Stroke Self-Management from the Hong Kong Society for Rehabilitation

By Lee Lay Beng, Executive Committee Member

Chronic Disease Management is still a new approach in Singapore's healthcare system. It uses an individual approach, compared to the Hong Kong Society for Rehabilitation (HKSR) which uses a group approach that saves costs and leverages on group support to change lifestyles and behaviour. Singapore can learn from Hong Kong’s approach which also involves a strong psychosocial component and trans-disciplinary approach.

In collaboration with Ang Mo Kio – Thye Hua Kwan Hospital, Agency for Integrated Care, St. Luke’s Hospital, Ren Ci Community Hospital, Community Rehabilitation Programme (Tan Tock Seng Hospital), and SPD, SNSA made a joint application to SHMDP-ILTC (Visiting Expert) for government funding support to bring in two experts from the HKSR to conduct a 2-day training workshop for local healthcare practitioners. Using a self-management concept, the workshop equipped them with the necessary knowledge and skills to conduct group sessions for stroke patients in our community, thus empowering patients to take charge of their own health.

**Objectives of the Training:**
1. Understand concepts of patient empowerment, self-management, mutual aid and their application in patient education.
2. Understand the key elements in enhancing patient knowledge and facilitating behavioural change.
3. Develop skills and confidence in running a 6-session self-management course for persons with stroke.
4. Explore the development of community supportive service for patients with stroke with reference to the experience in Hong Kong.

As the various approaches that HKSR developed are adopted from the Stanford Model on Chronic Disease Self-Management, Dr Audrey Tan, senior consultant from the National Healthcare Group, was invited to provide pre-workshop training to familiarise participants with the Stanford Model. Participants were required to attend this Pre-Workshop Training, before they embarked on the journey for training on stroke self-management.
Feedback from the participants
The 24 healthcare practitioners who participated in the training provided positive feedback for the workshop. The learning objectives had been met, not just through the workshop, but also through the dialogue sessions at each of the pre-workshop agency visits.

The visiting experts were very knowledgeable and experienced in the topics shared. They had compiled a very detailed manual with templates for activities and these will enable the participants to start self-management programmes for stroke patients without much further planning.

The experts were also able to inspire interest and instil confidence in the effectiveness of a stroke self-management programme. The participants’ self-efficacy in running the programme also increased significantly.

The participants felt more confident in running the 6-session Stroke Self-Management Programme using the manual provided. The participants have been grouped into clusters and collaborative efforts in running the programme have started. The participants have made plans to begin running the first programme in end-August 2014 and another in mid-September 2014.

A Stroke Self-Management Workshop Network will subsequently be formed for healthcare professionals to learn from each cluster’s experience and support one another. With the equipping of right knowledge and skills, and a better appreciation of the challenges of coping with stroke, the ultimate aim is for healthcare professionals to organise and strengthen the community support network for stroke patients, family members, caregivers and interested members of the public, for better health outcomes and care delivery.
In Singapore, stroke is more common among males than females. Stroke has often been thought to be disease that predominantly affects men, but did you know that approximately 60% of stroke deaths occur in women? This higher rate of death following a stroke has also been noted in Singapore. In fact, as women age, they tend to have equal number of strokes, if not more, as compared to men.

Nearly one in five women over the age of 45 will have a stroke by age 85. Compare this with the lifetime risk for breast cancer - one in nine! Stroke is the commonest cause of disability among women worldwide.

Interestingly, awareness of stroke symptoms is less in women as compared to men. In a recent survey done in USA, only 27 percent of women could name more than two of the six primary stroke symptoms. In addition, it was noted that women may report stroke symptoms that are unique. Symptoms seen more often in women include sudden face and limb pain, sudden nausea or hiccups, sudden general weakness, and sudden chest pain, shortness of breath, or palpitations.

Lack of awareness of stroke symptoms results in failure to get urgent medical care, and more women miss the opportunity to recover function after stroke.

Most risk factors for stroke are similar in men and women. The common risk factors for stroke are:

1. Non-modifiable factors such as increasing age, family history of stroke at a young age.
2. Modifiable factors that can, and must be managed effectively to lower the risk of stroke - hypertension (high blood pressure), diabetes mellitus, high cholesterol, irregular heart rhythm, smoking, physical inactivity and obesity, excessive alcohol intake.

While women smoke less than men, some risk factors are unique to women. Some of these are:

1. Pregnancy-related conditions: The risk for stroke is higher in pregnant than in non-pregnant young women. Pregnancy-related hypertension (high blood pressure) is the leading cause of stroke in pregnancy. In fact, it is now recommended that women with chronic hypertension or previous pregnancy-related hypertension should take low-dose aspirin from the 12th week of pregnancy, until delivery.

2. Cerebral venous sinus thrombosis (blockage of the veins in the brain; stroke is much more commonly caused by blockage of arteries in the brain) is another type of stroke that is commoner during pregnancy, and is overall commoner in women. This may be related to hormonal factors.

3. Oral contraceptives: The overall increase in stroke risk with low-dose oral contraceptives is small, approximately 1.4 - 2.0 times that of non-users. Certain groups of women, particularly those who are older, smoke cigarettes, have hypertension, diabetes mellitus, high cholesterol, are obese, or have certain blood coagulation abnormalities may be at higher risk for stroke. Notably, the risk of stroke with oral contraceptive use appears to be lower than the risk associated with pregnancy.

4. Hormone replacement therapy, which is used in some post-menopausal women, may also increase the risk of stroke. Women who have other risk factors must discuss the advisability for hormonal replacement with their doctor.

5. Migraine tends to be commoner in women. While this does not increase the risk of stroke considerably, when combined with smoking or consumption of oral contraceptives, the risk of stroke increases.

Since the physiology of women’s bodies is different from men’s, they may respond differently to stroke treatments and preventive therapy. For example, side effects of antihypertensive therapy tend to be encountered more in women than in men.

However, the recommended medications for management of risk factors for stroke, as well as for treatment of stroke, are the same for men and women as they provide benefit to both! One exception is that during pregnancy, when some medications may be harmful for the foetus (unborn child still in the mother’s womb).

More women need to be educated about the risks, as well as symptoms of stroke, so that they may seek medical attention in time. If your female friends are unaware, educate them and direct them to the resources below:


If you want to learn more, share your experience, or contribute to increasing stroke awareness, join the SNSA now!
Visit to Sky Park + Hi Tea

By Mr Amos Wee, SNSA Member

Immediately after lunch at our SNSA premises on 26th April 2014, 23 participants including long-serving members, stroke survivors, their caregivers and volunteers boarded a coach to head off for the Marina Bay Sands Hotel. We were visiting Sky Park! “Just bring your camera!”, I was told.

We arrived at the MBS Hotel at about 2pm. After collecting our tickets from the first floor of Tower 3, everyone gathered for a group photo before we headed for the elevator to the Sky Park on the 56th floor. Everyone was excited as the express lift didn’t make any stop on its way up. We watched the brightly lit level-indicator jump from 1 to 56 very quickly. Coming from diverse backgrounds and at different stages of their recovery didn’t stop anyone from mingling and socialising. There was laughter and excitement as the lift door opened and everyone walked out in high anticipation of what they were going to see.

After going through the main entrance to the Sky Park into the open-air, there was no stopping anyone of us from exploring what the Sky Park offered. Everyone headed out in different directions. There was “Waaahhh”的 and “Look!, look!” coming from everywhere....come to think of it...fingers were pointing everywhere too! The views are good from the top of MBS Hotel and we got to see the panoramic and aerial view of Singapore’s business district, Gardens By The Bay and even the floating platform in front of the F1 Grandstands and the Esplanade Theatres from a different angle. From up there, everything looked so small! It was as though they were from an architect’s working model or toys, except that the little “toy” cars are moving around like ants.

Noticing that there was a staircase that we had to ascend to the “Sky on 57” restaurant which offers an alternative view from the “57th Floor”, some members took the opportunity to walk up and down the steps as a form of exercise. It proved to be a useful “obstacle” to have, as seeing how the stronger members managed to overcome the “obstacle”, inspired the weaker amongst the rest to want to try to do the same too! It was encouraging to see the newer stroke survivors making attempts to exercise on the steps too and walk on their own or with the help of their caregivers. Everyone had the opportunity to take photos and have a good walk around to explore the different views that Sky Park offered. The weather was fine for a while before it started to rain about an hour into the visit and all of us took shelter at the Sky Bar. As only some of us had umbrellas, we formed a daisy chain to help each other arrive at the lift lobby on the 56th Floor to bring us down to the ground floor to FUSE restaurant for High Tea at about 3pm.

At the FUSE, the group settled down for an interesting High-Tea. Everyone could order their favourite beverage from a list. It was fun seeing each other checking out what the person next to them had ordered before deciding on their own order. Before the beverage and light snacks were delivered, the group had already gone into a “Group-Sharing” session. There was much excitement as members gave feedback on what directions they would like for SNSA to take. There was so much enthusiasm sharing that some of us didn’t notice the snacks that was quietly placed on the coffee table before us. It was only in-between topics that everyone went ... “Hmnnnnm... which piece should I try first?” There was tim-sum, satay, cakes and pastries for all of us to share.

Some members shared about their hopes for the future of SNSA, others shared about how they had overcome the challenges that they faced as stroke survivors or caregivers. All these help to bring more positive energy to the other members listening in as the afternoon went on.

At last it was time to leave. The event ended at about 4pm, there was some exchange of contact numbers as new friendships were forged as we headed back to SNSA in the coach.

The SNSA is very grateful to JC Trust Ltd for supporting the event.
Our Happy Members!
Music Therapy for Stroke Survivors

By Ms Christal Chiang Hei Loi, Music Therapist

Music therapy within neuro-rehabilitation is a relatively new phenomenon when compared with other clinical settings such as special education or palliative care in Singapore.

The focus in music therapy is the use of music to directly address the functional skills that stroke survivors need to re-develop outside of their treatment sessions. These skills include but are not limited to sensorimotor, speech, cognition, socio-emotional and coping. According to the definition provided by the World Federation of Music Therapy in 2012, “music therapy is the professional use of music and its elements as an intervention in medical, educational, and everyday environments with individuals, groups, families, or communities who seek to optimise their quality of life and improve their physical, social, communicative, emotional, intellectual, and spiritual health and wellbeing”.

Speech and Language Rehabilitation

Music and speech share or are processed in neighbouring neuron networks in the brain. Some patients with severe language problems (aphasia) can often produce well-articulated and linguistically accurate words while singing, but not during speech. For this group of patients, one of the neurologic music therapy techniques can be implemented—Melodic Intonation Therapy—to re-learn functional phrases by using intoned (sung) patterns that exaggerate the normal melodic content of speech. Music therapist and stroke survivors will start from simple words/phrases (e.g. water/bathroom) to longer phrases (e.g. I am thirsty; I need to go to bathroom). In addition to Melodic Intonation Therapy, there were other music therapy techniques shown to be effective for speech rehabilitation. For example, song singing is often a good way to encourage and engage stroke survivors with communication problems to initiate verbal participation by singing selected songs to practising target sounds and articulation of words. Besides singing, the use of woodwind instruments (harmonica, kazoo) can be effective for rehabilitating breathing (respiratory) strength and endurance too.

Sensorimotor Rehabilitation

Many research studies have shown positive effects of musical and rhythmic stimulation in physical rehabilitation such as in gait training and upper limb movement training. The strong rhythmic cues will be conveyed through music to improve physical function and motor skills. Rhythmic Auditory Stimulation (RAS) is an effective technique that can be used to help in walking in terms of joint position sense control, consistency and speed of muscle movements.

In addition to recognising the effects of rhythmic auditory stimuli, playing musical instruments has been widely used in physical rehabilitation particularly for retraining and enhancing functional movements too. Stroke survivors had significant improvement in speed, precision and smoothness of movement after they were exposed to drum and piano playing as compared to those who received only standard therapies.

Socioemotional (mood)

More than 55% of the stroke survivors in rehabilitation experience depression. It might due to loss of function and independence or difficulty in expressing their feelings due to communication problems. Music can be a form of non-verbal expression that is particularly important for people with communication problems to express their feelings in a musical way. Music can often express feelings more accurately and sensitively than words, and offer comfort and support to the stroke survivors too. During individual/group music therapy sessions, song singing and song discussion is always a powerful intervention to assist stroke survivors to relate their own experiences and further explore different ways of coping with the illness. Song singing has also been reported to encourage positive mood change in patients with neurological damage.

In conclusion, music therapy has a unique capacity to address sensorimotor, speech, cognition, and socio-emotional wellbeing for stroke survivors. Hopefully with an increase in awareness in Singapore, music therapy service can be expanded to the community in the near future and more stroke survivors can benefit from it.
Overcoming Post-Stroke Depression and Anxiety

By Dr Goh Chor Boon, Stroke Survivor

Depression is one of the biggest issues we face in our daily lives. For stroke survivors, it is even more challenging because you experience a whole new physical and emotional self – at one moment you are perfectly normal and within a few minutes, you are no more the old self. No wonder, stroke survivors often retreat into their own world. Dealing with a flood of self-pity emotion can be hard and draining for some stroke survivors. Grieving over what you have lost is actually normal and, indeed, some would say even good to go through – at least temporarily. But once you allow sadness to turn to depression and let it persist, it is time to act – and to act fast. A stroke survivor, his or her caregiver and family members must recognise the signs and symptoms and work collectively to control and eventually banish it altogether.

Once you allow yourself to be trapped in deep depression, your physical recovery will be severely impaired. The affected muscles and nerves will continue to “sleep” and refuse to be fired up. Improvement to your movement, if any, will be small and seemingly negligible. Once this happens, you will lose heart and sink deeper into the black hole. It is a vicious cycle. Hence, the top priority is to get out of your depressed state as quickly as possible and pour all your thoughts and energy into working hard on your body. It is like declaring war on stroke.

Easier said than done? Yes, to a certain extent, because it deals with the human mind, particularly at this point when the mind is badly bruised psychologically and emotionally. But the good news is that it can be done! I have done it and I am very sure there are many others like me too – and including those who were never physically active at all.

First, we need to recognise the symptoms of depression:

- Feeling sad or “empty” most of the time
- Loss of interest or pleasure in ordinary activities
- Constant fatigue or feeling of “slowed down”
- Sudden trouble sleeping or over-sleeping
- Frequent thoughts of worthlessness or death
- Easily breaking into tears

I had frequent anxiety attacks. When they came knocking, I just felt a heavy and foreboding feeling. I was not able to sit or stand still and not able to take full deep breaths, as if something was blocking the windpipe. Fear is anxiety. If the anxiety continues to snowball, a panic attack is next. Panic does not cause heart failure, but it sure feels that way. Muscular tension (particularly around the neck, shoulder and arms) and fast and shallow breathing (hyperventilation) cause dizzy spells and chest pain. The fear of an impending heart attack piles onto the fragile brain. After a few of these obnoxious attacks, I began to recognise the symptoms at its onset. Very quickly, I would pop in an anti-anxiety medication belonging to the class of drugs known as benzodiazepines or “benzo” for short. The drug usually kicks in about 20 minutes. But I took it only when I really needed to because it is addictive in nature. In the meantime, I would make myself active by getting out for a brisk walk in order to increase my heart-rate. Somehow by getting the heart excited, it does counteract the anxious state of mind. Research has shown that exercise is one effective form of combating depression and anxiety.

I was also easily agitated and annoyed, particularly when I needed to move within the house to get something done and my wife was slow in responding. It was also frustrating to try to manoeuvre the wheelchair around. I just could not control the wheelchair. It was difficult to coordinate my hands turning the wheels. It was like telling me that life is not so simple and straight. It hurt me that my wife had to cope with my unreasonable demands. The period when I was confined (the four weeks after the stroke episode) to the wheelchair, I had to depend on her for many of my chores. I had difficulty in folding clothes and ironing my own shirts and pants. The coordination of hands and fingers was lost. It was not easy for my wife wake up in the middle of the night to pass me the urinal and to dispose of the waste. It was tough on her to have her sleep punctuated by my calls. She had to push me into the bathroom for my daily shower.

Time to Act

Enough is enough. Knowing that this was not my old self, I decided that it was time for me for me to rebuild, to make a comeback. First, I shut off all thoughts of why I had to be so unlucky as to suffer a stroke. Second, I decided to work hard on my body to transform my mind. While still hospitalized, I made it a point not to wear the garb meant for patients. Instead, began to I put on my running attire. This is to give me a mental feeling of normality, and that I was not sick. I was indeed not sick; just not able to move my leg.

It must be stressed that recovery from stroke is not just about the physical body. There is also the mental and emotional dimension. It is advisable to seek the professional help of a psychiatrist if one is very emotionally disturbed. While this would increase the medical bill, in my opinion, the psychiatrist would be able to advise on methods to ease depressive and anxious moods. In my case, I shared my thoughts – my fear and aspirations - with my psychiatrist. We enjoyed talking about all kinds of issues, from things academic to the importance of exercise. I was prescribed an antidepressant. However, like all drugs, we have to be aware of the controversies surrounding the use of antidepressants. For me, the best medicine to combat depression and anxiety is simply to move your body for an hour each day and, preferably, over seven days. I told my psychiatrist that my bouts of depressive mood and anxiety attacks would definitely diminish once I was able to run again. By early December 2011 (about a month after the stroke episode), I had left my depressive self behind.

This article is adapted from the author’s book “Second Chance”. The book can be purchased from the SNSA. The hard-cover book is available at $25 each. All proceeds from the sales of the book will be given to SNSA.
Upcoming Events @ SNSA

1) Stroke Club Activities
   • 27 September: Road To Recovery – Driving Assessment
   • 18 October: Healthcare and Social Care Resource Mapping and Planning
   • 8 November: Arts and Therapy

2) Social Integration Activities
   • November: Visit to the Singapore Botanic Gardens for year-end celebrations / retreat to seek inner healing (more details will be provided later)

3) Charity Movie Gala
   • 11 October: In collaboration with 10AM Communications, SNSA will be organising a charity movie gala with the screening of a documentary on stroke. The event is aimed at raising funds and awareness for stroke. More details will be released later.

4) Pilot Programmes (September – October 2014)
   • Healthcare professionals who attended the Stroke Self-Management Workshop in May 2014 will be commencing their pilot run of programmes for stroke survivors. Through group facilitation, the pilot aims to educate, equip and empower stroke survivors in the concept of self-management which enables them to take proactive steps in managing their own health.
   • In partnership with NTUC Eldercare, SNSA is kick-starting a 3-month pilot LIFE (Learn, Interact, Flourish, Engage) After Stroke Programme for stroke survivors. More details will be provided later.

Welcome on Board!

SNSA welcomes our two new part-time staff.

**Name:** Jaime Yeo  
**Designation:** Communications and Liaisons Executive  
**Date Joined:** 3 February 2014  
**Email:** jaime@snsa.org.sg  
**About:** Now a part-time student pursuing a counselling degree, Jaime helps out with SNSA’s events and publicity. Driven by a sense of purpose, she enjoys being inspired by all the passionate people she meets at work.

**Name:** Cindy Vaithilingam  
**Designation:** Administrative Assistant  
**Date Joined:** 1 April 2014  
**Email:** cindy@snsa.org.sg  
**About:** Cindy helps out with the SNSA’s daily office administration on a part time basis. In her spare time, she whips up a mean meal and likes reading a good book or two. She lives with and looks out for her younger brother who is a stroke survivor.

SNSA would also like to extend our deepest appreciation to Ms Ann Sebastian for her dedication and contributions to SNSA during the past few years. Always friendly and helpful, hers has been that cheerful voice you hear when you call the SNSA Office. We wish Ann the best for her future endeavours - we will miss you Ann!!!