

# THE EFFECT OF NURSE-LED TELEPHONE CONSULTATIONS ON STROKE PATIENTS

## Background

Globally, stroke is a common disease and can cause people to suffer from longlasting physical problems, cognitive symptoms, limitations in daily life and reduced quality of life after a stroke <sup>1,2,3</sup>. Patients indicate a need for information, advice and social support <sup>3</sup>. Self-management support interventions create positive outcomes in stroke patients <sup>4,5</sup>. Nurse-led telephone interventions can facilitate the possibility of offering these self-management support programmes to patients <sup>6,7</sup>. Stroke care is becoming increasingly reliant on advanced nursing practice (APN), however, little is known about these roles within the stroke specialty.

## Aims

The aim of this study was two-folded: (1) to examine the effect of nurse-led telephone consultations on patients' (a) self-efficacy, (b) self-management, (c) quality of life, (d) medication adherence and (e) risk factors such as weight, blood pressure, physical activity, smoking and alcohol; and (2) to explore the experience of stroke patients regarding telephone follow-up by an APN.

## Methods

Using a triangulation mixed methods design <sup>8</sup>, a randomised controlled study with a pretest-posttest design was combined with an exploratory qualitative design with semi-structured interviews <sup>9,10,11</sup>. 161 participants were randomly assigned to the intervention or control group and completed five questionnaires at baseline and after twelve weeks. The intervention group received three nurse-led telephone consultations from a neurology APN. Thirteen participants, who received the intervention, were included for an interview.

## Results

A significant difference was observed in five of the eight subscales of self-management<sup>1</sup>, medication adherence, weight, blood pressure, physical activity and smoking between the intervention and control group. In addition, a trend towards a significant difference was observed in self-efficacy between the intervention and control group ( $p=0.05$ ). The other variables were not significantly different. The participants experienced the telephone consultations as an added value in terms of moral support and information. The APN served as a key point of contact in the follow-up of stroke patients.

## Discussion

Nurse-led telephone interventions can be an added value in the follow-up and treatment of stroke patients. With caution it can be assumed that the interventions contribute to the self-efficacy of stroke patients. This is an important statement since self-efficacy has a direct impact on the treatment goals. The study design and frequent follow-up by the APN (3 nurse-led telephone consultations) are the main strengths of this study <sup>12</sup>. Despite achieving the predetermined sample size, the narrow inclusion criteria, the narrow setting and the lack of a retention test (second measurement after one year), no statements about the target population can be made. Because of the duration of this study, the inclusion criteria and the lack of interest to participate, data saturation could not be achieved <sup>10,13,14,15</sup>.

## Implications and future perspectives

It is important to maintain follow-up of stroke patients after hospitalisation. These self-management support interventions can be developed by an APN and provided by nurse consultants. A multicentre study with more post-measurements can strengthen the obtained results. More in-depth interviews with a diverse sample are recommended to achieve data saturation. Further research regarding the cost-effectiveness of these interventions is recommended as well.

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<sup>1</sup> (1) positive and active engagement in life, (2) health-focused behaviours, (3) acquisition of health skills and techniques, (4) constructive attitudes and approaches, (5) self-monitoring and understanding, (6) health care navigation, (7) social inclusion and support, and (8) emotional well-being

## References

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