EVALUATION OF A 'LIVING WELL AFTER STROKE GROUP' A NEW AND INNOVATIVE APPROACH TO STROKE SPECIFIC SECONDARY PREVENTION IN A COMMUNITY SETTING

Authors: Rachel Sibson Clinical Team Leader & Gillian Cluckie Consultant Nurse

Poster Number AS09-014

Background and Aims

Despite considerable evidence that secondary-prevention group interventions can improve mortality, morbidity and reduce further myocardial infarction, no such groups have been evaluated for stroke patients.

Secondary Prevention of Stroke

According to the World Health Organisation, 15 million people suffer a stroke worldwide each year. Of these, 5 million die and another 5 million are permanently disabled. In developed countries, the incidence of stroke is declining, largely due to efforts to lower blood pressure and reduce smoking, however, the overall rate of stroke remains high due to the aging of the population (World Health Organisation, 2002). The cause of stroke is multifactorial, however it is well documented that most cardiovascular diseases, including ischaemic stroke, can be prevented by addressing behavioural risk factors such as smoking, unhealthy diet and obesity, physical inactivity and harmful use of alcohol (World Health Organisation, 2015). It is also well understood that patients surviving an initial stroke are at an increased risk of having a second stroke compared to the general population (Boysen & Truelsen, 2000), with the cumulative risk of a second stroke having been calculated as 3.1% at 30 days, 11.1% at 1 year, 26.4% at 5 years and 39.2% at 10 years after the initial stroke (Mohan, et al., 2011). The consequences of a subsequent stroke are usually more devastating than the first (Rothwell, 2007).

Efficacy of Secondary Prevention Interventions

A recent Cochrane Review investigating the efficacy of secondary prevention interventions for reducing modifiable risk factors for stroke, identified potential benefits of organisational interventions on reducing blood pressure, and improving Body Mass Index (BMI), but did not find clear evidence that organisational interventions could improve other modifiable risk factors or reduce the incidence of recurrent stroke. This review concluded that patient education alone is unlikely to lead to improvements in modifiable risk control (Lager, et al., 2013).

Self-Management Approach

Self-management support is a less well-established aspect of care for people after stroke, in contrast to other long-term conditions, such as diabetes (NICE 2015).

A Cochrane review by Fryer et al in 2016 however, found that self-management programmes improve quality of life in people with stroke and improved self-efficacy when compared with usual care. Benefits were found for health-related behaviours, such as reduced use of health services, smoking, and alcohol intake, as well as improved diet. However, lesser effects were found in the domains of locus of control, activities of daily living, medication adherence, participation, or mood.

They also found that people with stroke reported improvements in their ability to live the way they wanted and they felt more empowered to take charge of their lives, rather than be dependent on other people for their happiness and satisfaction with life. They found no reports of any risks or negative effects.

In a systematic review, Warner et al (2015) identified that the most prominent self-management strategies were **goal setting and follow-up**, and an individualised approach using structured information and professional support. They also found that self-management programmes can significantly increase participation and functional ability and the **inclusion of family members** and the contribution of **peer-support** can be helpful.

Stroke in the London Borough of Wandsworth

Stroke patients in Wandsworth (South West London, UK) are predominantly admitted to the stroke service at St. George's Hospital (78%) with a proportion (22%) admitted to other Hyper Acute Stroke Units such as Charing Cross Hospital. For the year April 2016 to March 2017, 254 patients from the Wandsworth catchment area were admitted to hospital with an acute stroke.

Wandsworth has a well-developed Early Supported Discharge (ESD) and Community Neuro-Rehabilitation (CNT) service based at St. Johns' Therapy Centre. The service is part of St. George's University Hospitals NHS Foundation Trust's Neurosciences Division. The community service in-reach into the acute stroke unit at St. George's Hospital and there is close working between both teams.

Living Well After Stroke Group

In response to the evidence, the Living Well after Stroke Group (LWAS) was set up as a joint venture between the acute stroke service and the community neuro-rehabilitation team and launched in early 2016. It was designed to address the key modifiable stroke risk factors using a 'self-management' approach. Rather than just being *told what to do or educated*, patients were encouraged to explore these themes from a personal point of view, support each other as fellow group members and set their own individualised secondary prevention goals to achieve. Patients were also encouraged to bring a 'significant other' such as a spouse or regular carer.

Each programme ran for five weeks offering two themes each session. The format of the group was as follows:

Week	Part 1	Part 2
1	Welcome and introductions	What is stroke?
2	Exercise and healthy lifestyle	Fatigue management
3	Healthy eating	Meal planning
4	Medication management	Relaxation
5	Community based organisations	Summary

Method

The Group was evaluated in the following ways:

- 1) Pre and post group outcome data
- 2) Post group patient feedback
- 3) Discovery interviews
- 4) Cost and attendance analysis of the group

Results

Pre and Post Outcome Data

Patients reported improvement in all outcomes with the exception of fatigue.

Areas with the most improved scores were the patient's understanding of:

- Their responsibility for taking care of their own health.
- Their ability to prevent problems with their own health.

Significant improvements were reported in patients understanding and confidence in their knowledge of:

- Their health problems and the causes.
- Healthy eating.
- Exercise.
- Fatigue management.
- Stress management.
- Medication.

Of all patients asked, 100% reported confidence in their ability to maintain lifestyle changes after the group.

There were less positive improvements for:

- How fatigue interfered with patient's family or social life
- Patients feeling tired and lacking in energy

Patients also reported on-going difficulties in their ability to participate in more physically demanding tasks such as shopping and heavy housework.

Post group patient feedback

100% of patients said they would recommend the group to others. Increased confidence and knowledge as well as meeting others in a similar situation were key reasons for this recommendation. 64% said there was nothing they wanted to change about the group format.

Discovery interviews

8 patients were interviewed. Age range was 45-78 years with 6 being male and 2 being female. All participants spoke positively about the group in terms of content and duration. Meeting others as part of a group had a mixed reaction, however the majority found it beneficial. One participant stated: *"Mixing with other stroke victims was helpful to me, made me start thinking more positively. I'm not being wheeled here in a wheelchair...life could be a lot worse"* (JC41)

Cost and Attendance Analysis

Over the evaluation period 7 groups were completed with a mean of 8 patients per group. This would therefore have cost £311 per patient per group. This is cheaper than the indicative costs per patient for cardiac rehabilitation estimated at £477 per patient per programme (NICE, 2011).

Conclusions

This project confirmed that the LWAS Group is comparable to other secondary prevention programmes positively addressing similar issues in terms of outcome and attendance rates and is lower in cost than that of a comparable cardiac rehab programme. The group was well evaluated by patients and the outcome data demonstrated improvements in key areas immediately following the group and an increase in confidence in ability to maintain lifestyle changes beyond the group.

Contact Details

Rachel Sibson rachel.sibson@stgeorges.nhs.uk
+44 (0)20 8812 4063