Transport Accident Commission & WorkSafe Victoria

Evidence Service

Comparative effectiveness of counselling providers with different qualifications

August 2013

Plain Language Summary

After trauma (e.g. a car crash or injury), people can have long lasting mental health problems, like anxiety or depression. Counsellors try to help these people cope better.

Counsellors can have different types of training. There is not enough research to tell if the type of training effects patient care.

A joint initiative of

Comparative effectiveness of counselling providers with different qualifications

August 2013

Executive Summary

Background

People affected by trauma can experience on going mental health symptoms. Counselling is one form of treatment that aims to help people better cope with their experience of trauma and the resulting symptoms. Counselling providers can vary considerably in their level of training.

This report sought to review the evidence that compares the effectiveness of counselling providers with different qualifications.

One high-quality systematic review of five randomised controlled trials was found and used as the basis of this report.

Does the qualification of the counselling provider effect outcomes for people after trauma?

The review found that the small number of studies available does not allow conclusions to be drawn about the effects of professional counselling providers compared to paraprofessional counselling providers for mental health outcomes in people following trauma.

Glossary	
Professional counselling providers	People with specialised professional training for the treatment of anxiety and depression, including psychiatrists and psychologists. Nurses and counsellors may be included in this group if specialist mental health training was a compulsory part of their degree.
Paraprofessional counselling providers	Mental health care workers, paid or voluntary, who were unqualified with respect to psychological treatment for anxiety and depressive disorders.

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Evidence Service

Comparative effectiveness of counselling providers with different qualifications

Evidence Review

August 2013

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CONTENTS

ACKNOWLDEGEMENTS

The authors would like to thank Fiona Chomley, Lauren McKirdy, Karen Tait, Jane Reid and Gulsun Ali for their assistance with scoping of the topic for this report.

BACKGROUND

Trauma and mental health

Following traumatic events, psychological distress is common.[1] Traumatised people can experience emotional upset, increased anxiety, sleep and appetite disturbance, or additional reactions such as fear, sadness, guilt or anger.[1] Often the psychological symptoms of distress subside in the days and weeks following the traumatic event, however for some people these symptoms persist and develop into longer lasting problems.[1] Motor vehicle accidents are commonly associated with anxiety, depression and posttraumatic stress disorder (PTSD).[2] Similarly, people injured in the workplace can suffer psychological distress (such as anxiety, depression and PTSD), sometimes to a greater degree than those injured outside the workplace.[3]

Each year, around 20% of Australians aged 16-85 (around three million people) experience symptoms of a mental health disorder (such as depression; anxiety or a substance use disorder).[4] In 2010-2011, the state of Victoria had the highest number of patients and Medicare subsidised mental health services, among all States and Territories.[4, 5]

In Australia, mental health disorders are often managed by general practitioners (GPs).[4] In 2010-2011, the most common ways that GPs managed patients presenting with mental health problems was using one or a combination of: medication, provision of advice or counselling, and referral for specialised mental health care.[4, 5]

Counselling and qualifications

Counselling is one intervention that aims to help people better cope with difficult life circumstances such as: grief and loss; communication and relationships; work and career; stress, anxiety and depression; life transitions; parenting; self-esteem; spirituality; and difficulties caused by addictions, trauma and abuse.[6]

In Australia there is no legislative recognition of counselling as a distinct profession and there are no regulations to govern the use of the term counsellor, as is the case for regulated professions such as psychology and social work.[7] Counselling practitioners are generally drawn from diverse professional and theoretical backgrounds, with varying levels of training ranging from doctoral level through to diplomas of one year or less.[7] Although peak bodies such as the Psychotherapy and Counselling Federation of Australia provides a set of training standards for membership, counsellors are not required to register in order to practice.[7]

Counselling is subsidised through the Australian Medicare Benefits Schedule (MBS), but only if it is provided by psychiatrists, psychologists, and some allied health professionals (specifically, social workers, mental health nurses and occupational therapists).[4]

Intended purpose of the review

The Transport Accident Commission (TAC) and WorkSafe Victoria (WSV) requested a review of the evidence to compare the effectiveness of counselling providers with different qualifications. This report sought to answer the following question:

- Does the qualification of the counselling provider effect outcomes for people after trauma?

METHODS

Methods are outlined briefly below. More detailed information about the methodology used to produce this report is available in Appendices 1 and 2. All appendices are located in the Technical Report accompanying this document.

Stage 1: Identify relevant research

A comprehensive search of Medline, PsycINFO, CINAHL, EMBASE and the Cochrane Library was undertaken in June 2013 to identify relevant synthesised research (systematic reviews (SRs)), and any relevant primary studies (randomised controlled trials (RCTs) or controlled clinical trials (CCTs)). Searches of the Motor Accidents Authority of NSW (www.maa.nsw.gov.au) and the Accident Compensation Corporation (ACC) of New Zealand (www.acc.co.nz) websites were also undertaken. Reference lists of included studies were also scanned to identify relevant references.

Studies identified by the searches were screened for inclusion using specific selection criteria (see Appendix 2, Table A2.1). In this review studies were only included if they were SRs, RCTs or CCTs that investigated the effects of counselling delivered by professional compared with counselling delivered by paraprofessionals in people experiencing mental health issues related to trauma. Systematic reviews that met the selection criteria were reviewed to identify the most up-to-date and comprehensive source of evidence and critically appraised to determine whether they were of high quality. This process was repeated for additional sources of evidence, until the most recent, comprehensive and high quality source of evidence was identified for each indication. All screening and selection was conducted independently by two reviewers, results were compared and any discrepancies discussed and resolved.

Stage 2: Address further actions identified

See algorithm in Table 1.

Table 1. Further action required to answer clinical questions.

<table>
<tr><th colspan="5">Is there any synthesised research available? (e.g. EBGs, HTAs, SRs)</th></tr>
<tr><th colspan="3">Yes</th><th colspan="2">No</th></tr>
<tr><th colspan="3">Is this good quality research?</th><th colspan="2">Are RCTs available?</th></tr>
<tr><th colspan="2">Yes</th><th>No</th><th>Yes</th><th>No</th></tr>
<tr><th colspan="2">Is it current (within 2 years)?</th><td rowspan="2">Undertake new SR and/or meta-analysis</td><td rowspan="2">Undertake new SR and/or meta-analysis</td><td rowspan="2">Consider looking for lower levels of evidence</td></tr>
<tr><th>Yes</th><th>No</th></tr>
<tr><td>No further action</td><td>Update existing SR</td><td></td><td></td><td></td></tr>
</table>

The most recent, relevant, high quality piece of evidence was used to address the question posed above.

RESULTS

Database searches yielded 3,728 articles, which were screened for potential relevance. Of these, 29 articles were reviewed in full text. From this review two articles were identified (see Appendices 3 and 4). No further studies were identified from the results of the internet search.

In total, 2 papers were identified, consisting of:

- 1 synthesised study (1 SR)[8]
- 1 primary study (1 RCT),[9] which was included in the systematic review above

This report is therefore based on the systematic review by Boer (2005).[8] Critical appraisal of the review found it to be of high-quality (see Appendix 5).

The SR by Boer (2005)[8] aimed to "critically examine the common sense notion that professional training/qualification is necessary to deliver effective psychological treatment for anxiety and depressive disorders."

The review only included RCTs that looked at:

1. paraprofessional delivery of psychological treatment for anxiety and depression versus professional delivery of treatment, or
2. paraprofessional delivery of psychological treatment for anxiety and depression versus no treatment

The latter comparison however was not the focus of this report and thus these results were only discussed briefly.

In this review the authors defined professionals as people with specialised professional training for the treatment of anxiety and depression, including psychiatrists and psychologists. Nurses and counsellors were also included in this group if specialist mental health training was a compulsory part of their degree. Paraprofessionals were mental health care workers, paid or voluntary, who were unqualified with respect to psychological treatment for anxiety and depressive disorders.

Studies in this review were scored against a Quality Rating Scale (QRS), developed by the Cochrane Collaboration Depression, Anxiety and Neurosis Review Groups. The QRS was developed in order to standardise the quality assessment of trials, assessing 23 items of quality according to three degrees of adequacy ("0"; "1"; "2"). In this review studies were scored against 21 of the 23 quality items, excluding the blinding and side effects items, which were not relevant to these trials. The maximum score that could be retrieved was 42 for 21 items.

The review and its five included studies are summarised in Tables 2 and 3.

Study characteristics

The studies included in the Boer SR[8] were published between 1976 and 2003. The populations of the included studies varied. Two studies looked at anxiety: anxious first time mothers,[10] and speech anxiety.[11] The other three studies looked at various types of depression,[9, 12] and women at risk of developing postpartum depression.[13]

The interventions examined by the studies also varied and included: cognitive behavioural therapy[9]; supportive group therapy;[9] systematic desensitisation relaxation and cue-controlled relaxation;[11] social worker support;[10] and peer support.[12, 13] Three of the studies examined interventions for individuals,[10, 12, 13] and two looked at group therapies.[9, 11] All of the paraprofessional interventions involved training of varying duration.

One of the included studies compared the *same* intervention delivered by professionals and paraprofessionals,[9] one study compared the *same* intervention delivered by professionals and paraprofessionals and no treatment,[11] one study compared *different* interventions delivered by professionals and paraprofessionals and no treatment,[10] while the remaining two studies compared paraprofessional interventions with a control condition (usual community care,[13] and no treatment[12]).

The duration of treatment in the included studies was six weeks for one study,[11] ten weeks for another study,[9] and not specified for the remaining three studies.[10, 12, 13] The included studies also varied in the outcome measures used and the length of follow-up:

- Spielberger State Anxiety, Costello-Comrey Anxiety and Trait Depression Scales, Beck Depression Inventory (measured at 12 months)[10]
- Hamilton Rating Scale for Depression; Beck Depression Inventory (measured ten weeks post treatment)[9]
- Edinburgh Postnatal Depression Scale score > 12 (measured at eight weeks)[13]
- Present State Examination (measured after one year)[12]
- Taylor Manifest Anxiety Scale (measured six weeks post treatment)[11]

Study quality

Four of the five included studies were considered to be of moderate to high quality, i.e. QRS score between 21-42.[9, 10, 12, 13] The study by Russell (1976)[11] was considered to be of low quality. The sample size was small for all of the included studies, with less than 50 in each arm. Allocation concealment was adequately performed in three of the studies[10, 12, 13] and detailed baseline characteristics were only reported by one study.[13] Furthermore power calculations were only adequately performed and reported in one study.[9] Clear selection criteria were reported in four of the studies.[9, 10, 12, 13] Blinding of participants and outcome assessors was not performed in any of the studies.

Study results

The individual studies and their pooled results found no significant difference between

paraprofessionals and professionals with regards to reduction in symptom severity immediately following treatment[9-11] (Standard Mean Difference (SMD) = 0.09, 95% CI -0.23 to 0.40; p=0.58) or at three, six, nine and 12 months followup.[11] Furthermore no heterogeneity was found between studies (I^2=0.1%; Chi^2= 4.0; df=4; p=0.41). In addition no significant difference was found between professionals and paraprofessionals following various sensitivity and subgroup analyses (e.g., study quality, outcome measures, inclusion criteria; paraprofessional background, indication (anxiety or depression), individual or group intervention or whether professionals and paraprofessionals performed the same intervention).

A significant difference was found in favour of paraprofessionals compared to a control condition;[10-13] however this was not the focus of this report.

DISCUSSION

The authors conclude that the findings of the review are inconclusive with regards to paraprofessionals partially replacing professionals in the treatment of anxiety and depressive disorders due to the small number of included studies, their small sample sizes, variations in treatment duration, majority female population, and methodological limitations (such as the potential rater-bias arising from the use of self-rated measures and lack of blinding for observer-rated measures).[8] The authors suggest that the lack of a significant difference between paraprofessionals and professionals could be due to the included studies being inadequately designed to detect significant differences.[8] It should also be noted that the majority of the studies included in the SR are over ten-years old, with the oldest published in 1976 and the most recent published in 2003.

CONCLUSION

The small number of studies available does not allow conclusions to be drawn about the effects of professional counselling providers compared to paraprofessional counselling providers for mental health outcomes for people following trauma.

SUMMARY TABLES

Table 2. Summary of Boer 2005.[8]

Boer PC, Wiersma D, Russo S, van den Bosch RJ. Paraprofessionals for anxiety and depressive disorders. Cochrane database of systematic reviews (Online). 2005(2):CD004688.	
Study type	Systematic review of 5 RCTs
Indication	Anxiety and depressive disorders
Outcomes	Depression and/or anxiety symptom scale scores. Validated observer and self-rated measurement scales were accepted.
Definition of professionals	People with specialised professional training for the treatment of anxiety and depression, including psychiatrists and psychologists. Nurses and counsellors were only included in this group if specialist training was a compulsory part of their degree.
Definition of paraprofessionals	Mental health care workers, paid or voluntary, who were unqualified with respect to psychological treatment for anxiety and depressive disorders.
Type of intervention	Any kind of psychological treatment for anxiety and depressive disorders
Comparisons made	1. Paraprofessionals vs. professionals 2. Paraprofessionals vs. control
Included studies	5 RCTs: Barnett 1985,[10] Bright 1999,[9] Dennis 2003,[13] Harris 1999,[12] Russell 1976[11]
Findings	**Main results** Five studies reported five comparisons of paraprofessionals versus professionals (n=106) and five comparisons of paraprofessionals versus control condition (n=220). No differences were found between paraprofessionals and professionals (SMD=0.09, 95%CI -0.23 to 0.40, p=0.58), and no significant heterogeneity. Studies comparing paraprofessionals versus control (mixed continuous and dichotomous data) showed a significant effect in favour of paraprofessionals (OR=0.34, 95% CI 0.13 to 0.88, p=0.03), but heterogeneity was indicated (I^2=60.9%, Chi^2= 10.24, df=4, p=0.04). **Authors' conclusions** The few studies included in the review did not allow conclusions about the effect of paraprofessionals compared to professionals, but three studies (women only) indicated a significant effect for paraprofessionals (all volunteers) compared to no treatment, however, this finding is not specific to counselling as an intervention. The evidence to date may justify the development and evaluation of programs incorporating paraprofessionals in treatment programs for anxiety and depressive disorders.

Table 3. Summary of studies included in Boer 2005.[8]

Barnett 1985[10] (RCT)
Population: 89 highly anxious first time mothers, 3 or 4 days postpartum Setting: hospital, Australia Professional intervention: assistance from social worker Paraprofessional intervention: assistance from volunteer Control group: not receiving any intervention. Treatment duration: not specified Follow-up: Assessments at three, six, nine and twelve months. Outcomes & measures: Primary outcome was state anxiety level at 12 months. Spielberger State Anxiety; Costello-comrey anxiety and trait depression scales; The Beck Depression Inventory. Quality: Interviewer of initial interview and assessment was blinded. No base-line differences of trial subjects between allocated groups. No co-interventions or other potential confounders. Adequate allocation concealment. Quality rating system score: 23
Bright 1999[9] (RCT)
Population: 98 people with depression (28 male, 70 female) Setting: university based clinic, USA Professional Intervention: cognitive behavioural therapy (CBT) or mutual supportive group therapy provided by professionals (master's degree in clinical training in clinical or counselling psychology) Paraprofessional Intervention: CBT or mutual supportive group therapy provided by paraprofessionals (no formal training, recruited from community-based self-help organizations) Treatment duration: 10 week treatment duration; weekly 90-min sessions for both treatment conditions Follow-up: 10 weeks post treatment assessment Outcomes & measures: 10 weeks post treatment, Hamilton Rating Scale for Depression assessed by an independent clinician; Beck Depression Inventory. Quality: Patient, provider and outcome assessor blinding were not mentioned. Drop-out rate before completing 7 sessions = 30%, 42 completed the post treatment assessment. Baseline characteristics differences between comparison groups not reported. Allocation concealment? Unclear. No co-interventions or other potential confounders. Quality rating system score: 30.
Dennis 2003[13] (RCT)
Population: 44 mothers identified as high-risk for postpartum depression (8-12 weeks postpartum) Setting: home (telephone-based), Canada Paraprofessional intervention: telephone-based peer support (mother-to-mother), from a mother who previously experienced postpartum depression Control group: usual care (both groups had access to the standard community postpartum services) Treatment duration: telephone support provided as often as the patient deemed necessary, duration not specified Follow-up: Assessments at 4 and 8 weeks post randomisation, no long-term follow-up Outcomes & measures: primary outcome at 8 weeks Edinburgh Postnatal Depression Scale score > 12 Quality: One drop-out in the control group. No baseline demographic differences between comparison groups.

Intention-to-treat analysis. Community postpartum services are potentially biasing; no other potential confounders. Allocation concealment adequate. Quality rating system score: 27

Harris 1999[12] (RCT)

Population: 86 women with chronic depression

Setting: home-based, UK

Paraprofessional intervention: Volunteer befriending - meeting and talking with the depressed woman for a minimum of one hour each week, and acting as a 'friend' to her, listening and 'being there' for her.

Control condition: not receiving intervention, on wait-list

Treatment duration: not specified

Follow-up: One final assessment after 1 year

Outcomes & measures: Remission of two months or more after one year; Present State Examination.

Quality: Intention-to-treat design. No withdrawals. No baseline demographic differences between comparison groups. Co-interventions (professional contact or psychotropic drugs) but no association with outcome; no other potential confounders. Allocation concealment adequate. Quality Rating System score: 31

Russell 1976[11] (RCT)

Population: 23 males, 27 females, volunteer undergraduates, with speeching anxiety

Setting: university, USA

Professional Intervention: systematic desensitisation relaxation and cue-controlled relaxation in groups of 2 to 4, led by professionals (counsellors PhD in psychology, experienced with interventions).

Paraprofessional Intervention: systematic desensitisation relaxation and cue-controlled relaxation in groups of 2 to 4, led by paraprofessionals (advanced undergraduate who had no previous training in interventions).

Control Group: no treatment

Treatment duration: 5 treatment sessions over 6 weeks

Follow-up: not specified

Outcomes & measures: Post treatment assessment of 6 weeks, Taylor Manifest Anxiety Scale

Quality: No patient, provider and outcome assessor blinding. No baseline differences between the groups on scales by analysis of variance. No co-interventions or other potential confounders. 42 completed the post treatment assessment. Allocation concealment unclear. Quality Rating system score: 17

DISCLAIMER

The information in this report is a summary of that available and is primarily designed to give readers a starting point to consider currently available research evidence. Whilst appreciable care has been taken in the preparation of the materials included in this publication, the authors and the National Trauma Research Institute do not warrant the accuracy of this document and deny any representation, implied or expressed, concerning the efficacy, appropriateness or suitability of any treatment or product. In view of the possibility of human error or advances of medical knowledge the authors and the National Trauma Research Institute cannot and do not warrant that the information contained in these pages is in every aspect accurate or complete. Accordingly, they are not and will not be held responsible or liable for any errors or omissions that may be found in this publication. You are therefore encouraged to consult other sources in order to confirm

the information contained in this publication and, in the event that medical treatment is required, to take professional expert advice from a legally qualified and appropriately experienced medical practitioner.

CONFLICT OF INTEREST

The TAC/WSV Evidence Service is provided by the National Trauma Research Institute. The NTRI does not accept funding from pharmaceutical or biotechnology companies or other commercial entities with potential vested interest in the outcomes of systematic reviews.

The TAC/WSV Health Services Group has engaged the NTRI for their objectivity and independence and recognises that any materials developed must be free of influence from parties with vested interests. The Evidence Service has full editorial control.

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