

Group Cognitive Behavioural Therapy for Stroke Survivors with Depression and their
Carers

Susan K. Ward

BSc Hons (Psych)

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Australia

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Statement of Originality

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying subject to the provisions of the Copyright Act 1968.

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Acknowledgment of Authorship

I hereby certify that the work embodied in this thesis contains a manuscript of which I am a joint author. I have included as part of the thesis a written statement, endorsed by my supervisor, attesting to my contribution to the joint publication/scholarly work.

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Abstract

Scope: Depression occurs in approximately one third of survivors following stroke and may impede rehabilitation, quality of life and affect caregiver health. Reliable evidence to guide the clinical management of post stroke depression is limited, particularly regarding psychotherapy interventions. The cost effectiveness of group cognitive behavioural therapy and being able to treat more people using the same resources makes it attractive as a psychotherapy intervention. A critical review of the literature and a manuscript of a group Cognitive Behaviour Therapy (CBT) intervention for post stroke depression are provided.

Purpose: The purpose of the current study was to evaluate the effectiveness of a group cognitive behavioural therapy program (*Brainstorm*) for stroke survivors with depression and their carers.

Methodology: This study utilised a repeated measures design with no control group. Participants were 48 community dwelling stroke survivors and 34 carers who attended groups from 2007 to 2013. This closed group intervention consisted of up to 10 sessions covering basic CBT techniques including psycho-education, mood and activity monitoring, activity planning, thought challenging and problem solving. Participants were assessed at baseline, post-treatment and 1 month and 6 months post intervention. Primary outcomes were depression scores for stroke survivors (Beck Depression Inventory-II; Hospital Anxiety and Depression Scale depression subscale). Exploratory

analyses included changes in anxiety, quality of life and the impact on participation and autonomy for stroke survivors, and the assessment of depression, anxiety and carer burden for carers. Statistical analysis used a mixed models approach for repeated measures data.

Results: The post-treatment assessment was completed by 77% of stroke survivors; 46% and 27% of the baseline sample completed 1 month and 6 month follow-up assessments respectively. Stroke survivors' depression scores decreased from baseline to post-treatment ($p < .001$), this was maintained at 1 month ($p < .001$) but not 6 month follow-up. Anxiety scores decreased for stroke survivors between baseline and 1 month follow-up ($p = .012$). Their quality of life, and participation and autonomy scores did not change over time. Carer burden (perceived time spent on and difficulty of caring tasks), depression and anxiety scores at 1 month and 6 month follow-up, for carers, were all reduced when compared with baseline.

General conclusions: The *Brainstorm* group intervention for depression in stroke survivors appears to be effective in the short term. Session attendance rates were high and participant feedback positive.

Implications: The benefit of group CBT for community dwelling stroke survivors with depression is highlighted. Stroke survivors were the primary focus of the current study; however results suggest that carers also benefitted from inclusion in the program.