DIETARY AND LIFESTYLE PRACTICES OF STROKE PATIENTS IN THE YEAR FOLLOWING STROKE

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BACKGROUND AND AIMS

Dietary and lifestyle factors are major contributors to the incidence and burden of stroke.^{1,2} Stroke survivors have a high rate of recurrent stroke with up to 19% of patients experiencing a secondary stroke within 5 years.³ Guidelines from the Stroke Foundation⁴ recommend that stroke patients improve their diet and lifestyle to prevent recurrent stroke. However, few studies have reported the diet and lifestyle behaviours of stroke patients under usual care.

Aim: to characterize the dietary habits, lifestyle behaviours, and related metabolic risk factors of stroke patients longitudinally, i.e. prior to stroke/baseline (assessed at initial hospital stay) and at 3 months and 12 months post stroke.

METHODS

The START study (STroke imAging pRevention and Treatment) was a multi-site longitudinal observational cohort study of patients with ischemic stroke.^{5,6}

Measures

Patients completed the Cancer Council Food Frequency Questionnaire,⁷ the Rapid Assessment of Physical Activity (RAPA),⁸ and additional questions relating to diet and lifestyle behaviours. Height, weight and waist circumference were measured.

Patients met recommendations if they were:

- not currently smoking
- eating a nutritionally balanced diet
- ≥ 5 portions fruit/vegetables daily
- not adding salt to food
- ≤2 standard drinks per day
- ≤4 standard drinks on any occasion
- ≥ 2.5 hours of moderate intensity physical activity per week
- Body Mass Index (BMI) (kg/m²)<25
- waist circumference ≤ 80cm (females) or ≤ 94cm (males)

Statistical analyses

Frequency and percentage of patients meeting Stroke Foundation recommendations are reported.

McNemar's tests were used to determine significant differences in the proportion of patients meeting recommendations between baseline and 12 months.

RESULTS

Participants included 219 stroke patients aged 27-95 years, with a mean age of 69 years. Nearly half had suffered a mild stroke (Table 1). Compared with females, males were younger, had experienced less severe stroke, and met dietary and lifestyle guidelines less frequently.

Table 1. Patient characteristics at baseline.

		n	%
Age	<65 years	77	35.2
	≥65 years	142	64.8
Gender	Male	140	63.9
	Female	79	36.1
NIHSS Score (day 3-7)	Mild ≤5	116	81.7
	Moderate 6-13	16	11.3
	Severe >13	9	6.3

Figure 1. Percentage of stroke patients meeting recommendations at baseline, 3 months and 12 months.

At baseline, most patients were non-smokers and met recommendations for alcohol consumption. BMI and waist circumference had the fewest participants in the healthy range. Less than one half of patients met dietary guidelines and only a third obtained sufficient exercise.

The percentage of patients meeting guidelines did not change substantially from baseline to 3- and 12 months for any of the health measures. Significant 12-month differences were only observed for daily alcohol consumption.

DISCUSSION

Stroke patients in the START study showed poor adherence to dietary and lifestyle recommendations at the time of their stroke, with only very small improvements over the following 12 months.

Patients receive information on improving their lifestyle during their hospital stay.⁹ Despite these recommendations from the Stroke Foundation, few patients achieve optimal behaviours, particularly for diet, physical activity and obesity. This places them at risk for further stroke and other cardiovascular events.³

CONCLUSIONS

This study highlights the need for more effective diet and lifestyle modification strategies in stroke patients.

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