



## Improving stroke knowledge through a ‘volunteer-led’ community education program in Australia



Monique F. Kilkenny<sup>a,b,\*</sup>, Tara Purvis<sup>a,b</sup>, Megan Werner<sup>c</sup>, Megan Reyneke<sup>a</sup>,  
Jude Czerenkowski<sup>c</sup>, Dominique A. Cadilhac<sup>a,b</sup>, On behalf of the National Stroke Foundation

<sup>a</sup> Stroke & Ageing Research, School of Clinical Sciences at Monash Health, Monash University, Clayton, VIC Australia

<sup>b</sup> Florey Institute of Neuroscience and Mental Health, Heidelberg, VIC Australia

<sup>c</sup> National Stroke Foundation, Melbourne, VIC Australia

### ARTICLE INFO

Available online 26 January 2016

**Keywords:**  
Risk factors  
Education  
Stroke  
Australia  
Stroke signs  
Prevention  
Community

### ABSTRACT

**Background.** Public awareness of stroke risks and warning signs remains poor. The National Stroke Foundation (NSF) in Australia has been undertaking a StrokeSafe Ambassador Education program to raise awareness of stroke. The format includes presentations by volunteers trained to be ‘ambassadors’ to spread standard information about stroke to the public. Our aim was to determine the change in knowledge of participants who attended presentations.

**Methods.** Participants completed questionnaires before immediately after presentations, and at 3 months following the presentation. Information was collected on knowledge of risk factors and signs of stroke. McNemar’s test was used to compare paired-responses over time. A *p* value of <0.05 was considered significant.

**Results.** Between March and April 2014, 591 participants attended 185 presentations and 591 (100%) completed them before and immediately after presentation questionnaires: 68% were female and 75% were aged 65 years or more. 258 consented for further follow-up with 192 completing follow-up. Comparing immediately after with before presentation showed significantly improved knowledge for all 10 stroke risk factors and all signs of stroke. Significantly improved knowledge for 7/10 risk factors and 1/3 signs of stroke was found when comparing follow-up and immediately after presentation results. Knowledge of 5/10 risk factors and 2/3 signs of stroke improved when comparing follow-up and before presentation.

**Conclusion.** This study describes a novel approach to support the use of trained volunteers to provide a community-based, standardised education program for stroke. This program shows that community presentations can improve immediate and short-term knowledge of signs and risk factors for stroke.

© 2016 Published by Elsevier Inc.

### Introduction

Similar to other countries, stroke is the second major cause of death and the leading cause of disability in Australian adults (Feigin et al., 2014). The burden of stroke can be reduced through improved prevention management and early medical intervention (Cadilhac et al., 2007). About 11.7 million (90%) adult Australians have at least one of the major modifiable risk factors (such as high blood pressure (BP), diabetes, high cholesterol, smoking, alcohol, poor diet, inadequate physical activity, obesity, atrial fibrillation, sleep disorders, and carotid stenosis) (Ebrahim and Harwood, 1999) for heart, stroke, and vascular disease (Senes and AIHW, 2006). There is poor knowledge and recognition of risk factors in countries worldwide (Stroebele et al., 2011). A systematic review of 22 studies found that between 18% and 86% of participants did

not know any risk factors for stroke (Stroebele et al., 2011). Increasing knowledge of these risk factors for stroke may lead to improved prevention of stroke (Stroebele et al., 2011).

In addition to prevention, facilitating timely access to effective medical interventions, such as thrombolytic therapy, can effectively reduce the burden of stroke by improving outcomes of those affected. Pre-hospital delays, particularly the time taken to seek medical help, remain a major challenge. Increased public awareness and knowledge of signs of stroke can reduce delays from stroke onset to hospital presentation and improve access to medical interventions (California Acute Stroke Pilot Registry, I., 2005). Stroke education programs have the potential to improve knowledge and health behaviours of people in the community (Rasura et al., 2014).

To improve public awareness, many countries use marketing campaigns with multiple media modalities to convey simple messages to educate the community about the signs of stroke. In Australia, the National Stroke Foundation (NSF) utilises the health promotion message FAST which incorporates the signs of Facial weakness, Arm weakness, Speech difficulties, as well as emphasising that Time is critical. The

\* Corresponding author at: Stroke and Ageing Research, Department of Medicine, School of Clinical Sciences at Monash Health, Monash University, Level 1/43–51 Kanooka Grove, Clayton VIC, 3168 Australia.

E-mail address: [Monique.kilkenny@monash.edu](mailto:Monique.kilkenny@monash.edu) (M.F. Kilkenny).

public are informed that if any of these signs are evident, 000 is the Australian emergency telephone number that should be called to get an ambulance. Despite the Australian public's awareness of stroke signs improving after this national mass media campaign, almost 50% of the sampled population were unable to name the common stroke warning signs (Trobbiani et al., 2013). While these awareness campaigns have been found to increase stroke knowledge and thrombolysis rates, they tend to be quite costly due to the costs of advertising in the media (Trobbiani et al., 2013). Therefore, there is a need for additional complementary and lower-cost strategies to educate the public.

The NSF in Australia has designed a volunteer-led StrokeSafe Ambassador Education Program to educate the general public about what stroke is, how to prevent stroke, how to recognise the early warning signs of stroke, and what to do if someone has a stroke. The program utilises a network of volunteer StrokeSafe Ambassadors (including stroke survivors, carers, health professionals, and general public) who have been interviewed, recruited, and trained by the NSF to deliver free standardised educational stroke presentations requested by community groups or organised by the NSF.

The aims of this study were to 1) describe the participant profile of people who attended the community-based stroke education presentations and 2) determine the change in immediate and short-term stroke knowledge among participants.

## Methods

### Participant selection

Overall, there were 5271 participants who attended 185 StrokeSafe presentations held between March and April 2014 in Australia. Forty-two StrokeSafe ambassadors volunteered to collect pre-post evaluation data during this period. A total of 591 participants who attended these 42 presentations were invited to and completed questionnaires. These presentations were held in English.

### Questionnaires (Appendix I)

- *Pre-presentation:* Before the presentation, participants were asked to complete a questionnaire. The questionnaire covered information on participant demographics, baseline knowledge of risk factors, and signs of stroke.
- *Immediately post-presentation:* Immediately after the presentation, participants were asked to complete a questionnaire on knowledge of risk factors for stroke and signs of stroke. Participants were asked to provide written consent to be followed-up in 3 months.
- *Follow-up:* For participants who consented to be followed-up at 3 months, a questionnaire to assess short-term retention of knowledge was posted to them by staff from the NSF. Using the Dillman (Dillman, 1991) protocol, two attempts at contact were made by mail and then, if there was still no response, one attempt was made by telephone.

### Presentations

StrokeSafe education presentations were requested by community groups such as sporting clubs, community centres, local councils, social groups, and health centres. The presentations took around 30 min plus question time. The presentations were directed at those aged over 55 years and built around adult learning principles and the impact of poor health literacy in the community was considered. This included the use of members of a local community as Ambassadors, storytelling and limiting the content covered to avoid confusion and overload. Information was also made relevant to people's daily lives and provided a clear 'call to action' about better health behaviours and acting FAST. A small number of Ambassadors were able to present in other languages.

### Ambassador recruitment

Volunteer StrokeSafe Ambassadors were recruited and interviewed to be volunteer speakers for the StrokeSafe education program.

### Training of Ambassadors

Comprehensive training including professional public speaking was provided for two consecutive days. The focus of this training was on equipping

Ambassadors with knowledge about stroke, as well as ensuring they would be confident public speakers. This included advice on effective presenting, managing questions, encouraging audience participation, and working with interpreters. The Ambassadors also received ongoing training in areas highlighted in an annual survey as areas of development, along with any updates on content of their presentations or the activities of the NSF. This included additional resources, e.g. brochures and contacts for more information, e.g. StrokeLine phone numbers and website links. StrokeLine is staffed by health professionals who can provide expert and individualised information and advice on stroke prevention, treatment and recovery.

### Presentation content

StrokeSafe Ambassadors could choose from three different delivery methods for the presentation, determined by personal preference or availability of facilities:

- StrokeSafe PowerPoint presentation – provided to the Ambassadors on a USB stick
- StrokeSafe presentation visual aid – display easel with colour printed A3 size slides used as a flipchart
- Speaking only – effective for 'on the spot' presentations with very limited time available (Fig. 1).

### The presentations covered

- What stroke is – What happens when someone is having a stroke and the different types of stroke.
- How to recognise the signs of stroke – Learn the vital FAST signs which will help you recognise when someone is having a stroke.
- What to do if someone is having a stroke – If you or someone else experiences the signs of stroke, no matter how long they last, call 000 immediately.
- How to prevent stroke – Steps that can be taken to better understand and reduce the risk of having a stroke.
- Where to get reliable further information?

### Brochures

Participants were given the following brochures at the end of the presentation: Stroke risk tick test ([http://strokefoundation.com.au/site/media/NSF120\\_](http://strokefoundation.com.au/site/media/NSF120_)

- **Key messages about stroke**
  - ✓ *What is stroke?*
  - ✓ *Impact of a stroke?*
  - ✓ *Stroke facts*
- **Stroke prevention**
  - ✓ *Reduce your risk*
  - ✓ *Know your stroke risk*
- **FAST message (Face, Arms, Speech, Time)**
  - ✓ *Do you know the signs of stroke?*
- **What can you do?**
- **Further information**
- **Speakers own story (optional)**

Fig. 1. Overview of the StrokeSafe Education Program.

Download English Version:

<https://daneshyari.com/en/article/3100294>

Download Persian Version:

<https://daneshyari.com/article/3100294>

[Daneshyari.com](https://daneshyari.com)