SMART STROKES/SSA CONFERENCE 2018 – AUGUST 7TH-AUGUST 10TH

SJG Midland
Senior Dietitian: Rebecca Leubner
17th September

Building a healthy future

Hospitality | Compassion | Respect | Justice | Excellence
STROKE EPIDEMIOLOGY
Stroke Epidemiology
Valery L. Feigin

1990-2013

- General decline in incidence, prevalence, mortality and DALYs
- Overall stroke burden – absolute number of people affect by, or who remain disabled from stroke has increased across the globe
- Both men and women
- Of all ages

- 2nd most common cause of deaths worldwide after IHD (11.8% of all deaths)
- 3rd most common cause of disability (4.5%)
- Substantial geographical variations
GEOGRAPHICAL VARIATION: DALYS

A

Age-standardized DALYs rates (per 100,000)
GEOGRAPHICAL VARIATION: MORTALITY

Age-standardized mortality rates (per 100,000)
GEOGRAPHICAL VARIATION: GENDER

Figure 3. Proportional (%) contribution of stroke-related deaths to deaths from all causes in men and women in 2013.
NO LONGER A DISEASE OF THE ELDERLY!

- Increasing number of prevalent cases, total deaths and DALYs in younger adults aged 20-64 years
- > 60% of people who survive stroke/ become affected by stroke are under 70 years
CALL FOR ACTION!

- Rise in non communicable diseases including stroke, heart disease, Ca, DM, and COPD.
- No longer lifetime risk of 1 in 6 (internationally)
- Moved closer to 1 in 4 risk
- China shows 1 in 3 risk!
- Over 94% of stroke burden in terms of DALYs could be preventable
- Risk factors: Air pollution (23%), poor diet (51%), limited physical activity (5%), drugs and alcohol (12%)
- Many lifestyle risk factors!
- Current primary prevention strategies are not working

Prevention is the key!
SMOKING

- 1980s increased focus on smoking and smoking risks
- Population wide based strategies implemented to reduce smoking & exposure
- Seen as one of the most effective strategies
- Unfortunately not adopted internationally
HIGH RISK PREVENTION STRATEGIES

Why haven’t we seen similar strategies for other risk factors as to smoking?

• $$$
  • Industry support
  • Legislative change
  • Public support

• But we need change!!
• Increase the knowledge of risk! Not just recognition of symptoms (FAST)

• Secondary stroke prevention – where does it start!
• Making room in rehab for stroke prevention strategies.
STROKE RISK-O-METER

Know your risk and prevent a stroke

Stroke Riskometer™ is a unique and easy to use tool for assessing your individual risk of a stroke in the next five or ten years and what you can do to reduce the risk.

The app can also give you an indication of your risk of heart attack, dementia, and diabetes.
INACTIVE AND ALONE!
INACTIVE AND ALONE

- National guidelines recommend minimum of three hours scheduled active therapy per weekday after acute stroke.
- Many studies looking into physical activity engaged by people hospitalized after stroke.
- Evidence suggesting 40-70% of patients are inactive and 40-60% time spent alone.

ENRICHED ENVIRONMENTS
- Enriching the recovery environment has been shown to enhance opportunities for practice and recovery.
- One to one intensive practice time with the therapist is restricted by therapist availability and consequently not a sustainable way to structure extra practice.
- Increase opportunities for semi-guided and self practice.
ENRICHED ENVIRONMENTS

The prevalence of boredom in stroke survivors during inpatient rehabilitation

Katrina Kenah

**Background:** Research indicates **boredom is common** in stroke survivors during inpatient rehabilitation. Boredom has the potential to **limit** patient **engagement** and therefore **recovery**.

**Conclusions:** Prevalence of boredom is reported by ~43% of stroke survivors during hospital based rehabilitation. **Strategies need to be put in place to improve engagement in rehabilitation.**
ENRICHED ENVIRONMENTS

Mrs Ingrid Rosbergen - The effect of an enriched acute stroke unit environment on timing and nature of patient activities

Aim:
Understand the effect of an enriched environment on the time and nature of patient activities and the amount of staff assistance provided, compared with a control environment.

Methods:
Before-after observational study.
Enriched group – stimulating resources, group activities, communal areas for eating and socialising. Families and carers encouraged to increase patient activity outside of therapy.
Control – usual environment
Behavioural mapping – comparison of activity levels during specified time periods, nature of activities observed and amount of staff assistance required.

Results:
Higher activities in the enriched group occurred during scheduled communal activity time, weekday non-scheduled activity time and weekend time. No difference observed in weekdays after 5 pm. Enriched group spent more time on upper limb, communal socialising, listening and iPad activities.

Conclusions:
Communal activities and environmental resources appeared to be major contributors to promoting greater activity within an enriched environment.
ENRICHEO ENVIRONMENTS

Dr Simone Dorsch – Increasing intensity of exercise in stroke rehabilitation: the use of semi-supervised exercise

Aim:
To determine how much exercise can be completed as semi supervised in a stroke rehabilitation unit.

Method:
Prospective inception cohort study of stroke survivors in a stroke rehabilitation unit. All lower limb exercise repetitions were recorded as semi-supervised or one to one exercise.

Results:
Mean 744 lower limb exercises daily, mean 573 semi supervised activity daily
Only patient characteristic which associated with the level of semi-supervised activity achieved was level of disability.

Conclusions:
Majority of exercise can be done as semi-supervised exercise however this is highly dependent on the level of disability.
ENRICHED ENVIRONMENTS

Katherine Rose: Aphasia-friendly hospital meal menus for stroke patients: A pilot study exploring perceptions and behaviour change

Aims:
To determine if the use of an aphasia-friendly photo menu tool changed people with aphasia (PWA) behaviours and perceptions related to meal ordering compared to usual menus in the inpatient hospital setting.

Method:
Thirty PWA (average age 70.5 years, ~ 3 weeks post onset), approximately thirteen care-givers and five Speech Pathology Therapy Assistants (SPTAs) participated. Using a random alternating treatment design, PWA ordered their meals daily using either the aphasia-friendly menu with SPTA help or the usual hospital menu. Daily oral intake was recorded and participants reported on their preferred menu type, perceptions of ease and level of participation. Caregivers and SPTA perceptions of the menus were explored through questionnaires and a focus group respectively.

Results:
Preliminary results suggested that 18 out of 27 PWA preferred the aphasia-friendly menu, with increased food intake for some participants compared to the usual menu.

Conclusion:
An aphasia-friendly menu may be a viable and preferred option for PWA when ordering food in hospitals.
ENRICHED ENVIRONMENTS

Laura Jolliffe: Increasing the intensity and amount of rehabilitation completed by stroke survivors

Aim:
Increase opportunity to develop functional independence of stroke survivors by providing enriched environments to engage, practice and develop activities of daily living.

Methods:
Patients assessed and identified capable to prepare simple breakfast meals. Hospital provided breakfast meals are cancelled for identified patients, aiming to promote patients to visit communal dining rooms to engage and practice making own breakfast daily.

Implications:
• Increased opportunities for activity practice to additional ~45 sessions/ week
• Increased participation in other activities/ therapy

Partnerships:
• Hospital catering
• Hospital dietitians to ensure appropriate breakfast items available to meet nutritional standards
• OT and OT/ Allied Health Assistants to support developing function and independence in carrying out breakfast preparation
DON’T FORGET THE PATIENT!

Assoc Prof Louise Gustafsson: Enriching stroke rehabilitation from the perspective of stroke survivors

Aim:
Explore the perspectives of stroke survivors regarding their needs and current level of opportunity for engagement in meaningful activities during inpatient stroke admission.

Results:
• Therapy observed as meaningful activity
• Not just ‘occupation’
• ‘Celebration’ of the quiet moments’
• Important to allow for rest, recovery and preparation for the next therapy.

Conclusions
Finding the balance between the two!
FALLS

Are falls in a stroke unit preventable?
AGAINST
Dr Neil Spratt

• Who learnt how to walk as a child without falling?
• How can you then relearn to walk without falling?
• What would the alternative be?

Falls =
• Visible
• Dramatic
• Falls review, assessment and often blame

Complications of falls prevention
• Less visible however impacts just as dramatic
• Deconditioning
• Loss of function
• Loss of independence
• Loss of quality of life

Summary
• Preserve independence, function and quality of life
• Minimise falls whilst maximise function
• Follow evidence rather than reactions
• Engineer the environment to minimise falls

This is all from the premise that falls are not preventable!
AGAINST
Dr Cathie Sherrington

Evidence of failed attempts in fall prevention

1. Cluster randomised trial of a targeted multifactorial intervention to prevent falls among older people in hospital
   • CONCLUSION: A targeted multifactorial falls prevention programme was not effective among older people in hospital wards with relatively short lengths of stay.

2. 6-PACK programme to decrease fall injuries in acute hospitals: cluster randomised controlled trial
   • CONCLUSION: Positive changes in falls prevention practice occurred following the introduction of the 6-PACK programme. However, no difference was seen in falls or fall injuries between groups. High quality evidence showing the effectiveness of falls prevention interventions in acute wards remains absent. Novel solutions to the problem of in-hospital falls are urgently needed.

3. Exercise to Enhance Mobility and Prevent falls after stroke: The community Stroke Club Randomised Trial
   • CONCLUSION: The experimental intervention delivered through stroke clubs enhanced aspects of mobility but had no effect on falls.
Questioning success of others

1. Fall rates in hospital rehabilitation units after individualised patient and staff reduction programs: a pragmatic stepped wedge, cluster randomised controlled trial.
   - 40% reduction in falls
   - HOWEVER - 136 people receiving this successful intervention had 196 falls including 66 injurious falls during that 11 day rehab stay (average)
   - It did NOT prevent ALL falls
FOR

John Gommans

- Emphasized the harm that comes through falls
  - Increased risk post stroke

- Prevention strategies
- Medications
- BP
- Assess vision
- Assess balance and strength
- Non slip socks
- Assess gait/stance during mobilisation
- Appropriate clothing
- Environment – clear obstacles
- Accessibility to appropriate equipment for mobilising
- Reduce tubes and linings to the patient

Falls can result in serious trauma! Must be prevented!
FOR

Kathy Bullen

Stroke Guidelines:
• For stroke patients at falls risk assessment including fear of falling should be undertaken on admission to hospital. A management plan should be initiated for all patients identified as at risk of falls.

• Must be a MDT approach!
Guidelines for preventing falls and harm from falls for people with a stroke

- Identification of risk of fall
- Vision - glasses
- Medications – increasing risk of falls
- BP
- Assess mobility – have required walking aids available
- Is correct footwear in place
- Education for staff, patients and carers
- Assess bowel and bladder function
- Make the environment safe
- Orientate the patients – bed, room and ward
- Have the buzzer within reach
- Devises – catheters, tubes, IV poles etc – make the patient safe!
- Position the patient in the ward
So ......

Do you think falls are preventable?
QUESTIONS