues. To date there has been a primary focus on the devastating effects of COVID-19 on the respiratory system. However, reports are now suggesting that although the primary target of COVID-19 has been the respiratory system, the condition is multi-system.

Neurological Disorders in COVID-19

Although not widely reported, COVID-19-related neurological conditions have surfaced in multiple countries. According to Iaccarino et al., (2020), one-third of hospitalized patients with COVID-19 display neurological signs and sumptoms. Initial neurological symptoms have ranged from headache, unstable walking, loss of smell, and general malaise (Wang, Li, Yan, Sun, Han & Zhang, 2020). A range of neurological disorders/diseases have been reported including ischemic stroke, hemorrhagic stroke, encephalopathy, and Guillain-Barré syndrome (Alhahtani, Subahi & Shirah, 2020; Filatov, Sharma, Hindi & Espinosa, 2020; Li et al., 2020; Mao et al., 2020; Oxley et al., 2020; Poyiadji, Shahin, Noujaim, Stone, Patel & Griffith, 2020; Zhai, Ding & Li, 2020; Zhao, Shen, Zhou, Liu & Chen, 2020). Studies outside of the US suggests neurological conditions have been more prominent in older adults with associated cardiovascular risk factors such as hypertension and diabetes (Li et al, 2020). However, a recently published case series study by Oxley and colleagues (2020) in New York City (US) described five young adults (ages 33-49) who experienced major strokes resulting in hemiplegia, dysarthria, dysphagia, and global aphasia. Neuropathological findings from autopsies of 18 patients who died from COVID-19 showed acute hypoxic injury in the cerebrum and cerebellum in all patients, with loss of neurons in the frontal cerebral cortex, hippocampus, and cerebellum (Solomon et al., 2020). There is evidence that COVID-19 impacts both the central and peripheral nervous systems and persistence of symptoms can result in significant disability (Iaccarino et al., 2020).

To date, the exact reason for stroke and other neurological conditions in individuals with COVID-19 is unclear. It has not been determined if the observed neurological conditions are the result of the coronavirus entering the central nervous systems (CNS) or a response to the viral storm in the body resulting from the coronavirus (Talon, 2020). Some reports note that neurological disorders can result from direct viral invasion of the nervous system, viruses crossing the blood-brain barrier, or virus migration into the nervous system via sensory or motor nerve endings (Wu et al., 2020). The consequence of viral infections can be severe damage to the structure and function of the nervous system, resulting in encephalitis, toxic encephalopathy, severe acute demyelinating lesions, or cerebrovascular disease. Regardless, there is concern that the neurological consequences of the condition beyond the significant respiratory issues associated with COVID-19 may make the recovery process more difficult. More importantly, there is an urgent need to understand the neurological aspect of the condition to ensure that treatment protocols are initiated properly to reduce long-term neurologically

related disability (Baig, 2020). Further, because the neurological disorders that have been reported do not fit a specific clinical syndrome, the identification and management of symptoms are more challenging than usual (Wang et al., 2020).

The management of COVID-19 has rightly had a primary focus on the respiratory complications to prevent death while simultaneously managing the highly contagious disease. Therefore, less attention has been given to the potential rehabilitation needs of patients with COVID-19 given the unfortunate need to maintain a basic focus on preservation of life. Consequently, in the first months of the COVID-19 pandemic the emergency care, intensive care, and acute care segments of healthcare systems in the US and abroad have been overwhelmed by the need to preserve life. During that time, a key early focus of the field of speech-language pathology related to COVID-19 in healthcare settings has been the establishment of new clinical practice patterns such as guidance for in-person SLP services, return to work after exposure to COVID-19, modifications to dysphagia service, and the use of telepractice to address patient needs in the context of a highly infectious disease (American Speech Language Hearing Association, 2020a). During that same time frame there has been concern that rehabilitation of individuals with COVID-19 has been less prioritized as healthcare systems reinvent themselves to deal with the pandemic (Khan & Amatya, 2020). Among those patients are the aforementioned individuals with potentially significant neurologically based disorders of communication.

A New Management Approach for Neuro Patients with COVID-19

There is an expectation that as the US healthcare system adjusts to the pandemic and the new normalcy of healthcare provision, there will be a very high demand for rehabilitation clinicians to address the needs of survivors of COVID-19. Among those will be individuals recovering from COVID-19 with co-existing neurological disorders. Early reports have shown that common adult onset neurogenic disorders such as dysarthria, dysphagia, and aphasia are present in patients with COVID-19 (Oxley et al., 2020). Because of the hypoxic nature of the disease, some will also likely exhibit cognitive-communicative disorders (Komiyama, Katayama, Sudo, Ishida, Higaki, & Ando, 2017; Wu et al., 2020). Finally, regarding dysphagia specifically, evidence indicates that approximately 60% of patients that require oral intubation and mechanical ventilation experience dysphagia and one third of all patients with acute respiratory distress syndrome (ARDS) will have persistent dysphagia symptoms even after hospital discharge (Brodsky et al., 2017). Consequently, swallowing assessments (clinical eval and modified barium swallow) will be required by many patients with COVID-19 as assessments should be considered following prolonged intubation regardless of neurological symptoms. Some also note that the field must embrace noninvasive imaging and noninvasive diagnostic measures to address the needs of patients positive for COVID-19 (Brodsky & Gilbert, 2020). Similarly, virtual dysphagia evaluations and telemedicine approaches must be implemented in a variety of settings during the COVID-19 pandemic (Fritz et al., 2020; Soldatova, Williams, Postma, Falk, & Mirza, 2020)

The country of Italy has already moved forward to address the needs of the individuals recovering from COVID-19 and exhibiting neurological deficits. A neuro-COVID-19 unit has already been established to manage neurological syndromes (Talan, 2020). Others have also established an acute stroke management pathway for individuals COVID-positive or with COVID-suspected stroke syndromes (Baracchini et al., 2020). Similar units and processes will likely be needed in the US and other countries to meet the needs of these patients. The field of speech-language pathology and other rehabilitation disciplines have had to quickly adjust to the many challenges associated with the complicated demands of COVID-19 rehabilitative care during and after the pandemic (Khan & Amatya). Because of the complex array of neurological symptoms and post-COVID communication disorders, early evidence suggests a range of treatment approaches will be required. For some with dysphagia and aphasia syndromes, traditional approaches for dysphagia and aphasia management will be required. For others, with broader cognitive-linguistic disorders, treatment/management approaches may mirror strategies designed to improve deficits resulting from adult onset traumatic brain injury, right hemisphere syndrome, and social communication disorders. The American Speech-Language-Hearing Association (ASHA) practice portal which was designed to offer guidance related to evidence-based treatments for a range of communication and swallowing disorders will serve as an invaluable resource as speech-language pathologists (SLPs) learn more about this condition (American Speech-Language-Hearing Association, 2020b). At the same time, SLPs and other rehabilitation professions will face major challenges related to rehabilitation that center around infection control, occupational risks associated with uncomfortable personal protective equipment (PPE), and never before continuity plans for staff who become infected and require quarantine (Koh & Hoenig, 2020). Changes

will also be required in traditional approaches to rehabilitation for patients with symptoms of or history of COVID-19 to prevent infection spread (Chang & Park, 2020).

Conclusions

The emergence of neurological disorders in COVID-19 is a reminder that the field of speech-language pathology must constantly adapt to the changing needs of our constituency; individuals with disorders of communication, cognition, and swallowing. Some believe the COVID-19 pandemic will transform care of individuals with neurological disorders more than any other crisis in modern history (Bloem, Dorsey & Okun, 2020). Individuals who survive COVID-19 will require comprehensive rehabilitation to address their neurological and other multi-system needs. SLPs and other rehabilitation professionals must remain a critical part of the patient care teams for individuals with COVID-19 despite the risks. Continued refinement of current practice approaches and preparedness to address the complex nature of COVID-19 and the associated neurological disorders will be the key.

References

Algahtani, H., Subahi, A. & Shirah. B. (2020). Neurological complications of Middle East respiratory syndrome coronavirus: A report of two cases and review of the literature. *Case Reports in Neurological Medicine*, Volume 2016, Article ID 3502683, 6 pages http://dx.doi.org/10.1155/2016/3502683.

American Speech Language Hearing Association. (2020). SLP service delivery considerations in health care during coronavirus/COVID-19. https://www.asha.org/SLP/healthcare/SLP-Service-Delivery-Considerations-in-Health-Care-During-Coronavirus/.

American Speech Language Hearing Association. (2020). The Practice Portal. https://www.asha.org/practice-portal/.

Arentz, M., Yim, E., Klaff, L., Lokhandwala, S., Riedo, F.X , Chong, M. et al. (2020). Characteristics and outcomes of 21 Critically ill patients with COVID-19 in Washington State. *Journal of the American Medical Association*. 323(16):1612–1614. doi:10.1001/jama.2020.4326.

Baracchini, C., Pieroni, A., Viaro, F., Cianci, V., Cattelan, A.M., Tiberio, I., et al. (2020). Acute stroke management pathway during Coronavirus-19 pandemic. *Neurological Sciences*. doi: 10.1007/s10072-020-04375-9.

Bloem, B.R., Dorsey, E.R. & Okun, M.S. (2020). The coronavirus disease 2019 crisis as catalyst for telemedicine for chronic neurological disorders. *JAMA Neurology*. doi: 10.1001/jamaneurol.2020.1452.

Brodsky, M.B. & Gilbert, R.J. (2020). The long-term effects of COVID-19 on dysphagia evaluation and treatment. *Archives of Physical Medicine and Rehabilitation*, doi: 10.1016/j.apmr.2020.05.006.

Brodsky, M.B., Huang, M., Shanholtz, C., Mendez-Tellez, P.A., Palmer, J.B., Colantuon, E., & Needham, D.M. (2017). Recovery from dysphagia symptoms after oral endotracheal intubation in acute respiratory distress syndrome survivors. A 5-year longitudinal study. *Annals of the American Thoracic Society*, 14, 376–383. doi:10.1513/AnnalsATS.201606-455OC.

Chang, M.C. & Park, D. (2020). How should rehabilitative departments of hospitals prepare for coronavirus disease 2019? *American Journal of Physical Medicine and Rehabilitation*. Volume 99 - Issue 6 - p 475-476. doi: 10.1097/PHM.0000000000001428.

Filatov, A., Sharma, P., Hindi, F. & Espinosa, P.S. (2020). Neurological complications of coronavirus disease (COVID-19): Encephalopathy. *Cureus* 12(3): e7352. DOI 10.7759/cureus.7352.

Fritz, M.A., Howell, R.J, Brodsky, M.B., Suiter, D.M., Dhar, S.I., Rameau, A. et al. (2020). Moving forward with dysphagia care: Implementing strategies during the COVID-19 pandemic and beyond. *Dysphagia*, doi.org/10.1007/s00455-020-10144-9.

Guan, W., Ni, Z., Hu, Y., Liang, W. Ou, C. He, J. et al. (2020). Clinical characteristics of coronavirus disease 2019 in China. *The New England Journal of Medicine*, doi: 10.1056/NEJMoa2002032.

Iaccarino, M.A., Tenforde, A.S., Zafonte, R.D., Silver, J.K., Hefner, J., & Paganoni, S. (2020). Neurological manifestation of COVID-19 and the enhanced role of physiatrists. *American Journal of Physical Medicine and Rehabilitation*. doi: 10.1097/PHM.0000000000001502.

Khan, F. & Amatya, B. (2020). Medical rehabilitation in pandemics: Towards a new perspective. *Journal of Rehabilitation Medicine*, 52(4):jrm00043. doi: 10.2340/16501977-2676.

Koh, G.C. & Hoenig, H. (2020). How should the rehabilitation community prepare for 2019-nCov?

Archives of Physical Medicine and Rehabilitation. 101(6), 1068-1071. doi:https://doi.org/10.1016/j.apmr.2020.03.003.

Komiyama, T., Katayama, K., Sudo, M., Ishida, K., Higaki, Y., & Ando, S. (2017). Cognitive function during exercise under severe hypoxia. *Scientific Reports*, 7(1):10000. doi: 10.1038/s41598-017-10332-y.

Li, Y., Wang, M., Zhou, Y., Chang, J., Xian, Y. Mao, L. et al. (2020). Acute cerebrovascular disease following COVID-19: a single center, retrospective, observational study. *The Lancet*. doi: 10.2139/ssrn.3550025.

Mao, L., Jin, H., Wang, M., Chen, S., He, Q., Chang, J. et al. (2020). Neurologic manifestations of hospitalized patients with coronavirus disease 2019 in Wuhan, China. *JAMA Neurology*. doi:10.1001/jamaneurol.2020.1127.

Oxley, T.J., Mocco, J., Majidi, S., Kellner, C.P., Shoirah, H., Singh, I.P. et al. (2020). Large-vessel stroke as a presenting feature of Covid-19 in the young. *The New England Journal of Medicine*, 82:e60. doi:10.1056/NEJMc2009787.

Poyiadji, N., Shahin, G., Noujaim, D., Stone, M., Patel, S., Griffith, B. (2020). COVID-19–associated Acute Hemorrhagic Necrotizing Encephalopathy: CT and MRI Features. *Radiology*. doi.org/10.1148/radiol.2020201187.

Santa Clara County Public Health. (2020). County of Santa Clara identifies three additional early COVID-19 deaths. Available at: https://www.sccgov.org/sites/covid19/Pages/press-release-04-21-20-early.aspx.

Soldatova, L., Williams, C., Postma, G.N., Falk, G.W., Mirza, N. (2020). Virtual dysphagia evaluation: Practical guidelines for dysphagia management in the context of COVID-19 pandemic. *Otolaryngology Head and Neck Surgery*, doi.org/10.1177/0194599820931791.

Solomon, I.H., Normandin, E., Bhattacharyya, S., Mukerji, S.S., Keller, K., Ali, A.S. et al. (2020). Neuropathological features of Covid-19. *The New England Journal of Medicine*. doi:10.1056/NEJMc2019373.

Talan, J. (2020). COVID-19: Neurologists in Italy to colleagues in US: Look for poorly-defined neurologic conditions in patients with the coronavirus. *Neurology Today*. Available at: https://journals.lww.com/neurotodayonline/blog/breakingnews/pages/post.aspx?PostID=920&fbclid=IwAR2omdLXmhl-7DEa0vLB8WVlMJp5CaI4w_gVQaJ6uPeKUNnAf-paGxy7fn3V0.

The COVID Tracking Project (2020). Available at: https://covidtracking.com/.

Wang, H., Li, X., Yan, Z., Sun, X., Han, J. & Zhang, B. (2020). Potential neurological symptoms of COVID-19. *Therapeutic Advances in Neurological Disorders*, 13, 1–2. doi.org/10.1177/1756286420917830.

World Health Organization. (2020). Coronavirus disease (COVID-19) Pandemic. Available at: https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

Wu, Y., Xu, X., Chen, Z., Hashimoto, K., Yang, L., Liu, C. et al. (2020). Nervous system involvement after infection with COVID-19 and other coronaviruses. *Brain, Behavior, and Immunity*. doi:10.1016/j.bbi.2020.03.031.

Zhai, P., Ding, Y. & Li, Y. (2020). The impact of COVID-19 on ischemic stroke: A case report. *Research Square*. doi:10.21203/rs.3.rs-20393/v1.

Zhao, H., Shen, D., Zhou, H., Liu, J. & Chen, S. (2020). Guillain-Barré syndrome associated with SARS-CoV-2 infection: causality or coincidence? *The Lancet Neurology*, 19(5):383-384. doi: 10.1016/S1474-4422(20)30109-5.

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LET'S NOT FALL SHORT: COVID-19, SOCIAL JUSTICE AND SPEECH-LANGUAGE PATHOLOGY

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It is now well established that COVID-19 negatively and disproportionately impacts the physiological, economic, and educational outcomes of communities of color. The Centers for Disease Control (CDC) recently updated their website to include a summary report of *COVID-19 and Racial and Ethnic Minority Groups* (2020). This report details potential factors that contribute to this disproportionality, but it falls short of addressing the depth of systemic racism in our country that leads to these outcomes. I was bothered by it and other reports from the U.S. Department of Education which do the same. I began to wonder. In this climate, how do we address inequities and effectively prepare pre-professional students to engage in practices that can positively facilitate individual change in communication and transform broader society? As an instructor, what will I need to do to help prepare future SLPs to address inequities and injustices? I share with you some musings that I have had during this time to help me answer that question so that I don't "fall short" in talking about and discussing the role of systematic oppression in health and educational disparities. My reflections are related to a talk I gave at last year's National Black Association of Speech Language and Hearing (NBASLH) Convention on social-justice and speech-language pathology. NBASLH's call for papers to address the COVID-19 crisis provides an ideal forum to discuss many of the key points from that talk and why they need to be considered within the context of teaching during this pandemic.

Currently, a number of instructors, students, researchers, and practitioners are searching for answers that are oriented towards social-justice and serving communities of color. Social-justice frameworks to teaching, research, and service delivery focus on understanding the ecological contexts of certain phenomena for traditionally marginalized groups; protecting the rights of these groups; improving their access to educational, economic, and health opportunities; and working toward equitable outcomes in how these groups benefit and participate in society (Levey and Sidel, 2013). Discussions of social-justice are important given the COVID-19 landscape and sociopolitical climate that affects how our clients, pre-professional students, and practitioners of color carry out their day to day functioning. In order to facilitate social-justice, we will need to:

1. Increase knowledge of existing social inequities.
2. Critique how systems of privilege and oppression operate.
3. Recognize and honor the contexts in which students and clients live their lives.
4. Identify strategies and frameworks that can be used to promote social justice.

The US society adheres to a social-stratification system that reproduces and reinforces inequities based on social position factors such as ***race, economics, language, and disability status***. In the current COVID-19 landscape African-Americans continue to suffer from conditions associated with poverty; segregated and poor neighborhoods, poorer public education and quality healthcare, and more chronic health conditions (Brookings Institute, 2020). We also know that aversive racism plays a significant role in patient referrals and differential diagnosis in African-American patients (Gonzalez, Kim, & Marantz, 2014); and discipline and placement decisions for African-American students (Long, 2016). These issues negatively impact availability, accessibility, and acceptability of health services and educational opportunities.

In pre-professional settings we must be honest and acknowledge that student race matters in our field. Students of color in communication sciences and disorders may face unique circumstances during their educational and career journey. COVID-19 has amplified those circumstances. Some students of color and first-generation students may not have access to the types of economic, material, and technological resources that allow students to effectively participate in remote learning. For international students or students far from home, they may also lack in traditional support systems provided by family and

loved ones. Faculty should not underestimate the daily stress and anxiety faced by students of color during this pandemic as they attempt to stay safe and healthy, meet financial obligations, perform academic duties, and deal with daily racialized practices that harm their mental and emotional well-being.

Language is a tool for socialization but also one for maintaining current systems of power and oppression in our society (Cummins, 2000). In our current COVID-19 settings we will need to discuss and analyze "standard language" frameworks and policies that seek to further marginalize communities that have been hard hit by an economic depression that has only amplified disparities. In particular, economically oppressed African-American children who have had little to no formal instruction over the past few months due to lack of available childcare, poorly funded schools, and/or limited access to technology and learning materials, are at increased risk for being identified as having difficulty with learning to read. Many of these children may use non-mainstream (NM) dialect. In the aftermath of this pandemic it will be important to move our discussions beyond NM dialect use as an explanation reading failure and consider how the systems in which these children develop language impacts their literacy outcomes. Additionally, in health care settings there will need to be a concerted effort to also consider how language excludes, particularly as it relates to health literacy. Lower health literacy results in higher health care costs and problems with self-management of health care (Allen & Easily, 2013)

Individuals with disability continue to be more likely than their non-disabled peers to experience poverty, reduced employment, lower educational achievement, and social exclusion (Erickson, Lee, and von Schrader, 2019). Prior to the pandemic significant disparities in access to health care and educational opportunities for individuals with disabilities was always an issue. Under COVID-19 conditions these challenges are more likely to be exacerbated. Recent reports indicate that during COVID-19, 44% of individuals with disabilities surveyed, faced new challenges in seeking, accessing, and participating in health care (Drum, Oberg, Cooper, & Carlin, 2020). It will be important for us to examine our own assumptions about disability and discuss with our students advocacy frameworks for promoting disability rights.

Just as important as examining our assumptions and knowledge about race, class, language, and disability status, it will be equally important to recognize that individuals from communities of color may be impacted by "intersectionality". Intersectionality is a term used to discuss the idea that it is possible for individuals to experience accumulated forms of oppression and discrimination when their identity is tied to multiple social position factors (Crenshaw, 1989). For individuals of color, their experiences and social contexts for racism, classicism, linguicism, and ableism are not mutually exclusive. Intersectional aspects of identity may result in exacerbated difficulties with access, opportunity, participation, and equitable outcomes in educational and healthcare settings. Intersectionality needs to be addressed in our coursework on cultural-linguistic diversity, research, and practices with students, adults and families dealing with communication and cognitive disabilities.

We can promote and facilitate the use of social-justice strategies and tools in all settings. We can begin to have more inter-professional conversations on the impact of communication impairment on daily behavior and teach using frameworks that are effective in understanding and working with communities of color. Specific frameworks that are oriented towards social-justice include critical race heuristics, trauma-informed frameworks, restorative justice models, and systems-based approaches to disability. These are a few of the frameworks that will guide my teaching and research practices in the upcoming year and I remain hopeful that our profession is ready to do the work.

References

Allen, C. & Easley, C. (2013). Racial and ethnic minorities, pp. 42-65. In B. Levy and V. Sidel (Eds). Social Injustice and Public Health. Second Edition. New York: NY. *Oxford University Press*.

Brookings Institute (2020). *Mapping Racial Inequality Among COVID-19*. Available at: https://www.brookings.edu/blog/the-avenue/2020/04/16/mapping-racialinequity-amid-the-spread-of-covid-19/

Centers for Disease Control (CDC, 2020). *COVID-19 in Racial and Ethnic Minority Groups*. Available at: https://www.cdc.gov/coronavirus/2019-ncov/need-extraprecautions/racial-ethnic-minorities.html

Crenshaw, K. (1989) Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, 1, 139-167.

Cummins, J. (2000). Language, power, and pedagogy. Clevedon, England: Multilingual Matters.

Dovidio, J., Gaertner, S., Penner, L., Pearson, A., & Norton, W. (2009). Aversive racism-how unconscious bias influences behavior: Implications for legal, employment, and health care contexts. In J. Chin (Ed.), *Diversity in Mind and in Action, Social Justice*. Vol. 2. ABC-CLIO, LLC.

Drum, C.E., Oberg, A., Cooper, K., & Carlin, R. (2020). COVID-19 and Adults with Disabilities. *Health and Healthcare Access Online Survey Summary report*. Rockville, MD: American Association on Health and Disability.

Erickson, W., Lee, C., & von Schrader, S. (2019). *2017 Disability Status Report: United States*. Ithaca, NY: Cornell University Yang-Tan Institute on Employment and Disability(YTI).

Gonzalez CM, Kim MY, Marantz PR (2014). Implicit bias and its relation to health disparities: a teaching program and survey of medical students. *Teaching Learning Medicine,* 26(1):64□71. doi:10.1080/10401334.2013.857341

Long, C. (2016, Jan. 26). The far reaching effects of implicit bias in the classroom. *NEA Today*, available at: http://neatoday.org/2016/01/26/implicit-bias-in- /

Levy, B. and Sidel, V. (2013) Social Injustice and Public Health. Second Edition. New York: NY. Oxford University Press.

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NAVIGATING THE ACADEMIC EDUCATIONAL RESPONSE TO COVID-19 IN COMMUNICATION SCIENCES AND DISORDERS: A FACULTY PERSPECTIVE

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— ABSTRACT —

The coronavirus 2019 (COVID-19) pandemic has wrought unprecedented levels of morbidity and mortality on a global scale. The United States leads the world in the total number of COVID-19 cases with more than two million persons infected and 120,000+ deaths. In this paper, the responses to COVID-19 of the healthcare system, the communication sciences and disorders profession, professional associations/organizations, and universities are discussed as are communication sciences and disorders faculty transitions from face-to-face to online teaching and learning.

Keywords: COVID-19, online teaching and learning, faculty preparation

Background

COVID-19 is a severe respiratory illness caused by a coronavirus. It is characterized by cough, shortness of breath or difficulty breathing, and/or at least two of the following symptoms: fever (≥100.4°), chills, muscle pain, headache, sore throat, and/or new loss of taste or smell. Symptoms may develop within 14 days of exposure to the illness. It is believed to be spread through close contact with an infected person through respiratory droplets or aerosols produced when an infected person coughs or sneezes. It may also be possible that a person can contract COVID-19 (aka: novel coronavirus discovered in 2019) by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes. Yet, this is not thought to be the main way the virus spreads. According to the Centers for Disease Control and Prevention (CDC), persons 65 years and older and those with underlying medical conditions like heart or lung disease diabetes, obesity, and high blood pressure appear to be at particular risk for developing more serious complications from COVID-19 illness (CDC, 2020; Stokes et al. 2020).

Preliminary reports suggest that up to one-third of older persons with severe infection from COVID-19 may present with neurological conditions such as central nervous system manifestations (i.e., dizziness, impaired consciousness, acute ischemic stroke, ataxia, and seizure) and peripheral nervous system symptoms (i.e., vision impairment, and nerve pain) (Mao et al. 2020; Zubair et al. 2020). Most of the ischemic strokes reported in patients with COVID-19 (65.6%) are cryptogenic (i.e., of unknown origin) (Yaghi et al. 2020). Additionally, another study revealed that patients younger than 50 years of age with COVID-19 suffered large-vessel strokes (Oxley et al. 2020) thus confirming that in adults, youth does not offer protection from the virus.

With its identification in December 2019 and rise to pandemic levels in January 2020, COVID-19 wrought unprecedented levels of morbidity and mortality on a global scale in a period of less than a year. Currently, the United States leads the world in the total number of COVID-19 cases with over two million persons

infected and over 120,000 deaths. Relative to their proportion in the general U.S. population, African Americans and Latino populations comprise the majority of COVID-19-related hospitalizations (Garg et al. 2020) and deaths especially in large cities such as New York City, Chicago, and New Orleans (Miceli, 2020). In these large urban areas, African American COVID-19 mortality rates were reported to be 2.4 times as high as the rate for Whites (APM Research Lab, 2020). Social factors influencing these epidemiologic disparities include historical patterns of residential segregation, living in densely populated areas, work circumstances (with greater proportions of African Americans and Hispanics employed in essential industries such as service industry jobs), lack of paid sick leave, and lack of health insurance (CDC, 2020).

The healthcare system, public health system and societal responses to the pandemic have been massive with the search for a preventive vaccine, clinical trials of drugs to treat the virus, use of personal protection equipment (face mask, gloves) and individual practices such as 'sheltering in place' and 'social distancing.' However, some areas of the country have been particularly hard hit by the COVID-19 pandemic and health care resources and responses have been strained thus taxing hospital emergency departments and exposing the lack of critical medical equipment (e.g., respirator and ventilator units) available to care for infected patients and illuminating historic health care inequities. Likewise, another impact of racial residential segregation is that there are comparatively fewer healthcare facilities in highly segregated urban areas (Ko et al. 2013) and rural areas (Caldwell et al. 2016) to meet the needs of vulnerable populations stricken with COVID-19.

The field of communication sciences and disorders (CSD) has also responded to the COVID-19 pandemic. At the practitioner level, speech-language pathologists and audiologists historically have provided services amid very challenging times. This record continues in the age of COVID-19 with practitioners often delivering services at the 'front lines' of health care (e.g., hospitals, medical centers, nursing homes, home health) as people's need/desire to regain or develop their ability to communicate, eat, swallow and hear does not disappear in the face of adversity. According to the American Speech-Language-Hearing Association (ASHA, 2020a), several of the procedures speech-language pathologists (SLPs) perform are considered aerosol generating procedures (AGPs) that is, medical procedures that are (a) more likely to generate higher concentrations of infectious respiratory aerosols than coughing, sneezing, talking, or breathing; (b) result in uncontrolled respiratory secretions; and (c) produce airborne particles that can lead to the spread of respiratory infections. Examples of these procedures include instrumental and non-instrumental dysphagia assessment and treatments; instrumental assessment of voice (endoscopy with or without stroboscopy) laryngectomy assessment and management (ASHA, 2020); and tracheostomy and ventilation care (Zaga et al. 2020),

Professional communication sciences and disorders associations/organizations around the globe have provided informational resources and educational materials for practitioners on COVID-19. Examples of three such CSD organizations in the U.S. and COVID-19 resources available on their webpages are shown in Table 1 below. As COVID-19 rendered

Table 1. COVID-19 Information Provided by Major U.S. Communication Sciences and Disorders Professional Associations.

Professional Association	COVID-19 Link	Examples of COVID-19 Information Provided
American Speech-Language-Hearing Association (ASHA)	https://www.asha.org/About/Coronavirus-Updates/	Educational; Resources; Updates on the virus, public policies, telepractice information
American Academy of Audiology (AAA)	https://www.audiology.org/practice-management/covid-19-resources	Educational; Resources (e.g., *Ototoxicity of FDA-Approved Drugs Being Re-Purposed for COVID-19 Treatment, Surgical Monitoring Safety: COVID-19 and Beyond)*
Council of Academic Programs in Communication Sciences and Disorders (CAPCSD)	https://www.capcsd.org/covid-19/	Educational; Resources (e.g., *CAPCSD Member Survey Results – COVID-19 Impact, Telepractice Resources During COVID-19)*

face-to-face clinical delivery untenable nationwide in some settings such as public schools or early intervention centers, many practicing clinicians shifted to telepractice as a service delivery platform (Ellis et al. 2020; Parafiniuk, 2020; Boisvert and Hall, 2018; Krum, 2014).

The COVID-19 pandemic has also changed the way universities across the U.S. educate students and the ways college students are learning. Thus, the purpose of this paper is to examine from a faculty member perspective, the response of universities and the communication sciences and disorders academic programs located within these institutions, to the COVID-19 pandemic.

On-Campus Closures and the Challenging Move to Online Teaching and Learning

In mid-March 2020, as the number of COVID-19 in the U.S. reached 15,000 (Statistica, 2020), state-mandated shelter in place edicts were issued by governors effectively shutting down to differing extents, work places; social gathering sites and events; and colleges and universities. The closure of on-campus operations forced universities and CSD academic programs housed within them to cease or curtail their face-to-face clinical operations and abruptly pivot to remote online instruction and learning. Institutions accomplished this rapid transition to remote learning with varying degrees of success as underscored by Maloney and Kim (2020) who observed, "In this emergency, keeping classes going was more important than advancing the state of the art in student learning."

How have faculty reacted to this sudden shift? A national survey of 935 university faculty members conducted in May 2020 to gain perspective on the success of remote teaching found 50 percent reported being experienced or somewhat experienced with online teaching, 65 percent expressed the concern that their students' lack of access to technology or Wi-Fi would be (or was) a challenge to remote teaching and learning, and 59 percent thought that their institution's online courses in the spring were inferior to what had been offered in person (June, 2020). Likewise, with nearly all CSD academic programs (98%) indicating they moved their coursework to online in Spring 2020, 136 CSD faculty members surveyed nationwide stated they were somewhat to extremely concerned about their readiness to teach online (64%) and somewhat to extremely concerned about their students' access to online learning platforms and tools (Council on Academic Programs in Communication Sciences and Disorders, 2020). Finally, in another national study of 1,843 CSD faculty conducted between March and May 2020, 78 percent listed teaching remotely as their top challenge (ASHA, 2020b). These concerns are understandable given the limited experiences or training most faculty have in online teaching and may also reflect for many, their pre-COVID-19 attitudes toward remote learning and baseline discomfort with teaching online. For some faculty, there may be a sense of loss of engagement with their students brought about by online teaching. Thus, it is incumbent upon universities to understand faculty concerns and provide them with quality support and training in online teaching given that this mode of educating will be with us for the foreseeable future.

Training and Support of Faculty in a New Instructional Format

With the anticipation of a second wave of COVID-19 in the late summer/early fall of 2020, CSD faculty will again be called upon to teach remotely. Only one-third of them report feeling prepared for an online teaching role this fall (Council on Academic Programs in Communication Sciences and Disorders, 2020). What can be done to help prepare CSD faculty and/or increase their confidence in teaching remotely? First, there must be institutional support, resolve, and resources directed to preparing faculty for the online teaching presence. Many universities have centers for teaching and learning, university teaching and learning commons, or centers for academic excellence designed to advance student learning by helping faculty implement evidence-based, innovative, and effective teaching strategies. Others may have dedicated divisions which offer a full-service online course development model which prepares and supports faculty to teach online through consultation and training workshops. Thus, faculty can develop online courses on their own or access other campus resources.

Next, to fully meet the needs of faculty and increase their confidence and competence in teaching in this new instructional format, institutional support must be provided on an *individual or small-group level*. Many universities employ instructional technology consultants (ITCs) who offer services to assist faculty with course development, technological assistance, and preparation to teach online. Most ITCs have an educational background in technology and education and bring an understanding of pedagogy that allows them to understand the needs of faculty members and communicate successfully with them. Working collaboratively with faculty, ITCs can offer insights about the technology and technology tools that are most suitable for the type of learning and course delivery whether traditional classroom,

online, or blended format; assist in developing student learning objectives and determining how to align those objectives with appropriate assessment strategies to measure the desired learning outcomes; and share effective ways of motivating and engaging students in activities designed for learning. At those universities with restricted resources and with only one or two ITCs to serve all of the institution, academic deans or department chairs should be encouraged to identify a cadre of in-house faculty with online course development and teaching experience and incentivize them to train and support faculty at the unit, department, or program levels.

Videoconferencing Options for Online Teaching and Learning and Translating Face-to-Face Class Activities to Online

With the closure of on-campus teaching activities in response to the COVID-19 pandemic, universities needed to decide which videoconferencing application(s) to use for web conferencing, online meetings, and synchronous online learning. Typically, these applications are housed on each institution's learning management system (LMS) which could include Canvas, Blackboard, Moodle or others. Among the most frequently used videoconferencing platforms are Zoom, Canvas Studio, Google Meet, WebEx, and Panopto. Each platform has features that can serve the university's and individual faculty member's online teaching and learning mission and at least two, Zoom and WebEx, are HIPAA-compliant and have been used for delivery of clinical services via telepractice. A few of these features include synchronous delivery of course content (where learning happens at the same time for the instructor and student with real-time interaction between them); asynchronous delivery (wherein the content is created and made available for consumption later on and not in real-time); or real-time chat (which allows students to communicate in real-time with the instructor and each other during class meetings). A summary of the essential features of Canvas Studio, Google Meet, Panopto and Zoom is provided in Table 2.

In our experiences with faculty colleagues who are for the first time tasked to teach their course(s) online, they express doubts about converting the teaching activities they used (and cherished) in the face-to-face environment to the online environment. In the face-to-face classroom, many instructors argue, they can lecture and then ask students questions or ask student groups to discuss something or solve a problem and then share their findings with the class. Such learning activities give students an opportunity to experience the course content in different

Table 2. Online Videoconferencing Platform Options for Faculty, Students, and Staff.

	Canvas Studio	Google Meet	Panopto	Zoom
Features	Best for any size group of faculty and students	Best for groups of up to 10 faculty, staff, and students	Best for any size group of faculty, staff, and students	Best for groups of up to 50 faculty, staff, and students
Synchronous Learning	No	Yes	Yes	Yes
Asynchronous Learning	Yes	No	Yes	Yes
Video Content Management	Yes	No	Yes	Yes
Real Time Chat	No	Yes	No	Yes
Private Chat	No	No	Limited	Yes
Screensharing	Yes	Yes	Yes	Yes
Videoconferencing	No	Yes	Yes	Yes
Live Webcast	No	Yes	Yes	Yes
Two-Way Audio & Video	No	Yes	No	Yes
Record & Playback	Yes	Yes	Yes	Yes
Quizzing	Yes	No	Yes	No
Electronic Hand Raising	No	No	No	Yes
Keyboard Accessible	Yes	Yes	Yes	Yes
Screen Reader Accessible	Yes	Yes	Yes	Yes
Closed and Live Caption Options	Yes	Yes	Yes	Yes

ways and demonstrate their understanding before completing a summative assessment such as a final examination. However, most face-to-face learning activities can be replicated in an online course. Examples of and suggestions for translating face-to-face class activities to the online teaching and learning environment are shown in Table 3 below.

Return to Work, the Uncertain Future, and Concluding Remarks

What will the return to work in the upcoming and future academic years look like for CSD faculty? First, the safety of faculty who return to on-campus roles must be paramount. Personal protection equipment (masks, face shields, goggles, gloves, hand sanitizer) must be provided by universities to ensure that faculty are able to carry out their teaching, service, advising, and research roles safely. Likewise, classrooms must be sanitized between class meetings to protect students and faculty. There will almost certainly be social distancing practiced in on-campus classroom spaces (Diep & Zahneis, 2020) with classroom configurations designed to decrease exposure risk. Also, the tenure and/or promotion clock and what counts toward tenure will need to be reconsidered (Connolly, 2020). Finally, online teaching and learning will continue and perhaps broaden if there is a surge of COVID-19 and that pedagogy will be delivered online in synchronous, asynchronous, and hybrid formats. Faculty must be supported by their universities as they endeavor in an uncertain future to accomplish what they do best---teach and mentor their students.

References

American Speech-Language-Hearing Association. (2020a). ASHA Guidance to SLPs Regarding Aerosol Generating Procedures. Available at: https://www.asha.org/SLP/healthcare/ASHA-Guidance-to-SLPs-Regarding-Aerosol-Generating-Procedures/.

American Speech-Language-Hearing Association. (2020b). COVID-19 impact on ASHA members: The personal and the Professional. *Asha Leader*, 25(5), 28-29.

APM Research Lab (2020). The Color of Coronavirus: COVID-19 Deaths by Race and Ethnicity in the U.S. Available at: https://www.apmresearchlab.org/covid/deaths-by-race.

Table 3. Translating Face-to-face Class Activities to Online.

If you do this in a face-to-face class:	You might do this online:
Group work in class	Create groups in Canvas; create group assignments & group discussions
Case Studies	Create an interactive timeline (Links to an external site.), simulations, videos in Canvas Studio or other LMS platforms
Collaborative Writing	Use Google Docs, Collaborations in Canvas
Fieldwork	Students perform fieldwork and submit videos via Arc or YouTube or upload documents or presentations
Icebreakers	Here are some suggestions for icebreaker in online course discussion boards (Links to an external site)
Interviews	Students can use their phones to interview a subject and then upload video via Canvas Studio or YouTube
Lectures	Faculty can record using the Upload/Record Media tool; record via WebEx and link within a Canvas page
Oral Reports	Students can record video or narrated presentation and upload via Studio, YouTube or file upload in a discussion board
Peer Review	Peer review tool in Canvas
Portfolios	Google Sites
Presentations	Students can create narrated presentations using PowerPoint or Prezi and share them in a discussion board
Reflections	Assignment tool or discussion tool
Synchronous Classes	Conduct using Zoom, Google Meet, WebEx, Panopto
Web Design	Students can create websites using Google Sites

Boisvert, M. and Hall, N. (2018). Telepractice for school-based speech and language services: A workload management strategy. *Perspectives of the ASHA Special Interest Groups*, 4(1), 211-216.

Caldwell, J.T., Ford C.L., Wallace, S.P. et al. (2016). Intersection of living in a rural versus urban area and race/ethnicity in explaining access to health care in the United States. *American Journal of Public Health,* 106, 1463-1469. http://dx.doi.org/10.2105/AJPH.2016.303212.

Centers for Disease Control and Prevention. (2020). Coronavirus (COVID-19). Available at: https://www.cdc.gov/coronavirus/2019-ncov/index.html.

Connolly, J. (2020). We need to rethink what counts for tenure now. *Insider Higher Education*. Available at: https://www.insidehighered.com/advice/2020/04/09/covid-19-demands-reconsideration-tenure-requirements-going-forward-opinion.

Diep, F., and Zahneis, M. (2020). Welcome to the socially distanced campus. *The Chronicle of Higher Education*, 66(31), 12-17.

Ellis, C., Briley, P., and Mayo, R. (2020). COVID-19 and the mad dash to telepractice: A tutorial to establish community-based telerehabilitation for aphasia using WebEx videoconferencing. *Journal of the National Black Association for Speech-Language and Hearing*, 15(1), 44-51.

Garg, S., Kim, L., Whitaker, M. et al. (2020). Hospitalization rates and characteristics of patients hospitalized with laboratory-confirmed Coronavirus disease 2019 — COVID-NET, 14 States, March 1–30, 2020. *Morbidity and Mortality Weekly Report (MMWR)*, 69(15), 458-464.

June, A.W. (2020). Was remote learning a success? *The Chronicle of Higher Education*, 66(31), 9.

Ko, M., Needleman, J., Derose, K.P., Laugesen, M.J., and Ponce, N.A. (2013). Residential segregation and the survival of U.S. urban public hospitals. *Medical Care Research Review*. http://dx.doi.org/10.1177/1077558713515079.

Krum, M. (2014). Teleaudiology model considerations. *Perspectives in Audiology*, 4(1), 4-10.

Maloney, E.J., and Kim, J. (2020). Learning and COVID-19. *Inside Higher Education*. Available at: https://www.insidehighered.com/blogs/learning-innovation/learning-and-covid-19?utm_source=Inside+Higher+Ed&utm_campaign=e2f5f333f8-DNU_2019_COPY_02&utm_medium=email&utm_term=0_1fcbc04421-e2f5f333f8-197574013&mc_cid=e2f5f333f8&mc_eid=32292f7b24.

Mao, L., Jin, H., Wang, M. et al. (2020). Neurologic manifestations of hospitalized patients with coronavirus disease 2019 in Wuhan, China. J*AMA Neurology*. doi:10.100Lik1/jamneurol.2020.1127

Miceli, S. (2020). COVID-19 and Health Equity — Serving the Underserved, Poorly Served, and Never Served. National Academies of Science. Available: here.

Oxley, T.J., Mocco, J., Majidi, S. et al. (2020). Large-vessel stroke as a presenting feature of COVID-19 in the young. *New England Journal of Medicine,* 382(20): e60. doi:10. 1056/NEJMc2009787.

Parafiniuk, D. (2020). Forced into telepractice with no idea what to do next! The ins and outs to becoming a teletherapist. Webinar presentation, Speech-Pathology.com.

Statistica. (2020). Number of cumulative cases of coronavirus (COVID-19) in the United States from January 22 to June 15, 2020, by day. Available at: https://www.statista.com/statistics/1103185/cumulative-coronavirus-covid19-cases-number-us-by-day/.

Stokes, E.K., Zambrano, L.D., Anderson, K.N., et al. (2020). Coronavirus disease 2019 case surveillance — United States, January 22–May 30, 2020. *Morbidity and Mortality Weekly Report (MMWR)*, 69, 759-765.

Yaghi, S., Ishida, K., Torres, J. et al. (2020). SARS2-CoV-2 and stroke in a New York healthcare system. *Stroke*, 51, 1-10.

Zaga, C.J., Pandian, V., Brodsky, M.B. et al. (2020). Speech-language pathology guidance for tracheostomy during the COVID-19 pandemic: An international multidisciplinary perspective. *American Journal of Speech-Language Pathology*, doi: https://doi.org/10.1044/2020_AJSLP-20-00089

Zubair, A.S., McAlpine, L.S., Gardin, T. et al. (2020). Neuropathogenesis and neurologic manifestations of the coronaviruses in the age of Coronavirus disease 2019 a review. *JAMA Neurology*. doi:10.1001/jamaneurol.2020.2065

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AFRICAN AMERICAN STUDENTS AND UNDERGRADUATE EDUCATION: A CRITICAL SOCIAL COMMENTARY

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— ABSTRACT —

This commentary focuses on the challenging recruitment and retention matters of African American (AA) undergraduate students in the field of Communication Sciences and Disorders (CSD). Most recently, Ginsberg (2018a) offers a framework to facilitate the understanding of AA student recruitment and retention matters in CSD using the qualitative responses of AA speech-language pathologists. As a result, this commentary provides insight to the author's experiences with AA undergraduate students using themes of community, outside resource connections, and culturally competent, caring mentoring. Furthermore, this article provides recommendations for inclusive teaching and learning practices with AA undergraduate students during the current COVID-19 pandemic.

This commentary analyzes the sociocultural implications of the current COVD-19 pandemic on the undergraduate education of African American (AA) students in Communication Sciences Disorders (CSD) programs. While the COVID-19 pandemic has increased the nation's awareness of health and social disparities (Deal-Williams, 2020), there has minimal discussion of how to retain and recruit AA students in CSD during this global pandemic. In a recent review of the literature, Ginsberg (2018a) highlighted recommendations from 11 (nine females, two males) African American Speech-Language Pathologists - for the retention and recruitment influences of AA students in speech-language pathology programs. In the study, Ginsberg (2018a) revealed four central themes of mentoring – culturally competent mentoring, caring mentoring, co-mentoring, and mentors connecting students to outside resources. In another article, Ginsberg (2018b) utilized an 'academic resilience framework' to describe the experiences of the study participants in their undergraduate and/or graduate CSD programs including the following: Microagressions, Culture Shock, Isolation, Mentoring (on a personal level), Community, and Grit.

As an undergraduate program director, the themes in Ginsberg's (2018a, 2018b) articles have motivated me to reflect on the achievement of the AA undergraduate students in my department's program. I began to use different terminology rather than only satisfactory (e.g. passing) or unsatisfactory (e.g. failing) grades in major courses. Specifically, during the immediate transition of course instructional methods from face-to-face teaching to online teaching amid the COVID-19 pandemic, my utmost concern was for those students who demonstrated low achieving grades in prior semesters and how the abrupt transition to complete online learning. However, there was another more specific reason to be concerned and that included the matriculation of current African American students in CSD undergraduate and graduate programs. That concern was related to increased enrollment of African American students at the undergraduate level since the 2013-2014 academic year. The data indicated an increase

of CSD undergraduate enrollment of racial/ethnic minority students from 20.6% to 29.5% in the 2018-2019 academic year (CSD Education Survey, n.d.). Accordingly, CSD faculty needed to become more attentive to the retention of underrepresented student populations. More importantly there were three keys areas where faculty needed to better understand the concepts of community, outside resource connections, and culturally competent, and caring mentoring. I offer my reflective experiences with the undergraduate education of AA students with teaching and learning connections during the COVID-19 pandemic.

Community

The development of community was a theme of success for the participants in Ginsberg's (2018b) study. Four of the study participants completed their undergraduate degrees at a Historically Black College/University (HBCUs); however, the specific undergraduate degrees were unknown. In comparison, only one study participant earned the SLP master's degree at an HBCU. Thus, the majority of the study participants earned their SLP master's degrees at Predominantly White Institutions (PWIs). Interestingly, while in graduate school, the study participants reported the benefits of having formal community networks such as the National Black Association of Speech-Language and Hearing (NBASLH). In contrast, among undergraduates, only one study participant mentioned maintaining communal relationships in the transition from undergraduate to graduate courses at the same university (Ginsberg, 2018b).

Similarly, most of the AA students enrolled in current university undergraduate program participated in informal meetings or study groups together to create their own community. In my conversations with the AA students enrolled in our program, their group gatherings were inspiring and provided a sense of identity and belonging within the undergraduate program. While most undergraduate students assume responsibility for their participation within communal networks, CSD programs may need to shoulder some of that burden and consider methods for the intentional engagement of AA students in virtual groups for informal (nonacademic) and formal (academic) discussions based on student interests during the COVID-19 pandemic. The informal groups may serve to facilitate opportunities for the students and faculty to develop mentoring relationships; whereas, the formal groups may need to consist of intentional grouping of students for the teaching and learning of diverse cultural experiences in a variety of subject areas. As a result, faculty will be able to foster community building that is inclusive of all undergraduate students in the deliberative practice that seeks to affirm and empower students of diverse racial/ethnic groups (Gay, 2010).

Outside Resource Connections

The Ginsberg (2018a) study participants endorsed the need for AA students to have 'outside resource connections.' For many of the study participants their outside resource connections included attending the NBASLH Convention (Ginsberg, 2018a). Additionally, in my undergraduate program director experiences, I frequently advised students regarding the available on- and off-campus resources, specifically in the areas of mental health and awareness. In my experience most students who appear on my academic warning lists have acknowledged diagnosed and/or undiagnosed mental health difficulties often related to stress, depression, and anxiety.

The stress of the undergraduate experience is often exacerbated by the demands for high grade achievements for graduate school admissions (Roos & Schreck, 2019). During the COVID-19 pandemic, the American College Health Association (ACHA) provided explicit guidelines for universities to consider in the availability and provision of mental health services for students to include telemental health and other resource connections to increase student care (ACHA, 2020). These guidelines have become very important for the retention of AA undergraduate students who consistently verbalize challenges with mental health due to working multiple jobs, being first-generation college students, and other family/personal issues. In order to recognize the diverse cultural mental health expressions of AA students, faculty will need to acknowledge that a variety of social and cultural variables (e.g., race, ethnicity, socioeconomic status, etc.) affect the 'expressive behaviors' (learning, thinking, speaking, performing, etc.) of AA students within and outside the academic classroom (Gay, 2010).

Culturally Competent, Caring Mentoring

Finally, the participants in Ginsberg's (2018a) study advocated for culturally competent, caring mentoring in CSD programs to aid the recruitment and retention of AA students. Based on the study participants' experiences, culturally competent mentoring should involve faculty from all racial-ethnic backgrounds involved in listening and talking to the AA students and getting to know them personally. The study participants defined caring mentoring as building safe and welcoming communities that

develop trust, rapport, and care in relationships (Ginsberg, 2018a). The AA students in my current department's undergraduate program frequently communicate that the actions of care demonstrated by faculty members influenced their ability to believe in themselves, succeed academically, and pursue CSD careers. Especially during the COVID-19 pandemic, the AA students' gratitude of expressions focused on faculty who were intentional in their actions of care in the offering of additional academic support and outside resource connections.

Culturally competent caring is inclusive, action-oriented, responsive, and accountable which is a component of culturally responsive pedagogy (Gay, 2010). Consequently, culturally responsive actions of care also involve understanding and talking about social inequities. In CSD undergraduate programs, faculty will need to consider having conversations with students about evident sociocultural inequities that many undergraduate students of color possibly experience daily. More specifically, topics of online education access, will enable faculty and students to engage in 'problem-posing dialogue' (Freire, 2009) of technology and internet resources that either support or challenge teaching and learning within educational institutions and the implications for underrepresented student populations.

Conclusion

This commentary provides a brief overview of recommendations to facilitate the retention and recruitment of AA students in CSD programs during the COVID-19 pandemic. The themes of community, outside resource connections, and culturally competent, caring mentoring are strongly suggested in response to Ginsberg's (2018a, 2018b) study results and my personal experiences. Finally, novel teaching and learning perspectives should be incorporated into online teaching approaches to also enhance the recruitment and retention of AA students.

References

American College Health Association (2019). *Considerations for reopening institutions of higher education in the COVID-19 Era*. Retrieved from https://www.acha.org/documents/resources/guidelines/ACHA_Considerations_for_Reopening_IHEs_in_the_COVID-19_Era_May2020.pdf

CSD Education Survey (n.d.). *Communication Sciences and Disorders Trend Data*. Retrieved from https://www.asha.org/uploadedFiles/Communication-Sciences-and-Disorders-Education-Trend-Data.pdf

Deal-Williams, V.R. (2020, June). Addressing disparities in the wake of injustice, violence, and COVID-19. *The ASHA Leader,* Retrieved from https://leader.pubs.asha.org/do/10.1044/2020-0601-addressing-disparities-of-injustice/full/

Freire, P. (2009). *Pedagogy of the oppressed* (30th Anniversary Ed.). New York: The Continuum International Publishing Group.

Gay, G. (2010). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). New York: Teachers College Press.

Ginsberg, Sarah M. (2018a). Increasing African American student success in speech-language pathology programs, *Teaching and Learning in Communication Sciences & Disorders*, 2 (3). doi.org/10.30707/TLCSD2.3Ginsberg2

Ginsberg, Sarah M. (2018b). Stories of success: African American speech-language pathologists' academic resilience, *Teaching and Learning in Communication Sciences & Disorders*, 2(3). doi.org/10.30707/TLCSD2.3Ginsberg

Roos, B.H., & Schreck, J.S. (2019). Stress in undergraduate students studying communication sciences and disorders, *Perspectives of the ASHA Special Interest Groups*, 4, 1430-1444. doi.org/10.1044/2019_PERS-SIG10-2019-0003

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CHALLENGES IN ACADEMIA DUE TO COVID-19

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When the world stood still in the midst of the declared pandemic, social distancing and self-quarantining became the new normal. While these are unprecedented times, people of color are disproportionately affected in unpredictable ways. Health reports show that the number of African-Americans dying with coronavirus disease (COVID-19) is greater than the proportion of those who reside in several major cities. This disparity is believed to be related to the disproportionate number of persons in the African American community with medical complexities which put them at higher risk of contracting and ultimately dying from COVID-19, confirming the reports from China that the outcomes were worse for persons with co-existing medical conditions. America has been bombarded hourly with disturbing news about the increasing number of positive cases and the rising number of deaths. What we aren't hearing is how the decision to close college campuses has affected the students and academicians; especially those belonging to minority racial groups, in the weight of the pandemic fall out. Specifically, are there issues that disproportionally affect Communication Sciences and Disorders (CSD) programs and their African American students.

When all college students were sent home and told they would be completing the rest of the semester online, no one in authority could have imagined the complications it would cause. For some, returning home was welcomed as they eased back into the familiar comfort zone. The transition for them was unremarkable and yielded little to no change in academic performance. However, for many others, "going away" to college was a subtle escape from certain environments and/or situations that may be deemed as distracting or even volatile. Campus life gave them an opportunity to put a primary focus on academics, explore social activities, and mature independently. Being forced to move back home may have caused unsuspecting and unanticipated stress that was reflected as a decline in academic performance and/or increase in critical issues in mental health. It is without question that the at-risk learners who were struggling to maintain passing grades in face-to-face courses on campus, while utilizing every resource available, would experience greater difficulty in online classes without the support of tutors and teaching assistants. Fortunately, many universities and colleges adopted new grading policies to be used during this season of crisis, which allowed students to choose if they wanted to receive traditional letter grades or pass/fail on a course by course basis. A pass/fail option was offered to students and beneficial for non-major courses. Yet, this option was not absolute for students in communication sciences and disorders programs because pass/fail grade points do not get factored into to the overall Grade Point Average (GPA). In addition, most, if not all, graduate programs in Communication Sciences and Disorders, the GPA calculation of major courses is required for completion of the degree; therefore, the pass/fail option could not be selected. One can only imagine the level of anxiety that came with this decision and the recognition that the same decision may put their future career at stake.

Additionally, academicians were challenged with recreating course materials that were designed for interaction and collaboration in a face-to-face classroom within a relatively short time period. With this type of change, it is not always easy to maintain the equity between online and face-to-face courses, but it's not impossible. Online courses require more independent learning and interactive activities can be designed that keep students engaged whether the course is synchronous or asynchronous. The greater challenge is how to help the aforementioned at-risk learners who struggle with courses using an online format, when external resources are limited, household environments contain overwhelming distractions, and anxiety elevates amid mental and physical health and safety concerns.

Current reports on COVID-19 tell us that things will not return to "business as usual" for quite some time. Therefore, we must be proactive in a very visible and audible way in order to make sure that at-risk learners and students of color are well equipped to compete within a system in which they are already considered to be the underdog. The number of African American students admitted to CSD graduate programs has been lower than that of mainstream

students even in Historically Black Colleges and Universities (HBCU). Consider this scenario, African American students within CSD graduate programs having a difficult time adjusting to online learning may have decreased academic performance thereby putting their continuance in the program in jeopardy. Likewise, African American students applying to CSD graduate programs will now have even greater competition. That leaves us with a number of concerning questions…A) How do we prepare African American students who are potential candidates to be viable applicants during these unprecedented conditions? B) How do we provide support in order to retain the current African American students within graduate programs despite the challenges erected by COVID-19?

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COVID-19, TELEHEALTH, AND THE DIGITAL DIVIDE: IN THE RUSH TO PROVIDE TELEPRACTICE, WHO GETS LEFT BEHIND?

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— ABSTRACT —

In an effort to mitigate community transmission of COVID-19, many speech-language pathologists (SLPs), audiologists, and communication sciences and disorders scientists quickly shifted their practice and research online. However, the rise of telepractice creates new barriers to care and research participation in populations that are historically unserved or underserved. This commentary describes the populations most at risk for being left behind due to the "digital divide" and the specific barriers that limit access to telepractice services and research. Implications and cursory suggestions are discussed.

Keywords: COVID-19, telehealth, barriers, digital divide

Since the first confirmed case in the United States was reported in January 2020, SARS-CoV-2 – the virus that causes COVID-19 – has dramatically altered day-to-day life. In early efforts to "flatten the curve" and reduce transmission rates, many states issued stay-at-home orders; citizens were ordered to minimize travel outside of their homes. In the wake of these orders, schools closed, and many "non-COVID-19" healthcare services such as speech-language pathology (SLPs) and audiology were postponed, cancelled, or delivered via telepractice (Centers for Disease Control and Prevention, 2020). Universities also suspended on-campus activities, causing many researchers in communication sciences and disorders (CSD) to quickly shift data collection online (Omary et al., 2020). Many CSD professionals and scientists have overcome herculean obstacles to quickly and efficiently transition to online practice and research; however, in the rush to maintain productivity, telehealth providers are likely creating access barriers for the most vulnerable populations we serve. When already underserved individuals cannot access services and participate in research, they are at risk of being left even further behind. The aim of this commentary is to describe the communities that experience these access barriers, explore the types of barriers experienced, and provide considerations for maximizing outreach to these communities.

The "Digital Divide"

The term "digital divide" refers to inequities in internet access and use (Kumar, Hemmige, Kallen, Giordano, & Arya, 2019). Specifically, people are less likely to have consistent and equal internet access if they live in rural areas, are impoverished, are over 65 years of age, are Black, Latinx, or Native American, have low educational attainment, speak limited English, and/or have a disability (Federal Communications Commission [FCC], 2019; Herd & Giray, 2020; Lewis, 2017; Martin, 2019; Ryan, 2016). Digital disparities are consistent with health disparities among historically unserved or underserved (henceforth, "underserved") populations, suggesting that similar systemic and institutional barriers im-

pact health outcomes and internet access (National Academies of Sciences, Engineering, and Medicine, 2017). Limited internet access may also *contribute* to poor health outcomes (American Medical Informatics Association, 2017). Whether they contribute to poor health outcomes or not, internet access barriers are analogous to healthcare access barriers, and include availability, quality, cost, and literacy/usability (Kumar et al., 2019; Martin, 2019).

- Availability: The infrastructure to support high-speed internet access is still a work in progress in the US, particularly on Native American reservations (FCC, 2019). According to a 2019 report by the FCC, compared to 98.3% of urban dwelling individuals, fewer Americans in rural areas and those living on tribal lands had both high-speed internet access and mobile internet coverage (73.2% and 67.7%, respectively). Furthermore, availability is not uniform across the US: Some states (e.g., New Mexico, Oregon) varied in their availability of high-speed and mobile LTE access from ≥ 95% of residents in urban areas to ≤ 49% of residents in rural areas.
- Quality: The FCC defines high-speed internet as download rates of at least 25 megabits per second (Mbps) and upload rates of 3 Mbps. In 2015, the average American broadband subscriber enjoyed download speeds of more than twice the federal minimum; nevertheless, 30% of US counties had download speeds of less than 25 Mbps, and 20% had download speeds of 20.6 Mbps or less (Martin, 2019). Although some people with limited or poor high-speed internet availability may be able to supplement their internet access with their mobile network, the FCC acknowledges that mobile networks are not perfect substitutes for broadband internet, partially because of reliability issues (FCC, 2019).
- Cost: The cost of broadband subscriptions, coupled with the cost of devices, is the greatest barrier to internet access among many underserved populations (Herd & Giray, 2020; Lewis, 2017; Martin, 2019). Assuming that it is available, rural communities are likely to pay higher prices for high-speed internet, and consumers in urban areas with fewer internet service providers (ISPs) do not benefit from subscription fee reductions associated with competition among ISPs (Martin, 2019). The prohibitive costs of internet subscriptions lead many lower-income people to become "mobile-only users," or to rely on mobile devices (e.g., smartphones) as their sole means of internet access. This access can be tenuous: mobile-only users often face data limits and/or have difficulty paying for consistent phone service (Kumar et al., 2019; Lewis, 2017). For example, Kumar et al. (2019) reported that 33% of participants in their study did not text due to data caps; thus, communicating health information to mobile-only users was suboptimal. Notably, the vast majority of mobile-only users are Black and Latinx (Lewis, 2017; Martin, 2019; Ryan, 2016).
- Literacy/usability: Lower educational attainment is associated with reduced internet access, likely due to a number of factors, including lower income, lower literacy levels, and limited experience with modern, internet-connected computers in educational settings. While income affects the affordability component of access, literacy and experience with technology directly affect individuals' ability to engage with internet-connected devices (Herd & Giray, 2020; Kumar et al., 2019). Usability also poses difficulties for older people, who may have limited experience navigating the internet, and people with disabilities, who may experience physical barriers to device use (Herd & Giray, 2020; Martin, 2019; Ryan, 2016).

Implications and Considerations

The rapid and universal adoption of telepractice creates tangible barriers to healthcare and research participation for our most vulnerable populations. Adult clients may miss out on time-sensitive rehabilitation for stroke or traumatic brain injury. Children may fall even further behind their peers in linguistic and social skills. In research contexts, digital inequities may further limit study findings to metropolitan, affluent, educated, White, and able-bodied populations. Unfortunately, the true scale of the disparities that underserved populations are currently experiencing may not be understood until well after COVID-19 is contained.

To combat these disparities, SLPs, audiologists, and researchers must rethink current telepractice strategies and tap into community resources. Adjusting our approaches may include determining how treatment activities appear on smartphones or tablets, counseling or providing support over the phone, or mailing materials to clients. We should also consider providing loaner devices, training loved ones and caregivers to implement treatments, and lobbying our local governments to provide low-cost, high-quality broadband for everyone. The onus cannot be on our underserved populations. We, as CSD professionals and scientists, must help to bridge the digital divide.

References

American Medical Informatics Association. (May 24, 2017). Re: Request for Comment – Actions to Accelerate Adoption and Accessibility of Broadband-Enabled Health Care Solutions and Advanced Technologies (GN Docket No. 16-46, FCC 17-46) [open letter]. https://www.amia.org/sites/default/files/AMIA-Response-to-FCC-Notice-on-Accelerating-Broadband-Health-Tech-Availability.pdf

Federal Communications Commission. (2019). 2019 *Broadband Deployment Report* (FCC-19-44A1). https://docs.fcc.gov/public/attachments/FCC-19-44A1.pdf

Herd, T., & Giray, C. (May 22, 2020). *Mitigating the implications of coronavirus pandemic on families*. https://www.research2policy.org/covid19-mitigating-implications-8

Kumar, D., Hemmige, V., Kallen, M. A., Giordano, T. P., & Arya, M. (2019). Mobile Phones May Not Bridge the Digital Divide: A Look at Mobile Phone Literacy in an Underserved Patient Population. *Cureus*, 11(2). https://doi:10.7759/cureus.4104

Lewis, J. (2017). *Handheld device ownership: Reducing the digital divide?* Retrieved from https://www.census.gov/content/dam/Census/library/working-papers/2017/demo/SEHSD-WP2017-04.pdf

Martin, M. J. R. (2019). Deconstructing the digital divide: Identifying the supply and demand factors that drive internet subscription rates. https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-15.pdf

National Academies of Sciences, Engineering, and Medicine. (2017). The state of health disparities in the United States. In J. N. Weinstein, A. Geller, Y. Negussie, & A. Baciu (Eds.), *Communities in action: pathways to health equity* (pp. 57-98). Washington, DC: The National Academies Press.

Omary, M. B., Eswaraka, J., Kimball, S. D., Moghe, P. V., Panettieri, R. A., & Scotto, K. W. (2020). The COVID-19 pandemic and research shutdown: staying safe and productive. *The Journal of clinical investigation*, 130(6), 2745. https://doi:10.1172/JCI138646

Centers for Disease Control and Prevention. (2020). Framework for healthcare systems providing non-COVID-19 clinical care during the COVID-19 pandemic. https://www.cdc.gov/coronavirus/2019-ncov/hcp/framework-non-COVID-care.html

Ryan, C. (2016). *Computer and internet use in the United States: 2016*. https://www.census.gov/content/dam/Census/library/publications/2018/acs/ACS-39.pdf

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CULTURAL CONSIDERATIONS WHEN WORKING WITH DIVERSE CHILDREN VIA TELEHEALTH DURING THE COVID-19 PANDEMIC

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— ABSTRACT —

This article will focus on the knowledge and skills that clinicians need when providing speech-language services to children from diverse backgrounds via telehealth. Information regarding culture competence, parental involvement, and working in the home environment will be provided. In addition, treatment resources are presented with a description of how to use with parents to enhance patients' speech-language skills.

Keywords: COVID-19, Coronavirus, Clinical Resources, Culture, Treatment

Introduction

During the COVID-19 pandemic, clinicians are forced to adapt traditional therapeutic activities to fit the needs of children from culturally and linguistically diverse (CLD) backgrounds when delivering services via telehealth. Research has indicated several paradigms that are necessary when treating children from CLD backgrounds in their homes: using parents as the agent (Roberts & Kaiser, 2011; Kaiser & Roberts, 2013; Weitzman, 2013) using the environment as the stimulus for language building (Ford, et al., 2020; Larson, Barrett, & Mcconnell, 2020); and bringing a culturally sensitive perspective to the clinical encounter (Edwards-Gaither, 2018; Pham, 2012). Furthermore, research suggests that language outcomes are impacted by the child's socioeconomic status and linguistic background (Jackson, Schatschneider, & Leacox, 2014). In addition, clinicians will need to have certain knowledge and skills in order to provide therapy that is sensitive to cultural and economic diversity. However, cultural consideration in therapeutic encounters becomes increasingly difficult when faced with the technological barriers of telehealth. The purpose of this article is to discuss knowledge and skills that are needed when working with children from diverse backgrounds in order to enhance service delivery via telehealth.

Discussion

To successfully provide speech-language therapy to the CLD population via telehealth, practitioners must first equip themselves with the tools that are necessary to enhance knowledge and skills. These

include: Cultural competence; Parental involvement; Therapy in the home; and Clinical resources.

Cultural Competence

To gain cultural competency, clinicians must consider the following principles: cultural humility, awareness of linguistic bias and ethical considerations (Edwards-Gaither, 2018). While this may seem obvious, these principles are commonly an after-thought when planning for therapy. Cultural humility can be described as forfeiting one's assumptions in regard to differing backgrounds (Edwards-Gaither, 2018). Clinicians should always consider linguistic biases when selecting assessments to avoid misdiagnosing the patient based on their language differences. However, linguistic bias can decrease significantly if the clinician can deliver services in the child's native language (Pham, 2012). Ethical considerations when delivering services should be a priority to ensure that treatment and evaluations are appropriate for the given population.

Parental Involvement

Another element for ensuring the efficacy of telehealth is parent participation and necessary pre-training. It is crucial to remind parents that they are one of the most important teachers of language for their child despite the need for speech therapy services (Kaiser & Roberts, 2013). There is evidence to support the positive outcomes in participants' language skills when parents had adequate training versus when parents did not (Roberts & Kaiser, 2011; Weitzman, 2013). To apply the principle of parent training to telemedicine, clinicians need to ensure parents can use the technology platforms that are available by reviewing log-in procedures, link access, and troubleshooting if problems with technology arise. Overall, it is the goal of the speech-language pathologist to provide parents with effective training and strategies to help facilitate and develop language skills outside of therapy (Kaiser & Roberts, 2013). Pre-consideration of parent involvement will allow clinicians to plan therapy that will best suit their family's needs which will provide a more positive outcome.

Therapy in the Home Environment

Clinicians should know the importance of providing speech-language therapy in the home environment. Research has shown that the home setting provides higher levels of language input due to the increased participation in conversational turns and vocalizations (Larson et al., 2020). Teletherapy allows for the implementation of the home environment in therapy. Parents are able to use familiar toys and routines that assist with carryover of skills typically taught in a more structured setting. Furthermore, speech-language pathologists are able to assist in establishing a routine in the home which will allow for repeated exposure to appropriate vocabulary. CLD children could benefit greatly from the use of their home environment; however, cultural considerations are crucial to determining the family's access and ability to support their child in this setting. Through telehealth, clinicians are able to train parents in their natural setting on how to stimulate their children for language and allow for opportunities for requesting and verbal output.

Clinical Resources

Speech-language pathologists may find the following tools useful when work with parents of children from diverse backgrounds: Boom Cards, My Play Home, and The Ultimate SLP. These are popular tools for telehealth is vital for increasing therapy outcomes, especially if toys are not accessible.

Digital book sources such as "Get Epic" and "Super Teacher Worksheets". These can be utilized to train parents in storybook reading where children can actively participate and be familiarized with age-appropriate vocabulary. Dialogic reading, a technique for storybook reading, encourages the child to actively participate in reading, provides feedback, and allows the reader to adapt their reading style to the child's linguistic abilities. This technique has been extremely effective in developing the vocabulary of children of low SES in the classroom setting (Hargrave & Sénéchal, 2000); however, researchers struggled to find efficacy of this technique in the home environment due to difficulties monitoring the use of the technique and frequency of reading. Telehealth is an optimal format for techniques that require parent-child interaction because clinicians can equip the parents with necessary skills for stimulating their child for language in a natural setting. It can decrease the pressure caused by the physical presence of the clinician, allow the clinician to effectively monitor progress, and motivate the CLD parents to follow through with carryover. Online resources, like "Get Epic", also provide stories in other languages which can support the bilingual homes and give families access to information in their native language.

Applications used with non-CLD children can be utilized when treating CLD children as long as activities are adapted considering the child's cultural and linguistic backgrounds. Clinicians should adjust therapy considering the parent's involvement, the child's natural environment, and the family's cultural and linguistic differences. Benefits of therapy in the natural environment are apparent but CLD children may not reap the same benefits as their peers if the

strategies are not adjusted to meet their needs. Special considerations (e.g. variations in parenting style, language use, home routines, and parental education etc.) are crucial when transitioning services to telemedicine. Receiving therapy services from a clinician of similar cultural and linguistic background is an effective way of addressing a child's cultural and linguistic diversity. With the use of telemedicine, clinicians of similar cultural and linguistic backgrounds have greater access to CLD children and can offer services that would have been unavailable to them otherwise. Research has shown that therapy in a natural setting with parent training has been beneficial for this population (Larson et al., 2020); however, telehealth adds a component of technology that can be troubling.

Summary

Clinicians are responsible for identifying these challenges and playing an active role in breaking down technological barriers. It is also important to continue to assess the needs of CLD children, recognizing that the modification of activities are not one size fits all, but unique to each individual child. It is important that patients are exposed to materials and activities that meet their needs and resemble their diverse learning environments.

References

Edwards-Gaither, L. (2018). Cultural considerations for telepractice: An introduction for speech-language pathologists. *Perspectives of the ASHA Special Interest Groups*, 3(18), 13-20. doi:10.1044/persp3.sig18.13

Ford, A. L., Elmquist, M., Merbler, A. M., Kriese, A., Will, K. K., & Mcconnell, S. R. (2020). Toward an ecobehavioral model of early language development. *Early Childhood Research Quarterly*, 50, 246-258. doi:10.1016/j.ecresq.2018.11.004

Hargrave, A. C., & Sénéchal, M. (2000). A book reading intervention with preschool children who have limited vocabularies: The benefits of regular reading and dialogic reading. *Early Childhood Research Quarterly*, 15(1), 75-90. doi:10.1016/s0885-2006(99)00038-1

Jackson, C. W., Schatschneider, C., & Leacox, L. (2014). Longitudinal Analysis of Receptive Vocabulary Growth in Young Spanish English–Speaking Children From Migrant Families. *Language, Speech, and Hearing Services in Schools*, 45(1), 40-51. doi:10.1044/2013_lshss-12-0104

Kaiser, A. P., & Roberts, M. Y. (2013). Parents as communication partners: An evidence-based strategy for improving parent support for language and communication in everyday settings. 20(3), 96-111. doi:10.1044/lle20.3.96

Larson, A. L., Barrett, T. S., & Mcconnell, S. R. (2020, March 31). Exploring Early Childhood Language Environments: A Comparison of Language Use, Exposure, and Interactions in the Home and Childcare Settings. *Language, Speech, and Hearing Services in Schools*, 1-14. doi:10.1044/2019_lshss-19-00066

Pham, G. (2012). Addressing Less Common Languages via Telepractice: A Case Example With Vietnamese. *Perspectives on Communication Disorders and Sciences in Culturally and Linguistically Diverse (CLD) Populations*, 19(3), 77-83. doi:10.1044/cds19.3.77

Roberts, M. Y., & Kaiser, A. P. (2011). The effectiveness of parent-implemented language interventions: A meta-analysis. *American Journal of Speech-Language Pathology*, 20(3), 180-199. doi:10.1044/1058-0360(2011/10-0055)

Weitzman, E. (2013). More than words—The Hanen program for parents of children with Autism Spectrum Disorder: A teaching model for parent-implemented language intervention. *Perspectives on Language Learning and Education*, 20(3), 96-111. doi:10.1044/lle20.3.86

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COVID-19 AND TELETHERAPY: AN OPPORTUNITY TO THRIVE PROFESSIONALLY

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— ABSTRACT —

This commentary offers the author's opinions on COVID-19 teletherapy and the opportunity for speech-language pathologists of color to embrace technology and thrive professionally.

Keywords: COVID-19, professional preparation, teletherapy

Near the beginning of March 2020, I was working and plugging along as a home health speech-language pathologist (SLP) serving the adult population of the Bay Area in Northern California. I serve patients with a variety disorders from dysphagia to aphasia. Life was good and simple as my only complications were traffic and scheduling patents. Fast forward to the third week of March and it was a totally different experience. The world was changing as COVID-19 spread across the world and specifically in the U.S. like wildfire. As a result, my world as a home health SLP was about to change dramatically.

As the rest of the nation was locking down, SLP's remained on the frontline of the COVID-19 fight. In the early stages of the COVID-19 pandemic, many SLPs did not have personal protective equipment (PPE) to safeguard themselves from becoming infected. We also ran out of sanitizing materials such as wipes and hand sanitizers. It would take a few weeks before the appropriate PPE would be distributed to frontline workers by employers. It was unclear if employers really understood how contagious this virus was.

A lot has changed since those first few weeks. Now when I go see patients, I wear what looks like a hazmat suit, gloves, goggles, and shoe covers. I must sanitize everything that I touch from my car to my apartment. I even wipe down the gas pumps I use to refill my car. My patient visit preparation is far more detailed now as I give a lot of thought to making sure that I am protecting myself and the patients I treat. Once I arrive at a patient's home, I must keep the recommended appropriate six-foot distance from that patient and their family. As patients continue to die, I and many other SLPs think about our own mortality. In these moments of reflection, I ask myself questions such as, "Where else will I work?" "Is there another population/setting that I can work?"

In most settings, SLPs provide services face-to-face. However, the COVID-19 pandemic has resulted in a move to online delivery of services via teletherapy. Teletherapy has been found to be an effective mode of clinical practice (ASHA, 2020a; Boisvert and Hall, 2018). But, while teletherapy is a useful platform to serve our patients, it is unclear how many of us are trained to use it. A recent ASHA survey noted that 61% of SLPs saw delivering clinical serves via teletherapy as their biggest challenge (ASHA, 2020b). In my opinion, those same clinicians seem to fit into three categories: (1) those who have been working face-to-face with patients for many years and are believed to have the necessary clinical experience to be successful at the use of teletherapy (I would place myself in this group); (2) those who have no experience with teletherapy but are learning it on the fly; and (3) those who have never thought about using the teletherapy service platform. However, with the present pandemic, it has become evident that teletherapy may be one of the only ways to provide services to clients.

I for one, wonder if SLPs of color are prepared for the challenges and opportunities that may exist in the near- and long-term future. I have worked as an

SLP for two decades. In my judgment, before the pandemic African American and other underrepresented minority SLPs had found their place in the profession of speech-language pathology. Although the numbers of underrepresented minorities in the discipline were not growing significantly, we were thriving and surviving. How will we continue to move forward in the profession in the era of COVID-19? Stated another way, how can we continue to thrive and not merely survive?

I recommend that SLPs of color continue or seek to work at the top of their certification. This term is borrowed from medicine and espouses the ethos of each practitioner using the full extent of their education, training, and experience. SLPs of color have always been told that we must be 'better than' and should always 'stay one step ahead in the workplace'. And we have always had to jump over academic and professional hurdles that have been put before us and deal with microaggressions directed toward our education, knowledge, or competence. For the most part, we successfully faced those challenges.

It is possible that teletherapy may represent a new opportunity for SLPs of color to thrive. My own recent experiences suggest understanding teletherapy is a must or SLPs of color may be left behind. I have recently been through several job interviews where I was asked about my experience with teletherapy. Although I have not had a lot of experience with teletherapy, those who were conducting the interviews gave me the impression that they had many years of experience. When I asked them about their own work with teletherapy I discovered that they learned and got their experience only recently in the last two months or right after the COVID-19 pandemic began. It was at this point that I had a revelation regarding teletherapy. In my work setting, I could see more patients each day via teletherapy (thus addressing productivity issues); reduce personal overhead or outlay of my own funds for gasoline, parking fees, highway tolls, etc.; and provide services for my patients without placing them and myself at risk for COVID-19. Additionally, with the proper technology, I could visualize and hear my patients (and vice versa). Moreover, treatment materials could be accessed and shared with patients and their families via the digital platform (often for free). However, at that time I did not have any significant experience with teletherapy and was viewed as unqualified. That may also be true for other SLPs of color like me. Again, how can we face this challenge and thrive?

What follows are some suggestions that might offer a path (especially for older clinicians such as myself) to enter the arena of teletherapy.

1. Seek out and enroll in continuing education courses/webinars on teletherapy.
2. Reach out to clinicians in your state or elsewhere with teletherapy experience who might be willing to provide guidance, offer tips, mentorship, etc.
3. Identify and consult with members of NBASLH and ASHA with experience in delivering services via teletherapy.
4. Practice simulated teletherapy sessions with fellow SLPs or likeminded clinicians in related disciplines (e,g,, physical therapy, nursing).
5. Familiarize yourself with the teletherapy literature and resources; become conversant in any outcome or efficacy literature on teletherapy.
6. Network with and nurture new graduates in the profession who may have gained knowledge and experience in the utilization of teletherapy during their graduate school education.

Practitioners of color cannot become complacent with just existing and working in the profession of speech-language pathology. We must not forget how we got here---through networking, staying one step ahead, and helping and supporting each other. We must help ourselves by embracing and moving forward with today's technology and continue to be proactive about our preparedness in the field of speech-language pathology and in new practice arenas. Through all these means we will continue to thrive in the field of speech-language pathology.

References

American Speech-Language-Hearing Association. (2020a). *Telepractice*. Available at: https://www.asha.org/practice-portal/professional-issues/telepractice/.

American Speech-Language-Hearing Association. (2020b). COVID-19 impact on ASHA members: *The personal and the Professional. Asha Leader*, 25(5), 28-29.

Boisvert, M. and Hall, N. (2018). Telepractice for school-based speech and language services: A workload management strategy. *Perspectives of the ASHA Special Interest Groups*, 4(1), 211-216.

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CLINICAL STRATEGIES FOR PEDIATRIC IN-PATIENT SPEECH-LANGUAGE PATHOLOGISTS WORKING IN A HOSPITAL SETTING DURING COVID-19 PANDEMIC

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— ABSTRACT —

This article focuses on strategies that speech-language pathologists may use when working in a hospital setting. The COVID-19 pandemic has required providers in healthcare to adapt service delivery to minimize risks to all involved yet provide them effectively and efficiently. Information regarding safety, the essential nature of speech-language pathology, and service delivery will be provided.

Keywords: COVID-19, Coronavirus, Speech-Language Pathology, Inpatient, Service Delivery

Introduction

With the advent of COVID 19, inpatient providers throughout hospitals world-wide have had to deal with an unprecedented experience with regards to patient care. The biggest factor was the "unknown" as this is a new disorder with limited epidemiological information; therefore, there are limited data on the likely course of the disorder. As a result, providers have met this disorder with fear and caution, but at the heart of the pandemic, patients have been kept front and center. Speech-language pathologists (SLPs) who work in pediatrics hospitals have not been exempt from clinical care responsibilities and in some cases have been deemed essential personal. In an effort to provide effective inpatient services and offer protection to the patient and deliver quality services, adjustments to service delivery must be made.

The purpose of this article is to highlight the efforts made in an acute care hospital setting to combat COVID 19. Information regarding managing caseloads, swallowing, safety, personal protective equipment (PPE), and advocating for the profession will be addressed.

Discussion

This section is designed to provide an overview of strategies used to address patients during the

COVID-19 pandemic. The section starts with the characteristics of patients followed by how to manage the caseload. Information on safety, the essential role of the speech-language pathologists and swallowing evaluations will follow.

Characteristics of COVID-19 Patients

Understanding the profile of COVID-19 patients aids in establishing the role that the speech-language pathologist plays in management. Below are the characteristics that are important for clinicians to know:

- Prolonged intubation without placement of trach
    - Increased risk of swallowing difficulties and laryngeal trauma
- Generalized weakness
- Delirium/ ICU psychosis
    - Especially challenging since many patients do not have a family member at bedside
    - Important to have written reminders of: Location, date, time, RN for the day, goals of care
- Emphasizing the importance of constantly re-orienting the patient to medical staff

Management of Caseload

While many health care professionals play a role in minimizing the spread of COVID-19, speech-language pathologists also play a role. This is especially the case for those who work in pediatric health care settings. The way this can be done is through the management of caseload. Below are two strategies that colleagues may find helpful to assist in this process:

- Plan schedule so that COVID -19 patients are seen at the end of the day to reduce risk of potentially exposing non-COVID-19 patients to the virus even as clinician's are wearing appropriate PPE to see these patients.
- In hospitals with larger inpatient speech-language staff, leaders may designate certain staff to see COVID-19 patients or patients under investigation (PUI). This will limit the impact on the entire staff.

Safety

The issue of safety has been publicly placed at the very center of patient care during this COVID-19 pandemic experience. Safety is paramount to the clinical process and protects the patient and the clinician. The following are strategies that speech-language pathologists should follow in order to practice effective safety measures:

- Stay updated on COVID-19 guidelines from hospital's Infectious Disease department, Occupational Health or the Center for Disease Control and Prevention website.
- Follow infectious disease protocols for cleaning and disinfecting procedure room surfaces.
- Have appropriate PPE: N95 masks, googles, face shield, gloves, gown, or PAPR (Powered Air Purifying Respirators). This is very important because swallow evaluations or treatment sessions have potential to be aerosol generating procedures. Practice universal precautions and use N95 masks and googles for all evaluations, given the risk of assessing an asymptomatic COVID-19 patient.
- Be aware of clinician's mental health status. Especially at the beginning of a pandemic. Clinician's face anxiety about treating these patients and potentially exposing their families. It is important to acknowledge these concerns and provide wellness resources and keeping an open line of communication about how staff are feeling.

Demonstrating the speech-language pathologist's essential role on an acute care team

Some institutions have questioned the essential nature of speech-language pathology and as a result, positions have been temporally eliminated. Speech-language pathologists should demonstrate the importance of their role by implementing the following strategies:

- Have open discussions with physicians and nurses regarding COVID- 19 patients and the need and timing of swallow evaluations or speech-language assessments.
- Nurses spend a great deal of time with patients. They are aware of the patient's overall alertness/ ability to follow commands in order to participate in an evaluation. Make them your supporter.
- Discussion with physicians, the timing of evaluations, as research has indicated that waiting 48 hours post-extubation to complete a swallow evaluation will result in patients being on a less restrictive diet (Brodsky, Mayfield, & Gross, 2019; Marvin, Thibeault, & Ehlenbck, 2019).
- Work collaboratively with the acute care team.
    - Time evaluations for when the medical team feels patient is appropriate.
    - Implement a swallow screening protocol for nurses to administer. If patient fails swallow screen, then move to formal swallow evaluation.

- Create a consultative role in obtaining from nursing the communication abilities and difficulties of patients with potential communication deficits. Speech-language pathologists can then educate nurses on communication strategies or provide communication boards for patients without direct contact with the patient. Clinicians should then follow up with nurses and receive feedback about the effectiveness of the communication strategies or communication board.
- Offer to aid in troubleshooting challenging situations and assist in providing the best care for the patients.

Clinical Swallow Evaluation

The clinical swallow evaluation often presents with a number of concerns that must be addressed by the clinician. Below are the strategies that clinicians may use during the clinical swallow evaluation:

- Eliminate testing of cough response during Oral Mechanism Examination as this can create droplets/aerosols.
- Have caregiver feed patient if needed. This will allow the speech-language pathologist to position further away from patient.

Instrumental Assessment of Swallowing

The instrument assessment of swallowing has been extremely challenging during this COVID-19 Pandemic. The strategies listed here may be used to address these challenges:

- Complete Modified Barium Swallow Studies (MBS).
    - Coordinate with Radiology and follow infection control recommendations for disinfecting the room after a patient diagnosed as positive for COVID-19 has used it.
    - Triage patients via chart review and parental interview to identify those at high risk of aspiration with no established alternative means of nutrition/hydration (e.g., nasogastric tube, gastrostomy tube).
- Limit use of Fiberoptic Endoscopic Evaluation of Swallowing (FEES) given this is an aerosal generating procedure. Collaborate with Otolaryngology to identify patients who would most benefit from use of FEES over MBS to further assess their swallow function. Consider testing patients for COVID-19 prior to the assessment and completing the evaluation in a negative pressure room with staff in full PPE.

Summary

The COVID-19 pandemic has forced us to rethink the speech-language pathology services that are offered in an acute care hospital. While progress has been made in understanding the clinical impact on speech-language pathology, there are some characteristics that may have unknown long-term effects, such as permanent lung damage which could impact voice, speech productions and other areas important to communication. Further, these patients may be experiencing post-traumatic stress disorder (PTSD) symptoms which impacts social communication. Finally, it is likely that there will be an increase in the need for alternative means of nutrition/hydration for these patients as they recover, and it is suspected this could be the case in the adult population.

References

Brodsky, M. M., Mayfield, E. B., & Gross, R. D. (2019). Clinician Decision Making in the ICU: Dysphagia Screening, Assessment and Treatment. *Seminars in Speech and Language*, 40(3), 172-187.

Marvin, S., Thibeault, S., & Ehlenbach, W. (2019). Post-extubation Dysphagia: Does Timing of Evaluation Matter? *Dysphagia*, 34(2), 210-219. doi:10.1007/s00455-018-9926-3

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CHALLENGES AND QUASI SOLUTIONS WHILE WORKING THROUGH THE COVID-19 PANDEMIC: OUT-PATIENT PEDIATRIC SPEECH-LANGUAGE PATHOLOGY IN A HOSPITAL SETTING

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— ABSTRACT —

Speech-language pathologists, who work in medical settings, may have questions about service delivery during the COVID-19 pandemic. This article will focus on questions and possible solutions that speech-language pathologists who work in an outpatient pediatric medical setting had while delivering services to children during the COVID-19 Pandemic. Information regarding safety, clinical-changes, licensure, legal issues, and productivity/budgetary impact will be addressed.

Keywords: Pediatrics, Outpatient Speech-Language Pathology, COVID-19, Coronavirus, Service Delivery

Introduction

When the COVID-19 Pandemic moved to the forefront of the workplace, speech-language pathologists in pediatric outpatient settings were forced into new service delivery models with little or no warning. Clinicians found themselves adjusting to providing evaluations and treatment through remote services as well as seeing patients during face-to-face visits. As a result, they developed a number of questions including: How do speech-language pathologists stay safe while providing services in-person? What are the changes that will need to be made to provide services appropriately? Are there licensing laws that apply to times like these? Am I considered essential? Will this impact my productivity? How will the changes impact my budget? While there are a myriad of other questions, these were felt to be important as clinicians approached an unknown area greatly impacting service delivery. Needless to say, some of these questions caused professional anxiety as society experienced its first pandemic in over 100 years. The purpose of this article is to address the questions and provide quasi solutions to challenges that were raised.

Discussion

How do speech-language pathologists stay safe while providing services?

Challenges: There was anxiety on the part of speech-language pathologists as they entered the work environment. Information seemed to change daily, and new questions of safety emerged including concerns about the likelihood of exposure to the clinicians' family members and patients.

Quasi-Solutions: There was a need to minimize in-person sessions and limit the hands on contact with patients as much as possible. Most outpatients were moved to an online format via Zoom telehealth. Personal protective equipment (PPE) was used with in-person visits, and modifications were made to limit the number of visits. In addition, only one parent/legal guardian could accompany the patient to a service visit. While a variety of PPE masks had been promoted, clinicians had to be extremely careful and only use those that were medical grade. Certain specialty clinics, (e.g., cranio-facial, aerodigestive, velopharyngeal) ceased in-person visits until accommodations could be put in place to allow for a safe visit for the patients and providers.

What are the changes that will need to be made to provide services appropriately?

Challenges: Speech-language pathologists often had limited experiences with telehealth and some did not have laptops or computers with cameras. The use of telehealth was foreign and frightening to some clinicians because they feared losing control. The biggest challenge for some speech-language pathologists was thinking that speech-language services could be conducted as if they were in "in-person" treatment rooms. And of course, there was the cultural divide that impacts services delivery including access to technology.

Quasi-Solutions: To combat these issues, clinicians were trained on how to use telehealth and became familiar with various platforms. Because speech-language pathology services must be HIPAA compliant, using a system that met those qualifications was imperative. Webcams were obtained for those without laptops. To alleviate anxiety, clinicians were trained to face the situation head with significant managerial support. Such conversations were held via the platform that was being used, for example, Zoom Telehealth. During these dialogues, clinicians shared experiences and clinical activities that could be used to facilitate services. Further, clinicians had to completely rethink the delivery of services. Without therapy rooms, clinicians had to employ parents as partners in the delivery of services, especially for younger children who could not sit in front of screens for long periods of time. Some families opposed being seen for services in this fashion. Still others did not have access to the internet and did not want to be seen in a medical environment for fear that it was unsafe. These were families who needed to "check-in" every few weeks. Clinicians also needed to limit the number of families in the waiting room for the face-to-face sessions and needed to take children to the treatment room immediately upon arrival. In some cases, it was helpful to have families wait in their cars and use a pager system to alert them when to enter. . Further, the number of providers in the clinic at the same time was limited.

What are the licensing laws and legal issues, and how do they apply in times like these?

Challenges: There was a great deal of confusion about the requirements for licensure when providing outpatient speech-language services via telehealth. Clinicians had a number of questions regarding who and where patients could be seen. In addition, clinicians wanted to know if there were relevant legal issues for providing services by telehealth.

Quasi-Solutions: As for licensure, each state or jurisdiction had regulations that governed the use of telemedicine. It was important that clinicians were aware of the laws of each jurisdiction and realized that there was no one law that governed all states.

In general, the clinician needed to be licensed in the state in which the services were delivered as well as where the services are received. Clinicians needed to be clear on what the laws were for traveling to a different state and seeing patients on their current caseload. Regarding legal issues, the speech-language leadership teams worked closely with the legal and managed care departments to ensure telehealth laws were being addressed. Insurance companies had to be contacted and provisions were made to obtain consent for treatment. For each encounter, clinicians documented in the medical record the following: 1. Patient was seen via telehealth; 2. A consent form that was read to the patient or caregiver for verbal authorization; and 3.State in which patient was located.

What is essential speech-language pathology?

Challenges: During this COVID-19 Pandemic, speech-language pathologists raised the issue of their positions as essential. According to ASHA (2020), the definition of essential or nonessential is usually assigned by an employer, an employee union, the federal government or state governments.

Quasi-Solutions: The best solution was to check licensure laws and declarations issued by the state. Further, speech-language pathologists worked across time (pre COVID-19) with employers to promote the notion of being essential and the impact of services on the quality of life for individuals. That same argument was made to state legislators and government leaders who made decisions. Clinicians conveyed the fact that outpatient feeding and dysphagia assessments were essential and that once a patient was identified with a speech-language or swallowing disorder, it was imperative that they received services.

What are the productivity expectations and budgetary concerns in a pandemic?

Challenges: The biggest challenge for any speech-language pathology program was the financial impact. When the speech-language pathologist does not meet clinical expectations, productivity is impacted by the reduced number of appointments. This was not predicted, and the program budgets of program will likely have shortfalls. .

Quasi-Solutions: Facilities modified budgets to reduce spending by eliminating travel, asking for mandatory use of vacation leave, and reducing overhead where possible. Managers of SLP programs created ways to increase revenue by maximizing schedules through a hybrid use of telehealth and in-person as well as flexible schedules that increased revenue.

Summary

The COVID-19 Pandemic has caused clinicians to rethink how to provide services to individuals with speech-language and related disorders in an outpatient pediatric medical setting. The traditional clinical process is no longer adequate to deliver services given that the knowledge about COVID-19 changes frequently. While the information presented here is germane to a pediatric medical setting, colleagues in adult acute care medical settings and private practice may also find themselves needing to use similar solutions (safety, clinical-changes, licensure, legal issues, and productivity/budgetary) as they engage in telehealth and in-person clinical visits. Further, the strategies presented here need to be examined through research paradigms to determine the efficacy of service delivery models in this manner.

References

American Speech Language Hearing Association. (2020, June 1). *SLP Service Delivery Considerations in Health Care During Coronavirus/COVID-19*. Retrieved June 15, 2020, from ASHA.org: https://www.asha.org/SLP/healthcare/SLP-Service-Delivery-Considerations-in-Health-Care-During-Coronavirus/

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CONDUCTING SPEECH-LANGUAGE EVALUATIONS IN AN OUTPATIENT PEDIATRIC SETTING DURING THE COVID- 19 PANDEMIC

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— ABSTRACT —

During the COVID-19 pandemic, speech-language pathologists have faced challenges navigating telehealth and in-person services. Potential challenges to the evaluation process and quasi-solutions for addressing them are discussed in this article.

Keywords: Assessment, Diagnostics, Evaluation, Pediatrics, Outpatient, COVID-19

Introduction

A major clinical challenge during the COVID-19 pandemic is conducting speech-language evaluations. The issues are evident in both in-person and via telehealth. Given the guidelines issued by the Centers for Disease Control and Prevention (CDC) (Centers for Disease Control and Prevention, 2020), clinicians need to be cautious with in-person clinical activities in general and more specifically with the evaluation process because of the close proximity between the speech-language pathologist and the patient. As a way to address this issue, the speech-language pathologist may use telehealth as an alternative to the in-person visit. The speech-language pathologist is charged with the task of creatively developing strategies and solutions in order to perform a thorough and reliable evaluation that represents the communication profile of the patient. This article will address the challenges that a speech-language pathologist may face when performing speech-language evaluations in an outpatient medical setting. Both in-person and telehealth issues will be addressed.

Discussion

In-person evaluation during COVID-19

Issue: Mask requirement for patient and speech-language pathologist

Challenge: Some children have difficulties with keeping masks on during the evaluation. This is particularly evident with patients diagnosed with Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder, as well as sensory issues.

Quasi Solutions: Speech-language pathologists should ensure that caregivers are aware of the mask requirement at the time of scheduling the appoint-

ment. Caregivers should understand that the patient must wear a mask for the duration of the in-person evaluation. The clinician may suggest that the caregiver practice at home prior to the evaluation. If the patient is unable to wear a mask for the duration of the evaluation, then consider a hybrid evaluation in which the in-person and telehealth models are used jointly.

Issue: Required social distancing

Challenge: The speech-language pathologist and the patient must keep six feet apart during an evaluation.

Quasi Solutions: The speech-language pathologist should try to use the largest room available to conduct the evaluation, moving furniture as necessary to accommodate specified distance. If possible, have older children turn the pages of the test manual which would allow the clinician to increase distance.

Issue: Oral mechanism examination

Challenge: The requirement of both the patient and the clinician to wear a mask creates difficulties in performing the oral mechanism examination.

Quasi Solutions: Use the hybrid evaluation approach to conduct the oral mechanism evaluation, assessing range of motion and rate movement through telehealth and completion of the examination at a later date.

Issue: Speech fluency/stuttering evaluation

Challenge: When assessing individuals who stutter, speech-language pathologists may find it difficult to fully observe concomitant behaviors at the lip level when wearing a mask.

Quasi Solutions: Use the hybrid approach and conduct a short telehealth session to assess the absence or presence of these behaviors.

Telehealth evaluations during COVID-19

Issues: Digital test batteries

Challenge: Digital assessments are available on the market. They are current and include the protocol, scoring forms and performance analysis. Using digital standardized measures requires the purchase of a license and the use of two devices, such as two iPads. This may be cost prohibitive for some organizations. In addition, most digital assessments are intended for in-person evaluations. Assessment instruments such as the *Goldman-Fristoe Test of Articulation – 3* (Goldman & Fristoe, 2015) and *Preschool Language Scales – Fifth Edition* (Zimmerman, Steiner, & Pond, 2011) are not normed for telehealth administration, and presentation of stimulus books violates copyright laws.

Quasi Solutions: Speech-language pathologists may use a hybrid evaluation approach to address this issue and use both telehealth and in-person visits. During the telehealth portion of the assessment, the clinician should consider the following: Review educational history, medical history, and previous therapeutic interventions; Conduct informal assessment of speech and language; Elicit a conversational speech sample; and Complete behavioral observation checklists and other non-standardized measures. Some parts of the *Clinical Evaluation of Language Fundamentals – 5* (CELF-5; Wiig, Semel, & Secord, 2013) are normed for administration via Q-Global (web-based system for test administering, scoring and reporting) in a telehealth modality with specific audio and video requirements.

For the in-person portion of the hybrid evaluation, the clinician should complete the standardized batteries, e.g., *CELF-5* (Wiig, Semel, & Secord, 2013). Clinicians should use informal methods to further assess patients' language and speech, for example, language samples and speech production screeners.

Issues: Assessing children birth to three years of age

Challenges: Speech-language pathologists sometimes must convey to caregivers that telehealth is a viable option when assessing young children. In addition, clinicians have less control manipulating the environment (e.g., toys, pictures, books, and so forth).

Quasi Solutions: Clinicians should educate caregivers on the evaluation process to alleviate concerns regarding the telehealth platform. Evaluations for children younger than three years of age work well in a telehealth format. Measures such as the *Receptive Expressive Emergent Language Scale – 3* (Bzoch, League, & Brown, 2003) or *The Rossetti Infant-Toddler Language Scale* (Rossetti, 2006) rely heavily on caregiver report and can be used to guide clinicians' observation of caregiver-child interactions. In addition, clinicians may find it useful to instruct caregivers in manipulating their device in order to maximize the quality of the observation.

Issue: Speech fluency/stuttering evaluation

Challenge: When assessing individuals who stutter, speech-language pathologists may find it difficult to fully observe concomitant behaviors that are below the chest level.

Quasi Solutions: Clinicians may find it helpful to ask probing questions of the caregiver or patient regarding possible concomitant behaviors. The caregiv-

er or patient may manipulate their device in order to get a full body view of the patient during some speaking tasks.

Issue: Audio quality

Challenge: Speech-language pathologists should be aware of the effect of microphone and speaker quality.

Quasi Solutions: Clinicians should ensure use of a high-quality, noise-canceling headset with built-in microphone that facilitates the clarity of speech and limits background noise. Clinicians should also ensure use of a camera in an adequately lit room. If the audio quality is poor, this should be noted in the evaluation report. When possible, the patient should use a headset with microphone as well to facilitate the clinician's perception. If the headset has a cord, he caregiver should be directed to ensure the patient does not fidget with the cord to limit noise.

Summary

The COVID-19 Pandemic has forced clinicians to rethink the evaluation process during in-person and telehealth appointments. Speech-language pathologists must be actively aware of the changing procedures for assessments, as this could result in a paradigm shift in the clinical evaluation process. While a number of quasi solutions are presented here, there is a need to conduct empirical research to determine the efficacy of these strategies.

References

Bzoch, K., League, R., & Brown, V. (2003). Receptive-Expressive Emergent Language Test - Third Edition (REEL-3). Austin, TX, USA: Pro-Ed.

Centers for Disease Control and Prevention. (2020, May 26). *Outpatient and Ambulatory Care Settings: Responding to Community Transmission of COVID-19 in the United States*. Retrieved June 11, 2020, from Centers for Disease Control and Prevention: https://www.cdc.gov/coronavirus/2019-ncov/hcp/ambulatory-care-settings.html

Goldman, R., & Fristoe, M. (2015). Goldman-Fristoe Test of Articulation - Third Edition GFTA-3. Bloomington, MN, USA: PsychCorp, an imprint of Pearson Clinical Assessment.

Rossetti, L. (2006). Rossetti Infant-Toddler Language Scale. *The Rossetti Infant-Toddler Language Scale*. East Moline, IL, USA: LinguiSystems.

Wiig, E., Semel, E., & Secord, W. (2013). Clinical Evaluation of Language Fundamentals - Fifth Edition (CELF-5). Bloomington, MN, USA: NCS Pearson.

Zimmerman, I., Steiner, V., & Pond, R. E. (2011). Preschool Language Scale, Fifth Edition (PLS-5). San Antonio, TX, USA: Pearson.

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CHALLENGES AND QUASI-SOLUTIONS FOR SPEECH SOUND PRODUCTION AND MOTOR SPEECH SERVICES DURING THE COVID-19 PANDEMIC

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— ABSTRACT —

During the COVID-19 pandemic, speech-language pathologists have faced many challenges specific to providing appropriate services for patients with speech sound disorders including motor speech disorders. Potential challenges and quasi-solutions are discussed in this paper.

Keywords: COVID-19, Speech Sound Disorders, Motor Speech Disorders, Telepractice, Telehealth, Pediatrics

Introduction

Since COVID-19 moved to the forefront of the workplace, speech-language pathologists who work with children with speech sound disorders (SSDs) have been faced with several questions regarding service delivery. Some of these questions include:

- How do clinicians use safe best practices when providing speech therapy to patients with SSDs during this pandemic?
- What are the challenges when providing telepractice therapy while working with children with SSDs?

Working with children with SSDs require actions that may violate social distancing guidelines. Speech-language pathologists often use tactile cues, gestural cues, visual modeling of production, and other activities that require the child and the clinician to be in close proximity. The purpose of this paper is to provide speech-language pathologists with options for delivering services in an appropriate and effective manner.

Discussion

Issue 1: How do clinicians use safe best practices when providing speech therapy to patients with SSDs during this pandemic?

Challenges: Clinicians have concerns about using best practices for speech therapy for patients with SSDs via telepractice and/or in person with limitations in both modalities. While in person, wearing medical grade masks eliminates the clinician's ability to visually model speech sound production. The other concern is that both the patient and the clinician should wear a mask in person; however, often children have difficulty wearing a mask correctly for therapy duration. Although there are some masks available now (i.e., The Communicator by Safe 'N Clear) that are approved by the FDA, they are often unavailable, do not meet medical guidelines, and cannot be used by speech-language pathologists in a healthcare setting, as they will not be approved for use by the Department of Infection Disease. Handmade masks with clear windows are inappropriate

for SSD treatment purposes as they are not health grade. However, patients can use these, but such masks are not issued by the healthcare facility. Another barrier with handmade masks with the clear window is that the window fogs, leading to difficulty seeing the patient's mouth to monitor production. Telehealth challenges start with ensuring the audio and video quality on both ends is adequate to refine speech sound production by providing the child appropriate cues and prompts.

Quasi-solution: Telehealth services are the best avenue for many children with SSDs during the pandemics. The speech-language pathologist and child can adjust their distance from the camera and even use a small flashlight to highlight oral movements. Given the amount of airborne droplets exhaled during speech production while maintaining normal speaking volume (Asadi, et al., 2019), it is likely safest for both clinician and patient to utilize a telepractice modality for services during the pandemic.

Clinicians can provide visual cues with high-quality cameras for speech production and model the tactile cues to be used by caregivers. By shaping the caregiver's tactile, verbal, and visual cues, the caregiver becomes a better asset to speech therapy services.

Issue 2: What are the challenges when providing telepractice while working with children with SSDs?

Challenges: Some families do not have access to high-speed Internet services. Lack of such services can result in uncoordinated audio and visual connections and can make it challenging to discern when a patient is achieving accurate sound placement. This poses additional challenges when using simultaneous modeling in methods such as Dynamic Temporal and Tactile Cueing (DTTC; Strand, 2020).

Quasi-solution: It can be helpful when the caregiver and child move closer to the wireless router, or in some cases connect the device directly to the router. When possible, it can help to switch to a smart phone using data instead of WiFi. Additionally, backgrounds should not be used by the clinician or family as they can contribute to uncoordinated audio and visual.

Challenges: Sound quality is an issue with some devices causing the patient to have difficulty hearing the speech-language pathologist or the speech-language pathologist to have difficulty perceiving the patient's speech sound productions accurately.

Quasi-solution: When possible, it is best for the clinician and patient to wear headphones with embedded microphones. The clinician should have an appropriate device that does not distort the visual image or audio reception. It is also best for the caregiver and patient to use a quiet room during the session.

Challenges: Some platforms being used currently for telepractice and devices do not allow the patient to have control of the mouse to indicate responses during auditory discrimination tasks.

Quasi-solution: When necessary, the caregiver should stand behind the patient and indicate whether the patient responded appropriately during the discrimination task. Another option is to label the pictures as "1" and "2" and have the child hold up fingers to respond.

Challenges: There are some patients who benefit from tactile cues that cannot receive these from the speech-language pathologist during telepractice sessions.

Quasi-solution: The clinician can provide gestural cues to prompt specific placement of the articulators (Rusiewicz & Rivera, 2017). Alternatively, the clinician can coach the caregiver for provision of tactile cues when necessary by modeling the cues and refining the caregiver's use. Remind the caregiver that these cues should be faded quickly and switched to verbal and visual cues (Strand, 2020).

Challenges: Some patients become easily distracted during sessions (e.g., siblings, self-view in the session, background noise, etc.).

Quasi-solution: Distractors in the room should be minimized (e.g., ask siblings to go elsewhere if they disrupt the session, ask parent to keep television off, etc.) during the session. When possible hide the patient's "self-view" to limit distractions and ensure the clinician's face is the largest on the screen. The caregiver should be readily available to assist and redirect the patient when needed. Removing self-view encourages the patient to use the clinician's face to cue production attempts instead of their own face.

Challenges: Some patients may seem less motivated and engaged during telepractice speech therapy.

Quasi-solution: The clinician must engage the patient's attention by using an abundant personality at an exaggerated level. Additionally, the patient can be motivated by using simple slide shows to uncover parts of a picture and activities available on websites. Encourage the caregivers and child to use movement breaks that allow the clinician to see favorite toys or pets. This helps the clinician tailor speech sound production activities to include words that are intrinsically motivating.

Challenges: Usually the clinician provides printed or verbal assignments to the caregiver for practice prior to the next session.

Quasi-solution: The clinician should take a few minutes at the end of a session to review the assignment with the caregiver and then email a PDF of the assignment to the caregiver. The clinician should also provide notes about what the caregiver did well in the session (e.g., "I like how you told Johnny to look at you before providing a visual cue for the production") and any suggestions for additional supports the caregiver can provide (e.g., "Next time Johnny uses /d/ for /g/, repeat the word to him with the correct production emphasized").

Summary

The COVID-19 pandemic has caused clinicians to think about alternative ways to provide services to patients with SSDs. Despite the limitations of telepractice, patients with SSDs may benefit more from telepractice given the availability of a visual model for production than from in-person services provided with masks.

References

Asadi, S., Wexler, A., Cappa, C., Barreda, S., Bouvier, N., & Ristenpart, W. (2019, February 20). Aerosol emission and superemission during human speech increase with voice loudness. *Scientific Reports*, 9, 2348. doi:https://doi.org/10.1038/s41598-019-38808-z

Rusiewicz, H., & Rivera, J. (2017). The Effect of Hand Gesture Cues Within the Treatment of /r/ for a College-Aged Adult with Persisting Childhood Apraxia of Speech. *Americal Journal of Speech-Language Pathology*, 26, 1236-1243. doi:https://doi.org/10.1044/2017_AJSLP-15-0172

Strand, E. (2020). Dynamic Temporal and Tactile Cueing: A Treatment Strategy for Childhood Apraxia of Speech. *Americal Journal of Speech-Language Pathology*, 29, 30-48. doi:https://doi.org/10.1044/2019_AJSLP-19-0005

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WORKING DURING THE COVID-19 PANDEMIC: AUDIOLOGY PROCEDURES AND PRACTICE IN A PEDIATRIC HOSPITAL SETTING

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— ABSTRACT —

Some audiologists have managed to be essential during the COVID-19 Pandemic. In the pediatric hospital setting described here, audiologists modified clinical services and are proactive in implementing safety measures in order to address the needs of patients.

Keywords: Audiology, COVID-19, Coronavirus, Service Delivery

Introduction

Audiology has been an area that has received little attention during the COVID-19 pandemic and, in some cases, has been deemed a profession that is non-essential (Palmer, Shoup, Christensen, & Committee, 2020). However, there are some settings in which audiological services are always needed and one of those areas is in a pediatric hospital environment. The importance of early identification of infants with hearing loss cannot be minimized as it directly affects quality of life in those with hearing difficulties or potential hearing loss. In addition, the need for monitoring hearing loss due to chemotherapy, fitting hearing aids, repairing hearing aids, and supporting the partners in otolaryngology are all critical procedures that are within the scope of practice for audiology. These procedures must be done regardless of what goes on in society but should be done with caution to protect the patient and the audiologist. While speech-language pathologists, otolaryngologists, and many other specialties can utilize telehealth, that is not the case for audiologists. Patients cannot enter a sound booth in their homes and be remotely seen by the audiologist from another site. The range of services offered in audiology is completed in person and in proximity with the patient and in most cases their families. Given the restrictions imposed by the Center for Disease Control (CDC) for COVID-19 (Centers for Disease Control and Prevention, 2020), audiologists are challenged with how to provide audiological services and meet the CDC guidelines.

The purpose of this article is to discuss and present some of the procedures and practice of audiology in the face of the challenges presented by the COVID-19 pandemic. Audiological strategies and protections put into place in one pediatric hospital will be discussed.

Discussion

How do Audiologists stay safe?

Audiologists and their patients need to be protected during the COVID-19 pandemic. This is particularly important as the audiologist's scope of practice involves direct and sometimes prolonged contact with patients in a face to face environment within an enclosed space. This places them and their patients into a situation where the virus may easily spread. Audiologists must be extremely careful to avoid infecting themselves and the patients who are seen for services. In order to minimize the impact, audiologists need to wear appropriate personal protective equipment (PPE). The issues regarding protection and safety are discussed below:

- The hospital provided PPE, that includes masks, googles, and gloves should be utilized during each patient encounter.
- Scrubs should be worn during the entire day. This is done to lessen the impact of transferring the virus via clothing to external environments.
- Masks must always be worn within the hospital and at all of the regional outpatient centers.
- Screening measures, such as taking temperatures of all staff and visitors should be required upon entry at all hospital facilities.
- If a patient is known or suspected to be COVID-19 positive, the audiologists must follow all procedures as stated in the hospital protocol. This includes wearing a PAPR (powered air purifying respirator), gown, gloves, and mask. It also involves cleaning clinical areas appropriately and disposing of PPE.

What are the changes that will need to be made to provide services appropriately?

Because of the nature of this disease, it was important to modify clinic operations to enhance social distancing and keep patients safe. Changes are done by implementing the following procedures that address clinic operations, the facility, clinical procedures and service delivery.

- Clinical modification
  - Schedule
    - Revise script for support staff to inform parents and guardians of changes to schedules and allow patients to reschedule when "stay at home" orders are lifted. Give them the options of being seen at a regional center or main hospital facility.
    - Implement a "no siblings allowed" policy.
    - Allow only one caregiver to accompany the patient to services.
    - Be sure and have parents activate Patient Portal for secure communication.
    - Make sure family is aware that patient and parent will be required to wear a mask.
    - Inform patients and parents they will receive a temperature screening upon entrance to the facility and above average temperatures will not be permitted.
    - Create telephone screening questions for support staff that address COVID-19 exposure, illness in the home and respiratory symptoms.
- Facility Modifications
  - Extend distances between seating in waiting room.
  - Be sure and place hand sanitizer throughout the clinic.
  - Arrange for day porter to clean frequently.
  - Create space for temperature screening.
- Audiological services modification
  - Exact testing performed is up to the discretion of the audiologist depending on the patient.
  - Impedance testing, OAE, otoscopy may be deferred to follow-up appointment because cerumen is involved.
  - If only sound field responses are obtained, patient will be scheduled for follow-up to obtain additional information.
  - BAHA, Hearing aid, Cochlear Implant patients may be difficult to assess, because sign language/total communication support may be needed. Masks will affect hearing impaired patients' ability to supplement communication with lip reading.
  - With Auditory Brainstem Response testing, the audiologist may use typical preparation with social distancing, however, with inpatient testing, the operating room protocol for PPE must be followed (e.g., mask, googles, glove, gown, etc.).
  - During Vestibular Testing the audiologist and patient parent/ guardian must keep masks on for entirety of testing. Patient will need to wear goggles as a part of the testing, but difficulties have been noted with keeping the googles in place. The audiologist will need to postpone calorics (small amount of

cold and warm water or air delivered down the ear canal), vHiit (sudden acceleration and then deceleration of the head, completed by audiologist manipulating head), and VEMP for future follow-up evaluation (using electrodes and sound stimulus to determine vestibular function by averaging the reaction of the muscle activity in response to each sound click or pulse)). All these activities create higher potential of infection from direct patient contact and potential for emesis.

- Time allotted for patient care does not require adjustment, as each patient has a one-hour (or greater depending on evaluation type) appointment time slot. This is ample time for evaluation, counseling, and disinfecting of the room.
- Audiologists should remain present in all clinics throughout epidemic to further demonstrate the essential nature of the profession. In this way audiologists are:
    - Available to support ENT patients, oncology patients, patients with hearing impairment and their devices, as well as patients with sudden hearing loss or change in hearing, or acute vestibular symptoms;
    - Available to assist in equipment management for children throughout the community who are not typically patients; and
    - A resource for school audiologists as they practice distance learning.

Summary

Audiologists have been challenged in a variety of ways during this COVID-19 Pandemic. They have been faced with the need to highlight the vital nature of their profession, determining ways to stay essential because telehealth is impossible. What has been presented here are procedures that may be used to enhance clinical audiological services and keep patients and clinicians safe during this pandemic.

References

Centers for Disease Control and Prevention. (2020, May 18). *Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings*. Retrieved June 12, 2020, from Centers for Disease Control and Prevention: https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html

Palmer, C., Shoup, A., Christensen, L., & Committee, A. A. (2020, March 22). *Work Together, Stay Informed, and Help Flatten the Curve*. Retrieved June 10, 2020, from American Academy of Audiology: https://www.audiology.org/message-academy-executive-committee-0

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TIPS AND STRATEGIES FOR WORKING THROUGH THE COVID-19 PANDEMIC IN AN INFANT HEARING SCREENING SETTING

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— ABSTRACT —

There are national regulations that govern the procedures for newborn hearing screening programs. Even during the COVID-19 Pandemic, these regulations must be followed. This article is designed to highlight the clinical modifications made by a managing audiologist in order to meet the requirements. Information regarding staff education, changing communication policies, patient safety, and clinical service modification will be presented.

Keywords: Newborn Hearing Screening, Service Delivery, Audiology, Early Identification

Introduction

Working in a newborn hearing screening program during the COVID-19 pandemic presented a challenge to newborn hearing screening technicians and the audiologists who supervise them. Newborn hearing screening is mandated throughout the United States and, as such, is an essential service. All newborn babies must be tested prior to leaving the hospital as stipulated by national regulations (Joint Committee on Infant Hearing, 2019). During the COVID-19 pandemic, many birthing mothers were admitted to the hospital with unknown COVID-19 status or with symptoms, exposure and/or a positive diagnosis of COVID-19. While this was troubling to all service providers, it was of particular concern to the hearing screening technicians who were limited in their medical knowledge and often were misinformed about the likelihood of contracting the virus and passing it on to family members. The result was generalized anxiety and miscommunication. The rapidly changing recommendations regarding reacting to the virus in the healthcare setting also contributed to this sense of fear, as technicians were often forgotten when new policies and procedures are implemented. This article will address the challenges faced by newborn hearing screening technicians and ways to enhance service delivery while keeping the technicians and patients safe in the work environment.

In order to assure the smooth continuation of newborn hearing screening services during the COVID-19 pandemic, audiologists who supervise newborn hearing screening programs may find specific strategies to be beneficial.

Education

Staff education was essential to alleviating the anxiety experienced by many hearing screening technicians. Technicians were educated about COVID-19;

the ways in which it is spread; procedures to minimize the likelihood of contracting it; and the low viral load of patients under investigation (PUI) or infants who are COVID-19 positive. The managing audiologist, neonatologists, and other physicians provided education through in-service training on these topics to staff. Informal huddles at the beginning of each day, email communication, and lecture-based presentations were utilized. This educational process reduced the technicians' misunderstanding of the virus which also reduced their resulting fears.

Communication

Communication was a critical step in positively managing newborn hearing technicians. Changes to Centers for Disease Control and Prevention (CDC) guidelines governing COVID-19 and hospital policies were communicated to the managing audiologist who then conveyed the information to the technicians. In the constantly evolving climate, changes were often made on a weekly, if not daily basis. This led to establishing a weekly meeting specifically to address evolving issues surrounding the COVID-19 Pandemic.

Personal Protective Equipment (PPE)

The technicians were confused about enhanced PPE and were provided with training on the appropriate PPE selection, donning, and doffing. Additionally, they were made aware of the policies and procedures of use and reuse of PPE. Checklist resources were provided which could be accessed as just-in-time reminders throughout the workday.

Modified Screening Procedures

The COVID-19 pandemic required some changes to the means by which technicians provided services. One crucial factor was that the COVID-19 status of all infants and parents was shared with the technicians. While universal precautions were always implemented in newborn hearing screening, a COVID-19 positive or PUI status necessitated the use of additional PPE, such as face shields, gowns, and hair coverings. Policies to minimize staff contact with PUI or positive patients by delaying screening were made also. Additionally, test results were communicated to parents and guardians via telephone rather than in-person communication.

Early on, institutions implemented strict guidelines governing visitors' entrance into the hospital, allowing the mother of the baby and only one support person. No other visitors were allowed during the COVID-19 Pandemic. This practice required modifications to new born hearing rescreening practice to meet regulations. The following procedures were developed to reinstitute two week rescreens:

- Only one parent was allowed to accompany the infant to the hearing rescreen;
- Masks were required to be worn at all times in the hospital;
- Parents were called with the following screening questions the night prior to their appointment:
  - Have you had any household contact with a COVID-19 positive patient?
  - Do you have any of the following symptoms – recent fever, shortness of breath, cough, sore throat, diarrhea, or vomiting?
  - Do you have a loss of taste or smell?
- No waiting was allowed in the hospital; therefore, upon their arrival for services, parents were instructed to call the hearing screening program from the car;
- Technicians met the family in the lobby where they received a temperature screen and were escorted to the hearing screening room; and
- When the screening was completed, parents were instructed on how to exit the hospital.

This process allowed for the completion of two week rescreens, with minimal contact between outpatients, newborns, and their mothers.

Summary

Providing clinical services during the COVID-19 pandemic highlighted the changes that were necessary to meet the national regulations for in-hospital newborn hearing screening while engaging hearing screening technicians at a high level of effectiveness. The managing audiologist was able to extend education, enhance communication, facilitate appropriate PPE use, and modify procedures in order to meet program requirements and maximize performance and engagement of technicians. These modifications may serve as a model for other newborn hearing screening programs and can be implemented in a timely manner, ensuring the safety of patients and staff.

References

Joint Committee on Infant Hearing. (2019). Year 2019 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs. *Journal of Early Hearing Detection and Intervention,* 1-44. doi:10.15142/fptk-b748

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CHALLENGES AND QUASI SOLUTIONS WHILE WORKING THROUGH THE COVID-19 PANDEMIC: SPEECH-LANGUAGE PATHOLOGY IN A PUBLIC-SCHOOL SETTING

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— ABSTRACT —

Providing speech-language services during the COVID-19 Pandemic proved to be challenge in all work settings; however, speech-language pathologists working in the schools experienced particular barriers to service delivery. This article will discuss some challenges experienced by speech-language pathologists working in an urban Title 1school and some solutions created to combat the challenges.

Keywords: Schools, COVID 19, Coronovirus, Service Delivery

Introduction

At the onset of the COVID-19 pandemic, speech-language pathologists in the schools were not prepared to provide services to students during school closures. Children enrolled in all special education services including speech-language therapy services have an Individualized Education Program (IEP) that defines their problem areas and includes goals and objectives specific to their individual needs. While the physical closure of schools was mandated, it did not negate that IEP requirements were to be followed and completed. Most school programs immediately transferred to distance "home" learning (video and phone conferencing). While such a service delivery model was fairly easily implemented in school settings where parents were equipped with technology and technical support, providing services in a low socioeconomic urban setting was particularly difficult. Remote service delivery presented a number of barriers clinicians were required to overcome in order to meet the requirements of the IEP.

This article will focus on challenges to remote service delivery experienced by the speech-language pathologist in a school within a greater urban setting. The school is a primarily African American and Hispanic Title 1 school whose students' progress in mathematics and reading has been noteworthy. A Title 1 school is defined as a school that has a large concentration of low-income students as determined by the number of students receiving free and reduced lunches (USLegal, 2020). In addition, the parents of the children in this school are primarily employed in the service industry which means they were essential workers during the pandemic. Some families resided in a section of the city that experienced a high incidence of COVID-19 cases and which was classified as a "hot spot."

The purpose of this article is to examine the impact that the COVID-19 Pandemic had on service delivery to students who live and learn in this environment. Information relative to issues regarding distance "home" learning (DHL), parental involvement, and groups with little to no success using this process will be discussed.

Discussion

What are the issues relative to access to services via distance "home" learning (DHL)?

Challenges: The speech-language pathologist who served this school encountered a number of barriers upon implementing DHL in the school. Barriers to successful DHL included, but were not limited to, parents failing to answer calls from the clinician, fearing that the calls might have been from Immigration Services; the presence of a language barrier between parents and clinicians; competing interactions with clinicians for students who were receiving a number of different services; and insufficient quantity or quality of devices in families where there were multiple children. Perhaps most significant was that some families had no access to technology and were not able to engage in DHL.

Quasi Solutions: After the clinicians realized that parents were avoiding calls, it was determined that the school secretary who was fluent in Spanish would make introductory calls to the parents. This procedure improved access, and families felt more comfortable engaging in conversation with the clinician. To deal with the overwhelming number of services, including speech-language treatment, a point-person was designated by the school to call parents and arrange/coordinate services from multiple providers. Finally, parents were encouraged to make a schedule and prioritize access to devices based on the schedule, and the clinicians utilized that schedule, providing services outside the "school day schedule" when necessary. For families with limited to no access to technology (e.g., internet, hot spots, devices), enrichment packets were developed and made available for parents, and the clinician then followed up with weekly contact via telephone. Some families found creative ways around their limited internet accessibility. For example, one family drove to a commercial parking lot to access the internet from the car in order for speech-language services to occur.

How is Parental/Family Involvement Maximized?

Challenges: Because school closed suddenly, parents were confused, apprehensive and overwhelmed by the need to be an educator or an educator assistant. They were not used to being so involved in the speech-language pathology services of their children. On the other hand, the speech-language pathologist was challenged by the need to deliver services via an unfamiliar medium and to small children on a tablet or phone. Further, the clinician was charged with a myriad of additional responsibilities by default to assist the families (e.g., technical support, administrative assistant, counselor/social worker) in dealing with overall difficulties.

Quasi Solutions: The clinician used the assistance of parents and older siblings as a part of the treatment process. Engaging other family members resulted in more parental and family understanding of the child's speech-language challenges. There were conversations during and after each session, and the entire family became a part of the treatment process. Parents began to understand the role that speech-language plays in the everyday life and academic success of their children. For example, as a component of the engagement, a parent took her child on a nature walk during the DHL therapy session with the speech-language pathologist. The clinician was able to observe an increase in questions and comments between the parent and the student. This prompted the clinician to develop virtual museum and aquarium visits as a part of therapy sessions to give students a more realistic view of being in the community and using functional and descriptive language. The clinician realized that being invited into the home, albeit by technology, opened the door to new opportunities. The clinician assisted the families with problem-solving and was the empathic and compassionate listener to whom the parents could turn. These interactions supported the role of the clinician in speaking to the needs of the student in a way that was not possible when services were delivered exclusively in the school.

Who are the groups where there is little to no success?

Challenges: For this speech-language pathologist, DHL was not successful for children who were on the lower end of the autism spectrum and those who were nonverbal. It was also not successful for preschool children whose parents or other family members were not involved in the treatment process via DHL. The speech-language pathologist also discovered that when students' IEPs were very specific and written for communication in the school, these students were less successful with DHL.

Quasi-Solutions: The clinician found that when working with children on the lower end of autism

spectrum and those who were nonverbal, it was best to develop activities for parents to do at home and use DHL or telephone calls to follow up. Success in meeting IEP goals was enhanced by utilizing parents as clinicians for children who needed treatment parameters that are as direct as possible. The direct approach also had some success with the students whose parents were not involved in direct treatment. In those instances, the clinician experienced some success in achieving IEP goals by giving the parents/family the tools to use and to continually check-in regarding challenges and progress. Finally, when IEPs were written for the school setting and were not implementable in the home, the clinician had little means to address the goal.

Summary and Recommendation

The COVID19 pandemic required a new perspective for the delivery of school-based speech-language service in an environment created by a disease for which we still have little understanding. The clinician associated with this school was able to identify challenges and develop strategies to respond that assisted her students in meeting IEP goals through DHL.

The challenges and quasi-solutions listed have had the unforeseen outcome of identifying potential problems with traditional IEPs. IEPs might be more beneficial to students if they had components emphasizing success in daily living for home and school. Such a focus would extend communication beyond the classroom and would make the IEP more effective and address the growing need for goals to be realistic and address functional life experiences.

References

USLegal. (2020). Title 1 *School Law and Legal Definition*. Retrieved from USLegal: https://definitions.uslegal.com/t/title-1-school/#:~:text=A%20title%201%20school%20is,in%20meeting%20student's%20educational%20goals

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PATIENT SAFETY FOR AUDIOLOGISTS AND SPEECH-LANGUAGE PATHOLOGISTS DURING THE COVID-19 PANDEMIC

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— ABSTRACT —

To keep patients safe during the COVID-19 pandemic, changes are being made to clinical environments, service delivery is being provided via telepractice, and wearing personal protective equipment (PPE) is now part of the norm. This article will focus on maintaining the safety of patients, speech-language pathologists and audiologists during evaluation and treatment sessions. Necessary changes to clinical spaces will be highlighted, as well as issues that should be addressed or considered that will reduce medical errors and adverse patient safety events.

Keywords: Safety, Patient Safety, COVID-19, Coronavirus, Medical Errors

Introduction

The COVID-19 pandemic requires audiologists and speech-language pathologists to ensure the safety of patients during a time when knowledge about the virus changes frequently. Patient safety includes preventing, reducing, reporting and analyzing medical errors that lead to an adverse health care event that affects patients (Donaldson, 2008). During this COVID-19 pandemic, concerns regarding how clinics will operate safely and efficiently, how institutions will protect employees, and how clinicians will safely deliver services to individuals are paramount. Considerations for modifications and enhancements span physical spaces, personal protective equipment (PPE), as well as assessments of the physical and mental health status of service providers.

This article will focus on the parameters of patient safety while delivering services via in-person and telepractice formats. Several barriers to clinical service delivery that impact patient safety will be discussed. These challenges require modifications to clinical environments, using interpreters, new born hearing services, feeding assessment and treatment, administration of standardized assessment tools,

cultural humility, and provider mindfulness and wellbeing.

Discussion

The ever-changing information about COVID-19 challenges institutions to be adequately prepared to deliver services safely. The information that follows describes seven issues that impact patient safety and strategies to address them.

Issue: Clinical environments need to be safe and clean.

Patient Safety Challenge: Keeping the environment safe and clean between patients is a requirement. There are new guidelines, and regulations for patient safety during the COVID-19 pandemic issued in all 50 states. Safety is at the center of patient care during this pandemic experience. Maintaining health and safety is paramount to the clinical process for the patient and the clinician.

Clinicians can use the following strategies to maximize effective safe service delivery:

- Stay updated on COVID-19 guidelines from the Infectious Disease department or Occupational Health department;
- The use of appropriate PPE (i.e., N95 masks, goggles, face shields or powered air purifying respirators (PAPR) is very important. Practice universal precautions and wear N95 masks and goggles for all evaluations, given the risk of assessing an asymptomatic COVID-19 patient;
- Modify waiting rooms to accommodate social distancing; and
- Clean and disinfect equipment, toys, clinical materials and all exposed surfaces between patients.

Issue: Interpreters are needed in-person and via telehealth to aid appropriate service delivery.

Patient Safety Challenge: Clinicians, patients and interpreters are each in different places using a telehealth platform.

Clinicians can use the following strategies to ensure that services are delivered efficiently and effectively:

- Calibrate the interpreter's and provider's roles to ensure consistency in this venue;
- Monitor discussions and treatment activities to maintain patient centered care;
- Minimize miscommunication by coordinating turn-taking during interpretation;
- Recognize that wearing a mask reduces the ability to see faces and read lips. Messages may need to be repeated and/or paraphrased to maximize understanding; and
- Create an environment in which everyone involved is comfortable restating what was heard and checking for clarification.

Issue: Audiologists need to provide newborn hearing screening services.

Patient Safety Challenge: During the COVID-19 Pandemic, regulations regarding newborn hearing screenings are not waved. Stay home orders greatly influenced parents' compliance with follow-up.

Audiologists providing newborn hearing screenings can use the following strategies to maximize effective service delivery.

- Develop a plan with social distance and infection control measures in place;
- Ensure that parents and providers adhere to social distancing and PPE requirements;
- Communicate with parents to ease discomfort with bringing newborn babies into health care settings; and
- Minimize negative impact on quality of life by informing parents about the value of early detection and management of hearing loss.

Issue: Feeding assessment and treatment are essential during the Pandemic.

Patient Safety Challenge: Evaluation and treatment of feeding difficulties during the COVID-19 Pandemic are essential services. Individuals who present with feeding and swallowing problems need to have their skills assessed.

Clinicians will implement the following strategies to ensure safe service delivery:

- State clear recommendations regarding intervention and diet modifications;
- Execute clinical services safely and expeditiously;
- Conduct bedside clinical evaluations using appropriate PPE and observing social distancing requirements;
- Avoid conducting feeding and swallowing evaluations remotely;
- Administer instrumental assessments while wearing appropriate PPE. Protecting the clinician is particularly important while executing aerosol generating procedures in which the patient emits droplets (ASHA, 2020).

Issue: Administration of standardized assessment tools in-person and via telepractice.

Patient Safety Challenge: The conditions under which the assessment tools were developed did not include SLPs wearing masks, engaging in social distancing nor were they administered via telepractice.

Clinicians can employ the following strategies when administering standardized assessment tools:

- During in-person interactions, the clinician and patient need to be protected, so each should wear PPE and maintain safe social distancing during the appointment;
- Recognize that masks – reduce visibility of the mouth and face as well as facial expressions – increase speech sound distortions and miscommunications;
- Administration of assessments via telepractice require clear audio and visual connections;
- Document all behaviors exhibited by the patient/client and any modifications made by the clinician;
- Make clinical decisions regarding which parts of the assessment will be omitted and conducted later under different circumstances, documenting the rationale for these clinical decisions;
- Avoid misdiagnosing the patient due to nonstandard administration of tests;
- Maintain confidentiality when others are present in the clinician's work/home environment; and
- While most states and health insurance providers have waived HIPPAA prosecution for telehealth during the pandemic, clinicians must maintain patient privacy.

Issue: As service delivery changes, clinicians need to exhibit appropriate cultural humility with patients.

Patient Safety Challenge: During the COVID-19 Pandemic, clinicians are providing services in new venues with unfamiliar restrictions. Delivering services without considering patients' culture can lead to misdiagnoses, mistreatment, and less than ideal patient outcomes.

Clinicians can use the following strategies to maximize culturally appropriate service delivery:

- Use culturally appropriate programs, materials, and techniques;
- Verify any cultural practices that are valued by the family that may impact outcomes;
- Explicitly discuss cultural and linguistic differences; and
- Be knowledgeable about cultural and linguistic differences as well as interactions that impact communication.

Issue: The mindfulness and wellbeing of audiologists and speech-language pathologists is important for service delivery.

Patient Safety Challenge: Mindfulness is compromised by factors such as stress and fatigue, which contribute to patient safety, resulting in the likelihood of adverse health care events (Scott, Roger, Hwang & Zang, 2008; Robinson, Ambrose, Gitman, & McNeilly, 2019). Clinicians work long hours and are anxious about how the virus can affect them and their families. The COVID-19 pandemic has led to increased stress, fatigue and anxiety in all health care providers, including audiologists and speech-language pathologists.

Clinicians can use the following strategies to maximize wellbeing to render safe and effective service delivery:

- Participate in counseling and support services offered by employers;
- Take self-care seriously and recognize when breaks, meditation and/or mindfulness is needed;
- Reduce prolonged hours when working remotely; and
- Engage in activities to create a work-life balance.

Summary

Patient Safety is always a priority for health care providers and the COVID-19 pandemic added several additional challenges to maintaining safety as audiologists and speech-language pathologists delivered services to individuals. The challenges and strategies for effective and safe clinical service delivery addressed in this article include modifying clinical environments, using interpreters, newborn hearing services, feeding assessment and treatment, administration of standardized assessment tools, cultural humility, and provider mindfulness and wellbeing. Audiologists and speech-language pathologists that employ these strategies will experience safe and effective service delivery facilitated by appropriate use of PPE and infection control procedures. Clinician's will gain knowledge of strategies that maximize successful patient outcomes with cultural humility, and awareness of mindfulness and strategies to reduce stress and fatigue, which are exacerbated during this pandemic.

References

American Speech-Language-Hearing Association (2020). ASHA guidance to SLPs regarding aerosol generating procedures. Available at: https://www.asha.org/slp/healthcare/asha-guidance-to-slps-regarding-aerosolgenerating-procedures/. Accessed June 15, 2020.

Donaldson, M.S. (2008). An overview of To Err is Human: Re-emphasizing the message of patient safety. In R.G Hughes (Ed.) Patient safety and quality: An evidence-based handbook for nurses. Rockville: Agency for Healthcare Research and Quality.

Robinson, T., Ambrose, T., Gitman, L. and McNeilly, L. Patient Safety in Audiology. (2019). Otolaryngologic Clinics in North America, Patient Safety and Quality Improvement. 52.1.

Scott, L.D., Roger, A.E, Hwang, W.T. & Zang, Y. (2006). Effects of critical care nurses' work hours on vigilance and patients' safety. American Journal of Critical Care, 15 (1), 30 – 37. http://ajcc.aacnjournals.org/content/15/1/30.full.pdf+html. Retrieved June 22, 2020.

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COVID-19: UPHOLDING PROFESSIONAL ETHICS IN THE MIDST OF A GLOBAL HEALTH PANDEMIC

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— ABSTRACT —

This article is intended to provide examples of how the ASHA Code of Ethics should help inform practice dilemmas and challenges that clinicians, educators, mentors, researchers, supervisors and administrators may encounter as a consequence of the current global health pandemic – COVID-19.

Keywords: Ethics, COVID19, Coronovirus

Introduction

The current health pandemic has caused the public to live and work in unprecedented ways. The coronavirus has led to disruptions and changes in all facets of our lives. Social distancing, personal protective equipment, quarantining – have all been challenging consequences of COVID-19. As a result, speech-language pathologists and audiologists have been presented with questions and decisions likely never faced before in the course of service delivery, teaching, administration, supervision or research. As professionals in communication sciences and disorders continue to tread in uncharted waters, upholding ethical principles is paramount in clinical, pedagogical, administrative and research practices. The Code of Ethics, being the guide that directs and governs professional conduct should always be held paramount. However, while most professionals adhere to the standards framed in the professions' code of ethics, there are instances where individuals find themselves in circumstances where judgment is compromised, and unethical behaviors are displayed. It is imperative, that despite the challenging circumstances that this pandemic may present, the responsibility to adhere to the established Code remains vital.

Audiologists, speech-language pathologists, and speech-language and hearing scientists must adhere to the ASHA Code of Ethics (ASHA, 2016) https://www.asha.org/Code-of-Ethics/ and are governed by the four principles that follows:

Principle I	Responsibilities to persons served professionally
Principle II	Responsibilities for one's professional competence
Principle III	Responsibilities to the public
Principle IV	Responsibilities involving interprofessional and intraprofessional relationships

The purpose of this article is to share examples of ethical dilemmas that can be encounter during this COVID 19 pandemic.

Examples

Principle I Responsibilities to persons served professionally

Scenario: Carla is a speech-language pathologist employed by a regional medical center. She is currently working from home due to the COVID-19 Pandemic. Her caseload includes a patient with traumatic brain injury and is emotional labile. Carla's supervisor instructed that all clinicians apply the added levels of information security to hospital-issued devices before remote work would be approved. Hastily, Carla did not obtain the proper devices before leaving her work site, and elected to use her personal computer to conduct a session with this patient instead. Regrettably, personal identifiable information about Carla, and this patient, was accessed when her computer was hacked.

Problem: Confidentiality and security of patient records have been compromised.

Possible violation of: Principle I (Rules N, O, and P).

Principle II Responsibilities for one's professional competence

Scenario: Dr. Jones is a junior-faculty member who intends to be reviewed for promotion during the next academic year. Completion of current research is critical to maintaining the grant and publication goals he has established. As a result of the pandemic, his institution's Institutional Review Board (IRB) has required that all previously approved research meeting certain requirements be suspended. Dr. Jones' research falls in that category. Dr. Jones only needed to complete data collection with two more subjects, so he elected to proceed just before his local jurisdiction issued a "stay-at-home" order. This would allow him to move forward with data analysis while quarantining, and therefore, remain on schedule with completing the study and submitting a manuscript for publication.

Problem: There was lack of compliance with institutional regulations that address research with human participants.

Possible violations of: Principle II: (Rule C).

Principle III Responsibilities to the public

Scenario: Due to COVID-19, Christian is providing LSVT voice therapy via telehealth because his typical case load has been reduced, and he needs to supplement his income. He has not been trained in LSVT voice therapy, but has convinced his patients that he can do this without the necessary instrumentation.

Problem: This speech-language pathologist is not competent to provide these services.

Possible violation of: Principle III (Rules A, B, and C).

Principle IV Responsibilities involving interprofessional and intraprofessional relationships

Scenario: During this COVID-19 pandemic, the rehabilitation and assistive-living facility has been understaffed. Many rehab professionals have been furloughed indefinitely, including speech-language pathologists, occupational therapists, and physical therapists. Kelli, a speech-language pathology clinical fellow, is thankful to remain on staff, but has been asked to cover a larger number – and more complex cases since the furlough. She has also been asked to assume responsibilities that an OT would normally cover, when the part-time OT is not present. Kelli believes she is being asked by the rehab director

and her immediate supervisor to cover cases for those who have been furloughed, who earn a higher salary in order to save the facility costs. Kelli's housemate is a nurse at a local hospital. She has had to borrow personal protective equipment from her since the rehab unit does not provide the necessary resources when she sees patients (e.g., swallowing screening). Kelli feels pressured to see patients for whom she has insufficient training and limited supervision, that are out of her scope of practice, and in an unsafe environment. She fears she will lose her job if she refuses seeing higher number of patients and more complex cases.

Problem: The immediate supervisor has abused his authority.

Possible violation of: Principle IV (Rules A, B, D, G and I).

Summary

These examples are just a few of the many scenarios that may emerge during this COVID-19 pandemic. Clinicians should be mindful of and adhere to the ASHA Code of Ethics. Each clinical activity, teaching experience, mentor-mentee relationship, research activity, supervisory encounter and administrative decision must uphold the ethical principles that guide our professions.

References

American Speech-Language-Hearing Association. (2016). *Code of ethics* [Ethics]. Available from www.asha.org/policy/. Retrieved June 15, 2020/

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COVID-19 RACIAL-ETHNIC DISPARITIES SHOULD NOT BE A SURPRISE: SO WHAT NEXT?

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Many have heard the old saying that "when white folks catch a cold, black folks get pneumonia". Although it is unclear who this classic saying should be attributed to, most know what it means and how it relates to COVID-19. On April 7, 2020 Dr. Anthony Fauci, Director of the NIH National Institute of Allergy and Infectious Diseases (NIAID) and head of the White House Coronavirus Task Force stood before the nation and introduced some to the plight of African American health and the longstanding disparities that exist. For some this was breaking news. I was not in that number.

Anyone who understands even the basics of health disparities in the US would have predicted the racial-ethnic disparities in COVID-19. African Americans have been devastated by the disease at much higher rates than their White American counterparts. Even though African Americans make up less than 13% of the US population, they represent roughly 25% of deaths where the racial-ethnic background is known.1 But this should not have come as a surprise. Once outcomes information started emerging from China, healthcare providers in the US knew African Americans would suffer disproportionately. For example, early mortality studies in China indicated the presence of comorbid conditions was the primary contributing factor to death.2 In the US, rates for conditions like hypertension, heart disease and high cholesterol are far higher among African Americans making their impact in patients with COVID-19 expected. But it also raises a longstanding question of "Why can't we close the racial-ethnic gap?".

In order to understand the "Why racial disparities" question one must look no further than a statement Dr. Fauci made in the April 7, 2020 White House Coronavirus Task Force press conference as he was explaining health disparities in America. In the midst of dealing with the staggering COVID-19 death tolls he explicitly said "There is nothing that we can do about that now" regarding the obvious COVID-19 racial disparities. As I listened intently to his discussion, I understood the current priority should be saving the lives of thousands of Americans on ventilators and near death nationwide. Yet, I was saddened at some level because my instincts told me "here we go again; there is no plan to address this issue." Nothing has changed since that press conference and the discussions of the COVID-19 racial-disparities have quieted dramatically as the number of deaths have declined across the country and particularly in the original US epicenter of COVID-19; New York City.

I have grave concerns about COVID-19 because racial-ethnic differences in health outcomes are not going away. COVID-19 is a disease that has again unmasked the disparities in health outcomes and has the potential to widen the gulf that currently exists between African Americans and White Americans. We know very little about how to treat COVID-19 successfully and consequently we do not know the long-term effects of the condition. Even more concerning is that shelter-in-place mandates are being relaxed as of June 2020 and an immediate uptick in cases has been observed. Concurrently, COVID-19 experts are predicting a major wave of COVID-19 in the Fall of 2020. Thus, the negative consequences for the African American community are concerning. More importantly it is clear the current disparity in deaths is of low priority and concern to those at the highest levels. One must look no further than the unwillingness of the Centers for Disease Control and Prevention (CDC) to collect race-related data in the first few months of the pandemic as evidence.

There are at least three things that African Americans can do immediately. First, **control the messaging and try to get it right the first time**. The African American community must take the lead in this area and not allow the uninformed and uncon-

cerned to misrepresent or spin the message. Mixed messaging can have a devastating impact on health outcomes. This is concerning because a recently published study found: a) African Americans are more likely to be exposed to COVID-19 or know someone exposed who has been infected than Whites, b) African Americans have less accurate knowledge about COVID-19 than Whites, and c) African Americans are more likely to leave their homes as many work in the public service sector, use public transportation and are less able to telecommute (Alsan, Stantcheva, Yang, & Cutler, 2020). At the same time, deceptive information, inaccurate information and false information has eroded the trust of national officials and the information they provide (Parnet & Paul, 2020). Ultimately, information issues impact those most vulnerable to the disease condition.

Early in the pandemic there were unsubstantiated rumors that "Blacks couldn't get COVID-19." Social media users perpetuated this rumor weeks into reports of staggering death tolls in New York from COVID-19. This myth was not unmasked until famed British actor Idris Elba, who is of African descent, was diagnosed with COVID-19 and made a public plea to quell these unfounded rumors. Shortly thereafter, African American NBA star Donavan Mitchell of the Utah Jazz along with his Frenchman teammate Rudy Gobert were diagnosed with COVID-19 abruptly ending the NBA season. Since then African American stars from the NBA (Kevin Durant, Marcus Smart) and NFL (Von Miller, Ezekiel Elliot) have also announced testing positive. It is unclear how early reports of African Americans being immune to the disease impacted treatment seeking behaviors. What we should all be clear about is there are few if any health conditions where African Americans are immune or have better health outcomes. As in the opening of this commentary, African Americans should expect to get pneumonia when our White counterparts get a cold. COVID-19 is no different.

Second, **strike while the iron is hot**. There is no better time to address the issue of health disparities in America. Collectively, the worldwide pandemic, the significant racial-disparities in COVID-19 mortality and the civil unrest related to police shootings and brutality have magnified the longstanding systemic racism that exists in America. African Americans have the country's attention. Yet, this focus on the African American community can be very short-lived as those external to the Black Lives Matter movement seek to disband the movement by passing a myriad of legislation such as defining the movement as a domestic terrorist organization. As time passes, Americans will want to transition back to their pre-pandemic lives. Many will return to work normalcy and engagement in protests will likely subside. At the same time, those African Americans who have been: 1) employed during the pandemic, 2) exposed to greater to COVID-19 and 3) have not been compensated for the additional risk (McCormack, Avery, Spitzer & Chandra, 2020), will be forgotten despite their contributions when others were safe at home. Similarly, their "essential worker" status ultimately placed their families at-risk, and the long-term impact to their communities at large is unclear. Consequently, now is the time to force the issue of health disparities to the forefront and demand a focused solution to the problem.

As a scientist and health professional, I definitely understood Dr. Anthony Fauci's comment in the April 7th press conference where he noted; "There is nothing that we can do about that now" as thousands of Americans were losing their lives to COVID-19 and the focus had to be on preservation of life. But I respectfully disagree that there is nothing that we can do now. The real question is "Does America really want to do anything about it?" If so, a critical first step would be to create a systematic and programmatic approach that involves research, clinical practice, education and relevant stakeholders, to address this issue and with adequate funding to do so.

However, any such plan to improve health disparities must extend beyond traditional approaches designed to tackle the social determinants of the health that are believed to drive them. America must first ask whether it has any interest in the "moral determinants of health" or the values one decides are the foundation for good health. Moral determinants of health must be based on the premise that the country is committed to and can depend upon one another (shared responsibility) to ensure that all Americans are provided the circumstances necessary to achieve good health in the same way that the nation can depend upon one another to ensure we have the world's best national defense (Berkwick, 2020). In the absence of such a commitment, health disparities will persist because it is well established that well-meaning people disagree on approaches to improving health conditions among African Americans and other health marginalized populations who experience worse health than the rest of the nation (Berkwick, 2020). But only time will answer the question of whether America wants to improve health disparities or whether America has the moral fortitude to organize the necessary resources to do so.

Third, **understand right now, we are not all in this together**. In an American Public Health Asso-

ciation podcast aired June 10, 2020, Dr. Chenjerai Kumanyika of Rutgers University stated:

"I think that this idea of kind of being all in this together and shared sacrifice, that we're a common community who kind of shares these burdens, it's really deeply appealing." ……. "I think the problem with that framing of shared sacrifice or we're all in this together is that it's actually a way of trying to find hope that hurts the most vulnerable, because really it's actually totally false."

He further notes that COVID-19 has impacted the most vulnerable communities that are primarily black and brown racial-ethnic minorities, people in poverty, women and frontline essential workers (American Public Health Association, 2020). At the same time, these are primarily the same individuals who are most likely to experience disparities in most health outcomes (Williams, Lawrence & Davis, 2019), most likely to be infected by COVID-19 (Alsan, Statcheva, Yang & Cutler) and most likely to die of COVID-19 (Yancy, 2020).

There is more obvious evidence that we are not in this together that relates wearing a mask in public to reduce the spread of COVID-19. Mask wearing, which has been established as a primary way to reduce infection rates, has become so politicized that the nation is divided on this one issue even in the middle of a pandemic when COVID-19 rates continue to increase. This one issue highlights the deep divide that exists in the US when it comes to health. This is evidence that many in this country value their "rights, freedoms and privileges" that allow them to not wear a mask, over and above common human decency to protect those around them. As a nation we should be concerned, and as an African American I'm even more concerned. We seem to be in the season where Americans value their own preferences that are frequently informed by the news, social media, the internet and their own gut instincts over and above science and health professionals (Permet & Paul, 2020). Despite these challenges, we must move forward to address COVID-19 and remember our moral obligation to address the social determinants of health that has magnified the impact of this disease. If not for ourselves, then for future generations, those who can't and even for those who won't.

References

Alsan, M., Stantcheva, S., Yang, D. & Cutler, D. (2020). Disparities in coronavirus 2019 reported incidence, knowledge, and behavior among US adults. *Journal of the American Medical Association Network Open*, 3, e2012403. doi:10.1001/jamanetworkopen.2020.12403.

American Journal of Public Health (2020). Are we in this pandemic together? (podcast). Available at: https://ajph.aphapublications.org/pb-assets/podcasts/AJPH_July2020_Podcast_transcript-1591884557367.pdf.

Berkwich, D.M. (2020). The moral determinants of health. *Journal of the American Medical Association*, doi:10.1001/jama.2020.11129.

McCormack, G., Avery, C., Spitzer, A.K-L., & Chandra, A. (2020). Economic vulnerability of households with essential works. *Journal of the American Medical Association*, doi:10.1001/jama.2020.11366.

Parmet, W.E. & Paul, J. (2020). "COVID-19: The First Posttruth Pandemic.". *American Journal of Public Health*, 110(7), pp. 945–946. doi: 10.2105/AJPH.2020.305721.

Williams, D.R., Lawrence, J.A., & Davis, B.A. (2019). Racism and health: Evidence and needed research. *Annual Review of Public Health*, 40:105-125. doi.org/10.1146/annurev-publhealth-040218-043750.

Yancy, C.W. (2020). COVID-19 and African Americans. *Journal of the American Medical Association*, 323(19):1891-1892. doi:10.1001/jama.2020.6548.

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