

Integrated occupational therapy practice case study



**ASSIGN
BUSTER**

Introduction

This report will focus on the occupational therapy (OT) process for Meera (Appendix A), a 56-year-old woman with a left cerebral vascular accident (CVA). Stroke is the death of brain cells due to the lack of oxygen (Bartels et al. 2016). It can either present as haemorrhagic or ischaemic in nature. Risk factors of CVA include hypertension and hypercholesterolemia which Meera has. Stroke may lead to neurological, psychological, speech and musculoskeletal complications. Meera's symptoms of right hemiplegia, right sided neglect and speech difficulties can be attributed to the occlusion of her left middle cerebral artery (Mtui et al. 2016).

A multidisciplinary inpatient stroke rehabilitation unit was involved with Meera's post-stroke rehabilitation. Stroke patients who underwent treatment inpatient stroke care were found to have improved independence (Stroke Unit Trialists' Collaboration 2013). Treatment was aimed at managing vital problems through restorative and compensatory approaches in order to prepare her for discharge (Edmans 2010). Thus, this service was most appropriate for Meera due to her recent onset of stroke. The OT process was guided by recommendations from the College of Occupational Therapist, National Institute for Health and Care Excellence (NICE)(2013) and Intercollegiate Stroke Working Party (ISWP)(2016)(Edmans 2010).

Assessments and Problems Identified

An initial assessment was gathered through an interview using the Kawa Model. It portrays a person's life as a river and various objects such as rocks, river banks and driftwood depict circumstances experienced by a person

(Teoh and Iwama 2015). Younger stroke patients such as Meera may require services which cater particularly to their needs which most stroke units were found not to do so (ISWP 2016). As Kawa focuses on the view of the client, it allows the therapist to know what is important to Meera in order to formulate priorities for intervention. The assessment is shown below:

Past

Medical History:

- Hypertension
- Hypercholesterolemia

Roles and Occupations:

Life flow
and
priorities
(river)

- Independent in self-care
- Proud ' Stay at home' mother
- Took charge of matters at home such as:
 - Cleaning
 - Shopping
 - Gardening
 - Laundry
- Enjoys cooking for family

Present

Medical History:

- Stroke

Roles and Occupations:

- Patient
- Needs assistance in most self-care tasks
- Loss of previous role and not engaging in occupations meaningful to her

Future

- Meera felt afraid and pointless to talk about the future, worrying that she may have another stroke if she engaged in activity.

Obstacle Occupational

and

performance challenges:

- Right hemiplegia
with increased
spasticity in right
arm and leg,
causing difficulty in:

Challenges
(rocks)

- Sitting
- Coordination
of movement
- Tasks that
require her
hands due to
being right
handed
- Unable to feel
sensations on
right hand
- Feels she cannot
remember things as
easily and may not
know the time and
place she is at
- Right sided neglect
with visual agnosia,
resulting in

difficulty :

- washing right side
- awareness of people approaching from affected side
- interacting with others
- Expressive dysphagia hinders communication with others.
- Feeling low mostly
 - Feels useless
 - Embarrassed that people are taking care of her
- Fatigues easily

Concerns

- Family unable to function as she is unable to manage

the household

- A burden to family, especially her husband who needs to manage the household together with the pressure at work now that she is in hospital
- Children's studies and social life may be affected as they may be concerned about Meera and visiting her in hospital may affect their daily life

Physical and Social Environment (river banks)

Physical (Home)

- 3 room semi-detached
- Bathroom, toilet and bedroom on the upper storey
- Kitchen, combined living and dining

room on ground

floor

- Nearest bus stop
and convenience
store 10 minutes'
walk away

Social

- Close knit family
- Meera usually
supports family
members as they
will confide her
during difficulties
- Looks forward to
dinner every day
where family will
gather together
- Family is most vital
source of support
for Meera
- Frequent
interaction with
neighbours and will
help each other
with chores if

needed

- Occasionally communicates with extended family overseas on phone

Personality

Personal resources (driftwood)

- Hardworking
- Afraid of trying new things
- Kind and caring
- Responsible

With information from the initial assessment, the problem list was formulated in a client-centred manner (ISWP 2016). Stroke survivors felt more engaged in the therapeutic process when their perspectives were taken into account (Peoples et al. 2011). Interventions were based on Meera's perceived problems in order to increase her motivation in therapy which she lacked. However the Kawa model only shows the problems perceived by Meera but not the therapist's views. In order to gather a clinical and therapeutic point of view, standardized assessments were conducted as well. The table below depicts the various assessment conducted, reasons for use, limitations and results.

| Assessment | Reasons for use and | Results |
|------------|---------------------|---------|
| | | |

limitations

Assessment of Motor and Process Skills (AMPS) (Fisher and Jones 2010) evaluates motor and processing skills of clients through observation of appropriate tasks (Fisher and Jones 2010). Self-care, specifically showering, dressing and cooking tasks which was important to Meera, were used to assess. This

allowed the
OT to break
the tasks
down and
acknowledg
e the
challenges
Meera faced
in order to
formulate
an
appropriate
intervention
. AMPS was
found to be
valid,
reliable and
standardize
d among
cultures but
results has
to be
computer
generated in
order to be

valid which
 may make
 the process
 tedious
 (Fisher and
 Jones 2010).

LOTCA Meera was
 evaluates able to
 the sequence
 orientation, tasks but
 Loewenste visual and was unable
 in spatial to complete
 Occupatio perception, tasks
 nal visual-motor involving her
 Therapy organization right field of
 Cognitive and thinking vision. She
 Assessme operations needed
 nt (LOTCA) through the prompts to
 (Itzkovich use of complete
 et al. various orientation
 2000) activities tasks.
 included in Activities
 the kit involving
 (Itzkovich et memory
 al. 2000). were also a

This allowed challenge for

the OT to her.

assess

Meera's

right sided

neglect and

to discover

any

underlying

cognitive

deficits. The

LOTCA is

reliable and

valid for use

in people

with stroke

but needed

to be

conducted

in more

than one

sitting as

assessment

s were long

and tedious

for Meera
 who
 experience
 fatigue
 (Katz et al.
 2000).

Rivermead The RMA Meera was
 Motor consists of not
 Assessme tests independent
 nt (RMA) evaluating in transfers
 (Lincoln the gross, and mobility,
 and leg, trunk she required
 Leadbitter and arm assistance of
 1979) function of a one for
 stroke transfers and
 patient used a
 (Lincoln and wheelchair
 Leadbitter for mobility.
 1979). This She also had
 was minimum
 conducted trunk and leg
 together control at
 with the her affected
 physiothera side and
 pist. The require

RMA assistance
allowed the for
team to movement.
know which However,
movements she is able to
Meera had hold objects
difficulties in using her
order to affected arm
formulate but cannot
appropriate reach for an
intervention object far
s. This away due to
assessment scapular
was found instability.
to be
reliable and
valid but
due to being
strenuous
and long, it
had to be
conducted
in a few
sessions
due to

Meera
showing
signs of
fatigue
(Kurtais
2009)

From these assessments, 3 problems Meera faced, in order of significance was developed:

1. Loss of independence in self-care affected Meera the most. From the assessments conducted, it was found that challenges in motor, cognition and perception affected her performance in self-care. Managing self-care would focus on these domains as well (NICE 2013). It was hoped that Meera would be more engaged in therapy by focusing on an issue she perceived as critical. This was evidenced by a study where patients were more motivated and engaged more in interventions when treatment was catered to their perceived needs (Combs et al. 2010). This would also help Meera to elevate her mood as low involvement in self-care was found to be a factor for post-stroke depression (Jiang et al. 2014). The psychologist in the team would be managing Meera's low mood as well (ISWP 2016). By working with Meera on her self-care would also remove some burden from Sanjay, who was assumed to be her main carer when she is discharged from hospital.

2. Problems with visual perception, specifically right side neglect and agnosia, were targeted as it was found to have an influence on self-care (Barker-Collo et. al 2010). This would help Meera in performing self-care

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

tasks. Her visual deficits also affected her social life and transfers. Managing her perceptual problems would allow her to interact more with other patients in the ward which could provide her with social support.

3. Meera's motor challenges, specifically right side weakness and spasticity were addressed as it was one of the major challenges faced during self-care. It was hoped that through the management of motor deficits, Meera would increase her engagement in occupations. This would also have a positive effect for Meera in future as it was shown that physical function affected quality of life in stroke patients (Ellis et al. 2013). Motor challenges faced by Meera would be managed in conjunction with the physiotherapist (ISWP 2016). Skills in managing motor challenges can also be transferred to other aspects such as cooking and reinstating her role as a homemaker.

Treatment Plan

Client Aims:

1. Meera wants to be more engaged in her personal care.

Therapist Aims:

1. To increase Meera's engagement in her self-care tasks.
2. To manage Meera's right sided neglect and agnosia.
3. To manage Meera's weakness and spasticity in her right arm, leg and trunk.

Objectives:

1. Meera should be able take charge of her own shower and dressing every morning for an hour, with assistance of one, in 4 weeks.

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

2. Meera should be able to independently identify items required on her right field of vision for washing and dressing every morning in 4 weeks.
3. Meera should be able to go from lying to sitting, and pivot transfer from bed to wheelchair as well as from wheelchair to shower chair, every morning with assistance of one in 4 weeks.

Intervention

Washing and dressing assessment was conducted through the use of AMPS. This allowed the OT to formulate an appropriate wash and dress plan for multi-disciplinary use through identified difficulties in motor and processing skills (Fisher and Jones 2010). Using a meaningful occupation as a basis for intervention was beneficial for Meera. This can be supported by a study where occupation based intervention was shown to be critical in improving occupational performance (Wolf et al. 2015). The intensity of the intervention would be higher than the recommended minimum frequency of 45 minutes, 5 days a week as it was included in Meera's daily routine (NICE 2013).

The washing and dressing plan was adapted from Salisbury District Hospital's (2013) assessment form. The OT conducted the first session in order to teach Meera the relevant compensatory and visual scanning skills. Other sessions could be conducted by other staff with guidance from the plan. A further review after every few days would also be required in accordance to recommendations (ISWP 2016).

Washing and dressing plan for Meera

Bed Mobility:

- Meera is able to roll to her right side independently.
- She requires assistance from lying to sitting.

Bed to wheelchair:

- Transfers
- Require assistance of one for pivot transfer

rs

Standing:

- Require assistance of one and grab rail in the bathroom

Wheelchair to shower chair:

- Require assistance of one for pivot transfer
- Allow Meera to navigate to bathroom

Washing Notes:

- g
- Require the use of a shower chair in the shower
 - Allow Meera to initiate

and sequence task

independently

- Only give Meera assistance when she asks for it
- Place items necessary for shower on Meera's right side
- If Meera seems to be searching for something, prompt her to look for it by turning her head
- Encourage use of right hand to wash herself
- Meera may require assistance to release her grip on objects
- Provide assistance if Meera feel fatigue

Upper body:

- Meera is able to wash her right side independently
- Meera require

assistance to wash
above her elbows on
her left side

- Assistance may be needed to wash hair and back thoroughly

Lower Body:

- Meera should be able to wash her genitals and front upper thighs independently
- Assist Meera in standing with the grab rail with one person supporting at all times
- Another person will assist Meera in cleaning her bottom and her rear upper thigh
- Encourage Meera to wash her lower thighs but prevent her from falling from the shower

chair

- Assist in cleaning the rest of the lower thighs

Upper Body:

- Encourage Meera to put on the bra independently using the one arm method.
- Allow Meera to use the one hand method to wear her t-shirt.

Dressing

- Prompt her by reminding her of the steps if she is struggling

Lower Body:

- Meera requires assistance to put on her trousers while assisted in standing.

Both the restorative and adaptive approach was used to guide the intervention. Restorative approach is grounded upon neuroplasticity where relearning takes place when new neural connections form in the brain during

constant exposure to various stimulus (Gillen 2016). By practising various movements of her affected side during self-care, Meera should have a reduction in her impairments. This is supported by a study where patients who went through functional motor relearning therapy were found to have improved balance and performance in self-care (Chan et al. 2006).

The compensatory approach is where tasks are modified to be easier for the clients to achieve (Edmans 2010). Even though this approach has been criticized for hindering motor recovery in people with stroke, it is still appropriate for Meera (Jones 2017). The compensatory method of using the one hand dressing method served as a feedback mechanism which could improve motivation as supported by Popovic et al. (2014). This would thus encourage Meera to engage in therapy.

Risk Management Plan

1. Meera might be fatigued and may not be able to do some of the tasks required. The staff in charge will assist when required and allow Meera to rest when needed.
2. Due to the intimate nature of a wash and dress, Meera might feel embarrassed and down during the process. In order to preserve her dignity, sensitive areas would be covered whenever necessary and observation would be subtle.
3. Environmental hazards would be checked before commencing any transfers or wash and dress in order to prevent falls.

Relapse prevention

In the hospital setting, encouragement for frequent engagement in occupation and usage of relevant motor and cognitive skills would prevent Meera's occupational performance from deteriorating (Brainin et al. 2015; Ullberg et al. 2015). According to NICE (2013), long-term health and social support should include education on symptoms and dysfunction relating to stroke, services available and participation in meaningful occupation. As such, Meera and her family would be briefed on these strategies.

Outcome Measures

Evaluation of treatment outcomes is important to conclude if the intervention was successful and used to change the treatment plan according (Mew and Ivey 2010). The outcomes were evaluated by using goals and comparing standardized assessment at baseline and outcome. Firstly, intervention was evaluated through the achievement of goals. Goal achievement was linked to client satisfaction and a significant client-centred outcome (Custer et al. 2013). Meera was able to achieve the objectives as expected. Secondly, the AMPS was conducted again, using the task of showering and dressing (Fisher and Jones 2010). Meera scored higher in these tasks but still required some assistance in achieving them. Thirdly, Meera improved on the LOTCA tasks which involved visual scanning, little to no improvement was seen on the orientation and memory tasks (Itzkovich et al. 2000). Lastly, the RMA was conducted again (Lincoln and Leadbitter 1979). Meera improved in the trunk, leg and upper limb function but there were still signs of weakness and instability involved.

Further plans

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

Other domains of concern would be managed as according to initial assessment and outcome measures. Further interventions would include management of cognitive function such as memory and orientation through cooking. Including Meera in a social group such as breakfast club in the ward would be beneficial to her as well (Venna et al. 2014).

To prepare for discharge, Meera would be referred to the Early Supported Discharge team. The team would help Meera and her family by introducing appropriate adaptations at home and relevant education on stroke (ISWP 2016). A smooth transition from hospital to home was found to improve patients' function in activities of daily living and service satisfaction (Fearon et al. 2012). This would thus be beneficial for both Meera and her family.

References

Bartels MN, Duffy CA and Beland HE (2016) Pathophysiology, Medical Management, and Acute Rehabilitation of Stroke Survivors IN: Gillen G (ed) *Stroke Rehabilitation: A Function-Based Approach* (4th Edition). Missouri: Elsevier 2-45

Brainin M, Tuomilehto J, Heiss WD, Bornstein NM, Bath PMW, Teuschi Y, Richard E, Guekht A and Quinn T (2015) Post-stroke cognitive decline: an update and perspectives for clinical research. *European Journal of Neurology* 22(2): 299-e16

Chan DY, Chan CCH and Au DKS (2006) Motor relearning programme for stroke patients: A randomized controlled trial. *Clinical Rehabilitation* 30(3): 191-200

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

Combs SA, Kelly SP, Barton R, Ivaska M and Nowak K (2010) Effects of an intensive, task-specific rehabilitation program for individuals with chronic stroke: A case series. *Disability and Rehabilitation* 32(8): 669-678

Custer MG, Huebner RA, Freudenberger L, Nichols LR (2013) Client-chosen goals in occupational therapy: Strategy and instrument pilot. *Occupational Therapy in Health Care* 27(1): 58-70

Edmans J (ed) (2010) *Occupational Therapy and Stroke* (2nd Edition). Chichester: Wiley-Blackwell

Ellis C, Grubaugh AL and Egede LE (2013) Factors associated with SF-12 physical and mental health quality of life scores in adults with stroke. *Journal of Stroke and Cerebrovascular Diseases* 22(4): 309-317

Fearon P, Langhorne P and Early Supported Discharge Trialists (2012) Services for reducing duration of hospital care for acute stroke patients. *Cochrane Database of Systematic Reviews* 7: CD000443

Fisher AG and Jones KB (2010) *Assessment of Motor and Process Skills Vol. 1: Development, Standardization and Administration Manual* (7th Edition). Fort Collins: Three Star Press

Gillen G (2016) *Stroke Rehabilitation: A Functional-Based Approach* (4th Edition) . Missouri: Elsevier

Intercollegiate Stroke Working Party (2016) *National Clinical Guideline for Stroke*. Royal College of Physicians. Available from: [https://www. strokeaudit.](https://www.strokeaudit.org)

org/SupportFiles/Documents/Guidelines/2016-National-Clinical-Guideline-for-Stroke-5t-(1).aspx[Accessed 28 March 2016]

Itzkovich M, Averbuch S, Elazar B and Katz N (2000) *Loewenstein Occupational Therapy Cognitive Assessment (LOTCA) Battery* (2nd Edition). New Jersey: Maddak Inc.

Jiang XG, Lin Y and Li YS (2014) Correlative study on risk factor of depression among acute stroke patients. *European Review for Medical and Pharmacological Sciences* 18(9): 1315-1323

Jones TA (2017) Motor compensation and its effects on neural reorganization after stroke. *Nature Reviews Neuroscience* doi: 10. 1038. Available from: <https://www.nature.com/nrn/journal/vaop/ncurrent/pdf/nrn.2017.26.pdf>[Accessed 28 March 2017]

Katz N, Hartman-Maeir A, Ring H and Soroker N (2000) Relationships of cognitive performance and daily function of clients following right hemisphere stroke: Predictive and ecological validity of the LOTCA battery. *Occupation, Participation and Health* 20(1): 3-17

Kurtais Y, Kucukdeveci A, Elhan A, Yilmaz A, Kalli T, Tur BS and Tennant A (2009) Psychometric properties of the Rivermead Motor Assessment: Its utility in stroke. *Journal of Rehabilitation Medicine* 41(13): 1055-1061

Lincoln N and Leadbitter D (1979) Assessment of motor function in stroke patients. *Physiotherapy* 65(2): 48-51

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

Mew M and Ivey J (2010) The Occupational Therapy Process IN: Edmans J (ed) *Occupational Therapy and Stroke* (2nd Edition). Chichester: Wiley-Blackwell 49-63

Mtui M, Gruener G and Docker P (2016) *Fitzgerald's Clinical Neuroanatomy and Neuroscience* (7th Edition). Philadelphia: Elsevier

National Institute for Health and Care Excellence (2013) *Stroke Rehabilitation in Adults*. Available from: <https://www.nice.org.uk/guidance/cg162/resources/stroke-rehabilitation-in-adults-35109688408261>[Accessed 28 March 2016]

Peoples H, Satink T and Steultjens (2011) Stroke survivor's experiences of rehabilitation: A systematic review of qualitative studies. *Scandinavian Journal of Occupational Therapy* 18(3): 163-171

Popovic MD, Kostic MD, Rodic SZ and Konstantinovic LM (2014) Feedback-mediated upper extremities exercise: Increasing patient motivation in poststroke rehabilitation. *BioMed Research International* 2014(2014): Article ID 520374. Available from: <https://www.hindawi.com/journals/bmri/2014/520374/>[Accessed 28 March 2017]

Salisbury District Hospital (2013) *Occupational Therapy Washing and Dressing Assessment*. Salisbury NHS Foundation Trust. Available from: <http://www.icid.salisbury.nhs.uk/ClinicalManagement/RecordsAndForms/Documents/12e3053a7be542cabff277c26634947aAcuteOTWashDressAssv1007091.doc>[Accessed 28 March 2017]

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

Stroke Unit Trialists' Collaboration (2013). Organised inpatient (stroke unit) care for stroke. *Cochrane Database of Systematic Reviews* 9: CD000197

Toeh JY and Iwama MK (2015) *The Kawa Model Made Easy: A Guide to Applying the Kawa Model in Occupational Therapy Practice* (2nd Edition). Available from: <http://www.kawamodel.com/download/KawaMadeEasy2015.pdf>[Accessed 28 March 2017]

Ullberg T, Zia E, Petersson J and Norrving B (2015) Changes in functional outcome over the first year after stroke: An observational study from the Swedish Stroke Register. *Stroke* 46(2): 389-394

Venna VR, Xu Y, Doran SJ, Patrizz A and McCullough LD (2014) Social interaction plays a critical role in neurogenesis and recovery after stroke. *Translational Psychiatry* 4(1): e351

Appendix A

Meera CVA

Meera is a 56-year-old woman who was recently admitted with a left Cerebral Vascular Accident affecting the middle cerebral artery. She has a history of hypertension and hypercholesterolemia. She was admitted via A & E after being found by her husband. Her husband reports that she felt unwell and made her way upstairs to have a 'lie down'. He went out to walk the dog and on his return found her on the floor in the bathroom. Meera presents with a right hemiplegia with increased spasticity in her right arm and leg. As a result, she has difficulty with sitting balance and co-ordinating her movements in order to engage in activities such as washing and dressing.

<https://assignbuster.com/integrated-occupational-therapy-practice-case-study/>

Meera also presents with right sided neglect, which results in her failing to identify objects on her right side, difficulty washing her right side and responding to others who approach her from her right. She has difficulty in articulating in a meaningful way to get her needs met and is very tearful. The Occupational Therapist undertook an initial assessment with Meera, the report is detailed below.

Initial assessment summary

Meera appears low in mood and is reluctant to talk about the future. She is worried that she may have another stroke and consequently is reluctant to engage in activity. Meera is embarrassed that she needs help in personal activities of daily living and is reluctant to talk about activities that she finds difficult.

Family – Meera is married to Sanjay, a 58-year-old man who works as a plumber. They have two children, Anni aged 18 years who has just completed her A levels and will be attending a local university in one month's time, and Sam aged 17 who is at secondary school.

Social situation – The family live in a privately owned three bedroomed semi-detached property in a small town. Sanjay describes Meera as a 'stay at home' mum who prides herself on her family and her cookery skills.

Posture – Meera has a right- sided hemiplegia; her scapular is unstable and she finds it difficult to flex her arm above 90 degrees. Elbow extension is uncontrolled and there is stiffness in her forearm making supination difficult. She is able to grasp objects but finds release very difficult.

Sensory assessment - Meera has poor deep and light sensation in her right hand, which has a profound effect on a range of performance areas.

Cognition and perception - Meera has a right sided neglect which interferes with washing and dressing, and transfers. She also has difficulty socialising with other patients on the ward due to to this. Meera has some cognitive impairment which presents as poor memory and disorientation. These features are more prominent at the end of the day when Meera is tired.

Mobility - Meera currently uses a wheelchair but can manage a controlled transfer with one person assisting.