

What are the effects of information provision for stroke survivors and their caregivers? A Cochrane Review summary with commentary

Soo Chin Chan and Julia Patrick Engkasan*

Department of Rehabilitation Medicine, Universiti Malaya, Kuala Lumpur, Malaysia

Abstract.

BACKGROUND: Stroke can lead to permanent and severe disability. Provision of information to stroke survivors and their carers could help them cope with consequences of stroke and aware of secondary prevention.

OBJECTIVE: The aim of this Cochrane review was to assess the effects of active or passive information provision for stroke survivors or their carers.

METHODS: The population addressed in this review included stroke survivors, their carers, or both. The intervention studied was provision of active or passive information compared to standard care or where information and another therapy were compared with the other therapy alone, or where the comparison was between active and passive information provision. The primary outcomes were knowledge about stroke and stroke services, and anxiety.

CONCLUSIONS: The authors concluded that the active provision of information may improve stroke survivors stroke-related knowledge and quality of life. It may reduce the cases and symptoms of anxiety and probably depression. The effect of active information provision to carers and passive information provision is still unclear; however, passive information may worsen stroke patients' symptoms of anxiety and depression.

Keywords: Information, stroke survivors, carers, rehabilitation

The aim of this commentary is to discuss from the rehabilitation perspectives the Cochrane Review “Information provision for stroke survivors and their carers” (Crocker et al., 2021) by Crocker TF, Brown L, Lam N, Wray F, Knapp P, Forster A,^a published by

the Cochrane Stroke Group. This Cochrane Corner is produced in agreement with NeuroRehabilitation by Cochrane Rehabilitation with views^b of the review

*Address for correspondence: Julia Patrick Engkasan, Department of Rehabilitation Medicine, Universiti Malaya, Kuala Lumpur, Malaysia. E-mail: julia@ummc.edu.my.

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10.1002/14651858.CD001919.pub4 (see www.cochrane.library.com for information). Cochrane Reviews are regularly updated as new evidence emerges and in response to feedback, and Cochrane Database of Systematic Reviews should be consulted for the most recent version of the review.

^bThe views expressed in the summary with commentary are those of the Cochrane Corner authors and do not represent the Cochrane Library or Wiley.

summary author in the “implications for practice” section.

1. Background

Stroke can cause permanent and severe disability; affecting the physical, cognitive, psychological and social functioning. Provision of information to stroke survivors and their carers is recommended across the continuum of care, to help them cope with consequences of stroke, and for secondary prevention. However, stroke survivors and carers reported the information they received were inadequate, of low quality and untimely (Abrahamson & Wilson, 2019). Information provision may be delivered passively, by providing leaflets or asking them to refer to online sources, or actively, by communicating with them and providing individualised information (Robson, 2013). Providing information can help them understand the nature of their disability and empower them to be actively involved in their care. Thus, it is important to evaluate the effects of information provision to patients and their carers on stroke outcomes.

Information provision for stroke survivors and their carers

(Crocker TF, Brown L, Lam N, Wray F, Knapp P, Forster A., 2021)

2. Objective

The aim of this Cochrane review was to assess the effects of active or passive information provision for stroke survivors or their carers.

3. What was studied and methods

The population addressed in this review was stroke survivors, their carers, or both. The interventions studied were active or passive information provided with the intention of improving the outcomes of stroke survivors, their carers or both. The intervention was compared with standard care, or where information and another therapy were compared with the other therapy alone or where the comparison was between active and passive information provision without other differences in treatment. The primary outcomes were knowledge about stroke and stroke services, and anxiety. The secondary outcomes

include depression, psychological distress, positive mental well-being, quality of life (QoL), activities of daily living, social activities, perceived health status, satisfaction with information, self-efficacy, locus of control, recurrent stroke and death.

4. Results

The review includes 33 studies involving 5255 stroke survivors and 3134 carers. The average age of stroke survivors in the studies ranged from a mean of 53 to 76 years old. Twenty-two and 11 trials evaluated active information and passive information respectively. Based on the quality of evidence, estimates have low certainty, unless stated otherwise.

As to active information:

i. In stroke survivors:

- May increase stroke-related knowledge [standardized mean difference (SMD) 0.41, 95% CI 0.17 to 0.65], slightly reduce cases of anxiety [Risk Ratio (RR) 0.85, 95% CI 0.68 to 1.06], cases of depression (RR 0.83, 95% CI 0.68 to 1.01), symptoms of anxiety [Mean difference (MD) 0.73, 95% CI 1.1 to 0.36], and probably improve symptoms of depression (MD 0.8, 95% CI 1.27 to 0.34; moderate-certainty evidence).
 - May improve QoL in the physical [Mean Difference (MD) 11.5, 95% CI 0.81 to 15.27], psychological (MD 11.8, 95% CI 7.29 to 16.29), social (MD 5.8, 95% CI 0.84 to 10.84), and environment domains (MD 7.0, 95% CI 3.00 to 10.94).
- ii. In carers:
- May have little to no effect on stroke-related knowledge (SMD 0.68, 95% CI -0.03 to 1.39) (very low certainty).
 - Had very uncertain effect on cases of anxiety (RR 0.96, 95% CI 0.71 to 1.28) or depression (RR 0.98, 95% CI 0.64 to 1.50) cases (very low certainty).
 - May slightly reduce anxiety (MD 0.4, 95% CI -1.51 to 0.7) and depressive symptoms (MD 0.3, 95% CI -1.53 to 0.92).
 - May have little to no effect on QoL (MD 1.22, 95% CI -7.65 to 10.09).

Passive provision of information presented very low certainty about effects on stroke-related knowledge for stroke survivors (SMD 0.23, 95% CI -0.23 to 0.69) or carers (SMD 0.28, 95% CI -0.42 to 0.97). It may slightly increase symptoms of anxiety (MD 0.67, 95% CI -0.37 to 1.71) and depression (MD 0.39, 95% CI -0.61 to 1.38) in stroke survivors. The effect on

cases of anxiety and depression in carers and in QoL is very uncertain.

5. Conclusion

The authors concluded that active provision of information may improve stroke survivors stroke-related knowledge and quality of life, and may reduce the cases and symptoms of anxiety and depression. In contrast, providing information passively may slightly worsen stroke-survivor anxiety and depression scores. The effects of active information provision to carers and of passive information provision is still unclear. Although the best way to deliver information is also unclear, the evidence is better for strategies that actively involve stroke survivors and carers.

5.1. Implications for practice in neurorehabilitation

Stroke survivors usually spend considerable time for rehabilitation professionals, and clinicians should ensure they provide adequate, individualized and high-quality information as part of their care/treatment. Provision of information should be done actively; two-way communication and clarifying any questions that stroke survivors and carers may have. In addition, clinicians should refrain from providing passive information since there is a possibility that this will negatively affect on stroke outcomes. Further research should take into consideration the need to focus on the development of a generalisable intervention, which could be evaluated in a large multicentre study. Information provision for people with aphasia and cognitive impairment also requires further attention.

Conflict of interest

The authors declare no conflicts of interest.

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