

# Case Study:

# Team Helps Young Stroke Survivor Return to Living Alone

SIG 2: Neurogenic Communication Disorders

## Summary

A 38-year-old woman had a stroke that resulted in aphasia and some physical limitations. Her treatment team developed an interprofessional plan to target community access and support communication so that both she and her family were confident that she could live by herself again.

## **Patient Info**



## **Current Diagnosis:**

**Aphasia** 

## **Meet The Team**



Speechlanguage pathologist (SLP)



Occupational therapist (OT)



Physical therapist (PT)



Social worker (SW)



Neuroophthalmologist



Physiatrist



Patient



Family: sister



# **Background**

Kanika is a 38-year-old right-handed woman who was working as a social media coordinator for an international organization when she had a stroke in early June. Prior to the stroke, Kanika lived alone and frequently saw her sister and nieces, who lived in a nearby state. Her apartment is on the second floor, and there is no elevator. She enjoyed socializing with friends at great restaurants, taking group exercise classes at the gym near her home, and traveling on the weekends. She spoke English as her first language but was fluent in French, which she used frequently in her work. She drove to most places she went to but would sometimes take the subway or a ride share accessed from her smart phone. She did not have any trouble with her vision or hearing and did not have any functional physical limitations. She thought of herself as active and healthy.

A few months into the pandemic, Kanika noticed some respiratory symptoms and mentioned to her friend that she was concerned about COVID-19. A few days later she was video chatting with her sister when she suddenly developed difficulty talking and moving her right arm. Her sister called 911 and Kanika was transported by ambulance to a nearby hospital where an MRI revealed a left-hemisphere ischemic stroke consistent with those seen in young COVID-19 patients. Kanika received tPA, a clot-busting medication, and was admitted to acute care. She tested positive for COVID-19. Once medically stable, Kanika was transferred to inpatient rehabilitation but was discharged after only a few days—even though she had significant aphasia—because she was able to walk with close supervision. Her sister came to stay with her in Kanika's home at discharge. Kanika began outpatient rehabilitation in an interdisciplinary day treatment program once she was no longer testing positive for COVID-19 with the goal of returning to independent living.

In the days following the stroke, Kanika was appreciative of her sister's help but wanted to be alone. She was worried about what would happen to her job if her aphasia did not resolve, and how she would be able to financially support herself if she was not able to work. Kanika's sister had concerns about Kanika's safety as she moved through her daily routines. She noticed that Kanika needed assistance with tasks that required both hands and with walking longer distances, and she wasn't sure if Kanika's vision had changed or if she was having trouble reading because of the aphasia. Her sister understood that Kanika's independence was a part of her personal identity and that Kanika felt overwhelmed and uncertain about the future.

# **How They Collaborated**

The treatment team met and discussed their assessments to develop a plan to help Kanika reach her goal of living alone. Kanika and her sister attended this meeting, asking questions and offering additional background throughout the discussion. The team set a plan for the SLP and OT to target communication during routine tasks in the community and instrumental activities of daily living (IADLs) requiring reading and typing. OT and PT would collaborate on increased endurance for community mobility, like climbing stairs while carrying things. The OT would team with the neuro-ophthalmologist to implement strategies to address a right visual field deficit that all the team members would reinforce. The social worker would partner with the family to work on short-term disability and preparation for long-term disability to allay concerns about finances.

The team developed a list of activities at home and in the community for Kanika and her sister to practice on days when Kanika did not come to therapy and over the weekend. They agreed on a strategy that her sister would step in to help only if Kanika asked for assistance or if there was an imminent safety risk; otherwise, Kanika requested an opportunity to problem-solve obstacles on her own. Kanika would keep notes on her iPad and bring them to therapy to keep the team informed of her challenges and successes.



## **Outcome**

Kanika was highly motivated and worked hard in all of her therapies and practice assignments outside of therapy. After 3 weeks of the day program, her aphasia and apraxia improved, and she became proficient in using communication support. She developed and practiced a script to let others know about aphasia and to advocate for her own communication needs, like asking her communication partner to slow down and requesting that her partner give her time to respond. She used technology tools such as screen readers, templates, voice dictation, and word prediction to read and send emails and text messages to friends and family as well as to schedule appointments and access her medical portal. She was able to walk from the subway station in her neighborhood and up the apartment steps to her home carrying a bag in her left hand and her purse on her right shoulder. She used visual strategies consistently to make sure she had seen everything in her right field of vision in the community. Both Kanika and her sister reported decreased stress related to her financial status once short-term disability was established, and they had a long-term disability plan in place with Kanika's employer.

## **Ongoing Collaboration**

The weekend before her last week in the day program, she stayed alone in her apartment over the weekend with her sister checking every 4 hours on the first day and every 8 hours on the second day. The team reviewed how both Kanika and her sister thought the weekend went and spent the last days of the program challenging Kanika's skills through community access to unfamiliar locations. At the time of completion of the day treatment program, Kanika and her family agreed that (a) Kanika was ready to return to living independently with frequent check-ins and supervision for complex tasks like financial management and (b) Kanika would continue to participate in single-service outpatient speech-language therapy and complete a follow-up appointment with her physiatrist 1 month after discharge from the program.

# Case Study:

# **Team Helps Young Stroke Survivor Return to Living Alone**

SIG 2: Neurogenic Communication Disorders

## **Patient Info**



## **Current Diagnosis:**

**Aphasia** 

## **Meet The Team**



Speech-Od language the pathologist (SLP)



Occupational therapist (OT)



Physical therapist (PT)



Social worker (SW)



Neuroophthalmologist



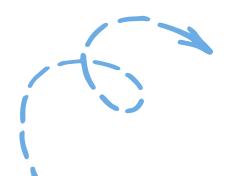
Physiatrist



**Patient** 



Family: sister



### **History and Concerns**

(Share key information gathered from team)

Kanika is a 38-year-old right-handed woman who was working as a social media coordinator for an international organization when she had a stroke in early June. Prior to the stroke, Kanika lived alone and frequently saw her sister and nieces, who lived in a nearby state. Her apartment is on the second floor, and there was no elevator. She enjoyed socializing with friends at restaurants, taking group exercise classes at the gym near her home, and traveling on the weekends. She spoke English as her first language but was fluent in French, which she used frequently in her work. She drove to most places she went to but would sometimes take the subway or a ride share accessed from her smart phone. She did not have any trouble with her vision or hearing and did not have any functional physical limitations. She thought of herself as active and healthy.

A few months into the COVID-19 pandemic, Kanika noticed some respiratory symptoms and mentioned to her friend that she was concerned about COVID-19. A few days later she was video chatting with her sister when she suddenly developed difficulty talking and moving her right arm. Her sister called 911 and Kanika was transported by ambulance to a nearby hospital where an MRI revealed a left-hemisphere ischemic stroke consistent with those seen in young COVID-19 patients. Kanika received tPA, a clot-busting medication, and was admitted to acute care. She tested positive for COVID-19. Once medically stable, Kanika was transferred to inpatient rehabilitation but was discharged after only a few days—even though she had significant aphasia—because she was able to walk with close supervision. Her sister came to stay with her in Kanika's home at discharge. Kanika began outpatient rehabilitation in an interdisciplinary day treatment program once she was no longer testing positive for COVID-19 with the goal of returning to independent living.

### **History and Concerns**

(Share key information gathered from team)

In the days following the stroke, **Kanika** was appreciative of her sister's help but wanted to be alone. She was worried about what would happen to her job if her aphasia did not resolve, and how she would be able to financially support herself if she was not able to work. Kanika's sister had concerns about Kanika's safety as she moved through her daily routines. She noticed that Kanika needed assistance with tasks that required both hands and with walking longer distances, and she wasn't sure if **Kanika**'s vision had changed or if she was having trouble reading because of the aphasia. Her sister understood that Kanika's independence was a part of her personal identity and that Kanika felt overwhelmed and uncertain about the future.

#### **Assessment Plan**

(Determine roles/

The interprofessional team at the day treatment program was led by the social worker (SW) who served as the case manager and included an SLP, an OT, and a PT with medical guidance from the physiatrist who managed Kanika's care during inpatient rehabilitation. After reviewing Kanika's inpatient rehabilitation medical records and notes from the social worker's initial discussion with Kanika and her sister when planning admission to the day treatment program, the team developed a skilled therapy assessment plan for each team member:



**SLP -** Comprehensive motor speech and aphasia assessment



OT - Fine-motor skills and for activities of daily living



PT - Balance, strength and endurance when walking home and community distances, climbing stairs



**SW/case manager -** Ethnographic interview with Kanika and her sister focusing on current support and community access to services



**Physiatrist -** Post-stroke medical status, baseline for post-COVID complications



Neuro ophthalmologist - vision assessment



**Family member -** Sister: case history and current status information

#### **Assessment Results**

(Summarize key diagnostic results)

The key results of the individual skilled therapy assessments are as follows:



SLP - Kanika's verbal expression was characterized by agrammatic phrases with high content. Auditory comprehension was intact for conversational turns on familiar topics with familiar partners but broke down when information was abstract, when information was presented quickly, or when there were distractions present. Kanika was able to type basic biographical information and short phrases on an iPad with benefit from word prediction. Her reading comprehension was intact for simple routine information with breakdown as length and complexity increased. Kanika showed some oral groping during speech and made inconsistent placement errors. The SLP provided a diagnosis of moderate Broca's aphasia with mild apraxia.



**OT -** Kanika was able to perform most ADLs on her own with extended time despite the weakness in her right hand. She needed some help with styling her hair and applying make-up, since she was used to using her right hand. She made some errors in a simulated bill-paying task online when she typed in the wrong amount. She was able to identify her medications and fill a weekly pill organizer. She was able to use her phone to access a ride-sharing app and identified subway stops on a map for places she visited frequently. The vision screen showed that Kanika may be missing some information in her right visual field.



**PT -** Kanika showed functional balance on a dynamic assessment. She was able to walk household distances without report of fatigue or footdrop in her right leg and could climb eight steps using handrails. At the end of the assessment, the PT noticed that Kanika's overall movement was slower and more effortful, and Kanika said that she felt tired.



#### **Assessment Results**

(Summarize key diagnostic results)



**SW/case manager -** Kanika was living alone prior to the stroke and would like to do so again. She and her sister identified that, in order to live alone, Kanika would need to be able to access public transportation until she is cleared for driving, manage a full flight of stairs while carrying small items, and communicate effectively in an emergency. Her sister can support tasks such as financial and medical management.

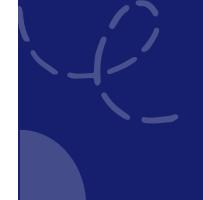


Physiatrist - Kanika was medically stable and did not report any pain or discomfort. The doctor established a baseline to monitor for long-term effects of COVID-19 such as hyperlipidemia and hypertension, neither of which were problems for Kanika pre-stroke.



**Neuro-ophthalmologist -** Based on the results of the vision screen by the OT, the physiatrist referred Kanika to a neuroophthalmologist for a full assessment. Results indicated a right upper quadrant visual field deficit.

The interprofessional team at the day treatment program was led by the social worker who served as the case manager and included an SLP, an occupational therapist (OT), and physical therapist (PT) with medical guidance from the physiatrist who managed Kanika's care during inpatient rehabilitation. After reviewing Kanika's inpatient rehabilitation medical records and notes from the social worker's initial discussion with Kanika and her sister when planning admission to the day treatment program, the team developed a skilled therapy assessment plan for each team member:



#### **Assessment Results**

(Summarize key diagnostic results)



**SLP** - Comprehensive motor speech and aphasia assessment



OT - Fine-motor skills and sequencing for activities of daily living (ADLs) and instrumental activities of daily living (IADLs); vision screen



PT - Balance, strength, and endurance when walking home and community distances, climbing stairs



Social Work/Case Manager, SW - Ethnographic interview with Kanika and her sister focusing on current support and community access to services



**Physiatrist** - Post-stroke medical status, baseline for post-COVID complications

#### **IPP Treatment Plan**

(Discuss, reflect, and modify recommendations to develop a coordinated plan)

The treatment team met and discussed their assessments to develop a plan to help Kanika reach her goal of living alone. Kanika and her sister attended this meeting, asking questions and offering additional background throughout the discussion. The team set a plan as follows:





**SLP and OT -** Communication during routine tasks in the community, IADLS requiring reading and typing





OT and PT - Increased endurance for community mobility, climbing stairs while carrying things





OT and Neuro ophthalmology - Implement strategies to address right visual field deficit





**SW and Family -** Work on securing short-term disability and prepare for long-term disability to allay concerns about finances

#### **IPP Treatment Plan**

(Discuss, reflect, and modify recommendations to develop a coordinated plan) The team developed a list of activities at home and in the community for Kanika and her sister to practice on days when Kanika did not come to therapy and over the weekend. They agreed on a strategy that her sister would step in to help only if Kanika asked for assistance or if there was an imminent safety risk; otherwise, Kanika requested an opportunity to problem solve obstacles on her own. Kanika would keep notes on her iPad and bring them to therapy to keep the team informed of her challenges and successes.

#### **Treatment Outcomes**

(Discuss results of treatment)

Kanika was highly motivated and worked hard in all her therapies and practice assignments outside of therapy. After 3 weeks of the day program, her aphasia and apraxia improved, and she became proficient in using communication support. She developed and practiced a script to let others know about aphasia and to advocate for her own communication needs, like asking her communication partner to slow down and requesting that they give her time to respond. She used technology tools such as screen readers, templates, voice dictation, and word prediction to read and send emails and text messages to friends and family as well as to schedule appointments and access her medical portal. She was able to walk from the subway station in her neighborhood and up the apartment steps to her home carrying a bag in her left hand and her purse on her right shoulder. She used visual strategies consistently to make sure she had seen everything in her right field of vision in the community. Both Kanika and her sister reported decreased stress related to her financial status once short-term disability was established, and once they had a long-term disability plan in place with Kanika's employer.

### Team Follow-Up

(Determine meetings & communication plan)

The weekend before her last week in the day program, she stayed alone in her apartment over the weekend with her sister checking every four hours the first day and eight hours on the second day. The team reviewed how both Kanika and her sister thought the weekend went and spent the last of days of the program challenging Kanika's skills through community access to unfamiliar locations. When she completed the day treatment program, Kanika and her family agreed that Kanika was ready to return to living independently. She would have frequent check-ins and supervision for complex tasks like financial management, continue to participate in single-service outpatient speech-language therapy, and complete a follow-up appointment with her physiatrist one month after discharge from the program.

## **Acknowledgement**

ASHA extends its gratitude to the subject matter expert(s) who were involved in the development of the original version of this IPP case:

Special Interest Group 2 (SIG 2): Neurogenic Communication Disorders

#### **Citations**

American Speech-Language-Hearing Association. (n.d.). Team Helps Young Stroke Survivor Return to Living Alone www.asha.org/practice/ipe-ipp/case-studies/case-study-23/

Find more case studies at https://www.asha.org/practice/ipe-ipp/case-studies/.