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Efficacy of a self-help manual in increasing resilience in carers of adults with depression in Thailand

Original Citation


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ABSTRACT: Caring for a person with a mental illness can have adverse effects on caregivers; however, little is known about how best to help such caregivers. The aim of the present study was to examine the efficacy of a cognitive behaviour therapy-guided self-help manual in increasing resilience in caregivers of individuals with depression, in comparison to caregivers who receive routine support only. A randomized, controlled trial was conducted, following CONSORT guidelines, with 54 caregivers allocated to parallel intervention (self-help manual) (n = 27) or control (standard support) (n = 27) groups. Resilience was assessed at baseline, post-test (week 8), and follow up (week 12). Intention-to-treat analyses were undertaken. Repeated-measures ANOVA indicated a significant difference in resilience scores between the three time points, showing a large effect. Pairwise comparisons between intervention and control groups indicated resilience to be significantly different between baseline and post-test, and between baseline and follow up, but not between post-test and follow up. Overall, the intervention group showed a slightly greater increase in resilience over time than the control group; however, the time-group interaction was not significant. Guided self-help is helpful in improving caregivers’ resilience and could be used as an adjunct to the limited support provided to carers by mental health nurses and other clinicians.

KEY WORDS: cognitive behaviour therapy, controlled trial, depression, randomized, resilience, self-help.

INTRODUCTION
Depression is predicted to become the main mental health problem in Thailand, a prediction premised on the marked increase in prevalence (from 56 to 346 per 100 000 population between 1997 and 2007) (Department of Mental Health 2007, 2014). Not only is depression disabling to the affected individual, providing support to this person can have significant adverse effects on family members, especially primary caregivers. Caring can undermine caregivers’ general well-being and experience of caring (Lowyck et al. 2004; McCann et al. 2011b), increase their psychological distress (Berghold et al. 2003) and burden (Kumar & Gupta 2014; Vikas et al. 2011), affect adversely-social connectedness (McCann et al. 2011a) and financial well-being (McCann et al. 2011b), and how they support the affected person (Butzlaff & Hooley 1998; Tompson et al. 2010). Specifically, carer burden tends to be greater and more enduring with family members who have depressive disorders than those with bipolar disorder (Heru & Ryan 2004). Although depression is the principal cause of disability and a significant contributor to the global burden of disease (Marcus et al. 2014), and most caregivers are underprepared to assume the crucial role of carer (McCann et al. 2011b), little attention has been given to supporting caregivers in this situation.

Increasing caregivers’ resilience could be one way of helping them cope with a family member who has depression. Resilience is the ‘process of coping with adversity, change,
or opportunity in a manner that results in the identification, fortification, and enrichment of resilient qualities or protective factors’ (Richardson 2002, p. 308). A person’s resilience is affected by a balance between personal and sociocultural risk and protective factors when confronted by adversity (Luthar et al. 2000). Personal and sociocultural risk factors undermine resilience (Giesbrecht et al. 2013; Wyman et al. 2000) and include, for instance, carer burden, care recipient’s level of dependency, family disruption, and social stigma of mental illness (Zauszniewski et al. 2009). Protective factors help strengthen resilience (Giesbrecht et al. 2013; Wyman et al. 2000) and include, for example, caregivers’ ability to have a favourable experience of caring and to think positively about caring (Zauszniewski et al. 2009).

Resilience is a protective factor that enables successful coping in adverse situations (Fergus & Zimmerman 2005), such as caregiving. It has favourable effects on health status, including improving outcomes in people with a diagnosis of depression (Songprakun & McCann 2012a). However, little research has been conducted into carer resilience in the mental health field. Studies conducted in this field report that it has beneficial effects on primary caregivers of people with schizophrenia, with caregiver resilience being a predictor of their quality of life, depression, anxiety, and stress (Fan et al. 2014). In addition, resilience is associated with carer coping within the context of caring for young people with first-episode psychoses (McCann et al. 2011b). To our knowledge, no research has been undertaken on the impact of resilience on primary caregivers of people with depression.

Cognitive behaviour therapy (CBT) is effective in enhancing resilience, particularly when individuals are confronted with challenges, such as anxiety and depression (Kilbourne et al. 2006). It can be combined with guided self-help with good effect to treat depression, and is more convenient to use and cheaper than conventional face-to-face therapy (Link et al. 1999). CBT incorporated within a guided self-help (GSH) manual could also be one way of increasing caregivers’ resilience in supporting individuals with depression. GSH is therapy-based self-help, which utilizes written materials in book form or bibliotherapy (Campbell & Smith 2003; Jorm et al. 2002). The underlying premise of the approach is to provide information, enable insight, stimulate discussion, learn from the problems others encounter in similar situations, offer a range of practical alternatives to problems, and facilitate problem resolution (Pantalon et al. 1995). From the perspective of caregivers of individuals with depression, GSH provides a basic framework to increase their resilience, and in so doing, enables them to cope with and support the person with depression to deal with negative thoughts and feelings associated with the illness. An important consideration is that the method can be used without mental health professionals’ involvement (Cuijpers et al. 2010; Jorm et al. 2002), but seems to be more effective when used in conjunction with other therapeutic methods (Campbell & Smith 2003), such as intermittent support from mental health professionals.

The efficacy of GSH in comparison to conventional therapy has been established. Cuijpers et al. (2010), in a systematic review and meta-analysis of studies comparing GSH with conventional face-to-face psychotherapy for depression and anxiety disorders, concluded the effects were comparable, and there was no difference in drop-out rates between these approaches. Subsequent studies have also demonstrated that self-help books (Marcus et al. 2014; Naylor et al. 2010; Songprakun & McCann 2012a, b, c) are helpful in reducing or treating depression. Even though a considerable amount of self-help studies has been undertaken, and of these, several have concentrated on people with depression (Gregory et al. 2004), few have focused expressly on caregivers (Eckshtain & Gaynor 2012, 2013), and of the latter, these have comprised small and atypical sample sizes (van Wijngaarden et al. 2009) conducted primarily in developed countries. Furthermore, resilience studies have generally been undertaken in developed countries, especially with white Americans (Haefelf & Grigorenko 2007); thus, it is unclear if the findings of these studies apply to Asian cultures, especially Thai culture.

To date, no randomized, controlled trials (RCT) have been conducted to assess the efficacy of GSH in increasing primary caregivers’ resilience in supporting family members with depression, especially in developing countries, such as Thailand. A study of GSH is also timely, because the provision of mental health services in Thailand is based mainly in psychiatric hospitals in large cities, with little access to services in rural settings, and very limited tailored support given to family caregivers (World Health Organization and Ministry of Public Health 2006). Therefore, the aim of the current study was to evaluate if adult primary caregivers of family members obtaining outpatient department treatment for moderate depression, who participated in a GSH programme, had greater resilience than a wait-list control group that received standard support for caregivers, as assessed at post-test (week 8) and follow up (week 12). A primary caregiver is defined as the ‘main person (aside from health, social, or voluntary care provider) responsible for assisting with activities of daily living, supporting and advocating on behalf of’ a family member with depression (McCann et al. 2011b, p. 382).

The findings of the present study are taken from a larger study evaluating the effect of GSH on primary carer participants’ resilience, experience of caring, and expressed emotion. The findings about resilience are presented in this paper. The findings about caregivers’ experience of caring...
METHOD

A parallel-group, RCT was conducted adhering to CONSORT (2013) guidelines for selection, randomization, follow up, and analysis. A researcher not involved in recruitment or data collection carried out random allocation, which was concealed and offsite in Melbourne, Australia (TMcC), and subsequently emailed to the researcher. Randomization was done in blocks of 10, using a computerized random number generator, to one of two parallel groups. Individual participant allocation was then emailed on an ongoing basis to the researcher allocating participants to the intervention (GSH manual and standard support) or wait-list control (standard support) group intervention, in Thailand. In addition, both groups received a short (approximately 5 min) weekly telephone call from a researcher. The purpose of the call was to answer questions, give limited support, and for the intervention group only, to provide brief answers to questions about using the manual. After trial commencement, no modification of original protocol took place.

Participants and recruitment

Participants were adult primary caregivers of outpatient department attendees diagnosed with depression who had consented to take part in a different RCT of GSH. Carer participants were recruited through mental health nurses at the outpatient department of Suan Prung Psychiatric Hospital, a large public psychiatric hospital in Chiang Mai City in northern Thailand. The nurses gave participants brief information about the study. Those who indicated an interest in participating were referred to the researcher, who provided comprehensive information about their involvement in the study. Inclusion criteria were primary carer of an adult receiving treatment at the outpatient department for moderate depression (F32.1, International Classification of Disease-10 classification), (World Health Organization 2000), aged 18–60 years, capable of writing and reading Thai, and had a telephone at home. The exclusion criterion was presently receiving treatment for acute mental illness (as advised by outpatient department nurses).

Based on a repeated-measures ANOVA, a power calculation, using IBM SPSS SamplePower version 2.0 (IBM, Armonk, NY, USA), indicated that a standardized difference between both groups of 0.8 (regarded an effect size of clinical significance) could be obtained with 80% power with a sample of 52, with a type I error probability of 0.05. To compensate for some (approximately 8%) attrition, the sample size was increased to 56.

Instrument

The Resilience Scale (RS), which assesses the level of individual resilience, was used (Wagnild & Young 1993). The scale comprises 25 items rated on a seven-point Likert scale, with scores extending from 25 to 175; higher scores indicate higher levels of resilience (Wagnild & Young 1993). High internal reliability has been reported with the RS in 11 of 12 studies reviewed involving participants from several racial/ethnic groups (African American, Hispanic, American Indian, and Asian), with Cronbach’s alpha coefficient ranging from 0.85 to 0.94 (Wagnild 2009). In the present study, Cronbach’s alpha was used to assess internal reliability of the RS at baseline, indicating good reliability (α = 0.87). The RS was used because it has high internal reliability and has been used in several studies with participants from various racial/ethnic backgrounds.

With the author’s approval, the RS was translated into Thai by adhering to the WHO Process of Translation and Adaptation of Instruments (World Health Organization n.d.) framework. Briefly, this included forward-translation by a bilingual clinical psychologist whose mother tongue was Thai and who was very knowledgeable about American–English culture, review by an expert panel to identify and resolve inadequate expression/concepts in the translation, and back-translation to English by an independent translator, whose mother tongue was American–English and who had no prior knowledge of the questionnaire. The RS was administered at baseline (week 0), immediate post-test (week 8), and at follow up (week 12). Follow-up data collection was undertaken to assess the maintenance effect of the GSH manual from weeks 8 to 12, and to assess the difference between baseline and week 12.

Procedure

The study was conducted in participants’ homes, in urban and rural settings, in provinces in the upper northern part of Thailand. Intervention group participants received The Good Mood Guide: A Self-Help Manual for Depression (Bilich et al. 2008; Phipps et al. 2004), which was translated into Thai. The manual, which was informed by self-help and CBT principles, comprised eight modules: (i) gives an outline of depression and encourages readers to engage in physical activity; (ii) affirms the importance of maintaining social contact and physical exercise; (iii) enables participants to discern the way they feel and think; (iv) emphasizes how to change thought patterns from negative to positive; (v)
highlights how healthy living, social support, and problem solving enable behaviour change and contribute to overcoming depression; (vi) equips the person to improve sleep pattern and to sustain favourable thoughts, behaviours, and emotions; (vii) illustrates how to practise progressive muscle relaxation to assist them deal with stress; and (viii) re-emphasizes earlier learned skills in thought challenging, dealing with difficult events and changing behaviour.

Participants were asked to finish one module per week, and each module took approximately 2 hours to complete. The manual was prepared mainly as a form of self-help for people with depression, but could also be adopted by their caregivers. Treatment fidelity was evaluated during the weekly telephone calls, where participants were asked predetermined questions about the content of the module finished that week. Control group participants were given standard support while accompanying the family member with depression to the outpatient department for prescription of antidepressant or anti-anxiety and antidepresant medications and consultations. Standard support included receiving minimal support and information from mental health nurses about supporting the affected family member.

Ethical issues
The study protocol was approved by Victoria University Human Research Ethics Committee (Melbourne, Vic) and the Mental Health Department, Public Health Ministry of Thailand (Bangkok, Thailand). All participants provided written, informed consent, and were free to withdraw from the study at any stage. No harm occurred to participants through participation.

Data analyses
All analysis was conducted by original assigned groups using IBM SPSS Statistics version 20.0 by a researcher who was blind to the group allocation. A mixed ANOVA procedure, including both between-subject and within-subject factors, was implemented to assess the effect of grouping, time, and interaction effects. Effect sizes were assessed using the partial eta-squared statistic.

RESULTS
Fifty-six caregivers attending the outpatient department with the family member diagnosed with depression were assessed as eligible to participate in the study. Of these, two were excluded because they declined to take part in the study. Fifty four were randomized to an intervention or control group, and none withdrew from the study (Fig. 1).

A descriptive summary of participant characteristics in the sample as a whole and in the two groups individually...
is given in Table 1. Fifty-four family carer participants were analysed; with 27 randomized to each group. In total, slightly more females than males participated. The average age of participants was 41 years (standard deviation (SD) = 9), and the average time they had been a carer was 13.1 months (SD = 14.5). Approximately three-quarters were married or in de facto relationships, and in paid employment.

Measurement of resilience scores at baseline, post-test and follow up indicated that marginal mean resilience scores increased steadily in the control and intervention groups from baseline to follow up (Fig. 1); however, the increase in resilience was greater in the intervention than the control group between baseline and post-test, in particular (Table 2).

The repeated-measures ANOVA provided evidence for a significant difference in resilience scores between the measured time points (F2,102 = 15.1, P < 0.001), with a partial \( \eta^2 \) statistic of 0.228 indicating a large effect. Pairwise comparisons (using the Sidak correction for multiple comparisons) indicated resilience scores to be significantly different between baseline and post-test (\( P = 0.001, 95\% \) confidence interval for the difference (3.33, 13.7)) and between baseline and follow up (\( P < 0.001, 95\% \) confidence interval for the difference (7.31, 19.9)), but not significantly different between post-test and follow up (\( P = 0.216, 95\% \) confidence interval for the difference (−1.87, 11.9)) (Fig. 2).

The effect of group was also found to be statistically significant different between groups (F1,51 = 6.22, \( P = 0.016, 95\% \) confidence interval for the difference (1.21, 11.2)). A partial \( \eta^2 \) statistic of 0.106 was calculated for the group effect, indicating a medium-to-large effect. The intervention group exhibited a slightly greater improvement in resilience over time than the control group, but the interaction between time and group was not significant.

Regarding treatment fidelity, all participants in the intervention group completed the manual, and a small number (\( n = 2, 7.4\% \)) reread parts after finishing the final stage of data collection. Concerning the written component, eight (29.6%) finished all of this, six (22.2%) finished approximately three-quarters, and nine (33.3%) completed approximately half this requirement.

**DISCUSSION**

The aim of the present study was to assess the efficacy of a GSH manual in increasing resilience in family caregivers of individuals diagnosed with moderate depression, in

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<th>TABLE 1: Participants' sociodemographic information</th>
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<td>Time (months) spent as caregiver</td>
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SD, standard deviation.

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<th>TABLE 2: Mean and standard deviation (SD) for resilience scores at each time point</th>
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comparison to caregivers who only received routine outpatient department support. Participants were allocated randomly to a control or intervention group, and the study was carried out over 12 weeks. The principal findings of the study were that, even though both groups reported improvements, a significantly greater increase in resilience took place in the intervention group recipients of GSH in comparison to the control group recipients of standard outpatient department support. Similarly, among intervention group participants, a significant increase in resilience occurred from baseline to post-treatment and baseline to follow-up, but not between post-test and 1-month follow up. Overall, the differences between the two groups could be due to the efficacy of the GSH in strengthening resilience in the intervention group of carer participants. These findings accord with systematic reviews and meta-analyses supporting the efficacy of GSH for depression (Cuijpers et al. 2010; Gellatly et al. 2007). It is also noteworthy that the control group reported improvement in their resilience, although at a lower level than the intervention group. This improvement might have in part been attributable to caregivers learning to cope with their caring role, and improvement in care recipients’ level of dependency (Zauszniewski et al. 2009).

Depressive symptoms in a family member are an important contributor to caregivers’ psychological distress (Scazuca et al. 2002) and burden (Heru & Drury 2011; Heru & Ryan 2004), which, in turn, can have a detrimental effect on caregivers’ resilience and well-being and the recovery of the person with, in this instance, depression. Low resilience can also affect adversely carer coping and increase stress in the family environment. As a consequence, this can extend the duration of the episode of depression and lead to less favourable outcomes for the person with depression (McCauley et al. 1993). Likewise, living in a family with high levels of stress and low levels of support increases the likelihood of relapse and poorer opportunity for recovery from depression compared to living in a family with low levels of stress and good support (Asarnow et al. 2001; Silk et al. 2009).

Resilience acts as a buffer to protect individuals from adverse psychological and physical health during challenging life events (Yi et al. 2008), such as supporting a family member with depression. Thus, it is important to minimize risks and enhance protective factors associated with resilience (Luthar et al. 2000) when caregivers are confronted with the challenge of supporting a family member with depression. In so doing, this will help reduce their psychological distress and burden and increase their resilience to cope with the challenges of supporting the person with depression (Heru & Drury 2011; Heru & Ryan 2004). Within the context of the present study, it could be inferred that, for intervention group participants, the GSH manual served as a protective factor by helping to increase their resilience.

![Figure 2: Estimated marginal mean resilience scores: control and intervention groups.](image-url)
and understanding of, and how to support, the family member with depression.

The findings of our study offer provisional evidence that GSH helps strengthen caregivers’ resilience when caring for family members with moderate depression. This is an important consideration, because resilience helps individuals (caregivers) manage positive and challenging life events (Padesky & Mooney 2012). They are more likely to be persistent when faced with challenges and accepting of circumstances that cannot be changed, such as persevering in supporting a family member with depression (Bonanno 2004). This is the first RCT of GSH in Thailand to assess the efficacy of this approach. Even though the manual was conceived originally for people with depression, there are considerable benefits in adopting this approach to increasing caregivers’ resilience. It can be used as an adjunct to the limited amount of information and support given to caregivers by mental health nurses and other clinicians. It is a convenient-to-use (Bilich et al. 2008), accessible, and cost-effective approach (Watkins 2008), particularly in Thailand, and elsewhere in Asia, where psychiatric rehabilitation is frequently underresourced and caregivers’ needs are often overlooked (Chiu et al. 2013), and in light of the considerable distances and costs incurred in travelling to outpatient departments (World Health Organization and Ministry of Public Health 2006).

It is noteworthy that only two caregivers declined to participate in, and none withdrew from, the present study. There are four interrelated, and at times, competing explanations for this situation. First, caregivers might have perceived they had no choice but to participate, and having done so, felt they could not withdraw. While the researchers cannot be certain that caregivers perceived coercion to participate, steps were taken in writing and verbally to ensure participation was voluntary. Furthermore, the researcher who undertook recruitment and data collection was not an employee of the hospital where recruitment took place, and there were no adverse consequences for the two caregivers (and their respective care recipients) who declined to participate in the study. Second, the high participation and low withdrawal rates might be attributable to a culture of respect for people perceived to be in positions of authority (in this instance, the researcher), common in people living in some South-East Asian countries, including Thailand (Bankston & Hidalgo 2006). Evidence of high participation rates is evident in other studies conducted in this region (e.g. Hmwe et al. 2015; Ngai & Ng 2014). Third, the high participation rate could also be due to the fact that limited tailored support is provided to Thai family caregivers in this situation (World Health Organization and Ministry of Public Health 2006); therefore, participants might have perceived the study could be beneficial to their situation. Finally, the weekly telephone calls participants received might have played a part in helping to retain them in the study.

LIMITATIONS

The assessor who undertook the assessments was not blinded to participant allocation to groups. In our view, while this did not have an adverse effect on the findings, it is nevertheless a potential limitation. GSH might be of limited value to caregivers with little reading and writing ability or inclination to read, and the subjective feature of self-report by caregivers could be a limitation. Also, the manual was only provided for 8 weeks, which could explain why the short-term benefits detected were not maintained at 12 weeks. Furthermore, the 12-week follow-up period might have been too brief to foresee significant improvement in caregivers’ resilience outcomes. Finally, only caregivers aged 18–60 years were included; therefore, the findings might not apply to caregivers aged over 60 years.

CONCLUSIONS

Our study provides preliminary evidence that GSH can lead to a greater increase in resilience in family caregivers of individuals with moderate depression in comparison to caregivers who only receive standard support. The findings contribute to the limited body of mental health nursing knowledge about the usefulness of GSH in increasing primary caregivers’ resilience in coping with and supporting family members with depression in the community. Mental health nurses and other clinicians can use GSH as an adjunct to standard support provided to caregivers in this situation. It is a low-cost approach, with potentially good access and penetration, particularly in developing countries, such as Thailand, where limited support is provided to family caregivers. Further research is required to evaluate the efficacy of the approach, with recruitment from more mental health settings and with a longer intervention. Ideally, the duration of the intervention should be greater than 3 months, and a follow up of at least 1 year is desirable to establish significant long-term advantages of GSH (Pitschel-Walz et al. 2001). One way of doing this is to include occasional booster sessions, which can help consolidate the effects of GSH over a greater period of time. Research is also needed to assess if sharing the GSH manual with the family member who has depression leads to greater resilience in both sets of individuals, and include older adult caregivers.
ACKNOWLEDGEMENTS

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REFERENCES


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