

Evidence Summary Title:

Peer support telephone calls for improving health: Evidence and implications for public health

Review Quality Rating: 9 (strong)

Review on which this evidence summary is based:

Dale, J., Caramlau, I., Lindenmeyer, A., & Williams, S.M. (2008). **Peer support telephone calls for improving health**. *Cochrane Database of Systematic Reviews*, 1, Art. No.: CD006903

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This is an evidence summary written to condense the work of the authors of this systematic review, referenced above. The intent of this summary is to provide an overview of the findings and implications of the full review. In this review, key findings from the included studies are synthesized by type of outcome and the aim of the intervention. However, this evidence summary focuses on the findings by type of outcome in keeping with the objectives of the review. For more information on individual studies included in the review, please see the review itself.

Review content summary

This systematic review of seven randomised controlled trials (2492 participants) aimed to determine the effectiveness of peer-support telephone calls. The participants studied were living with acute or long-term illness, carers of people with acute or long-term illness, parents, people with psychological symptoms, and people requiring screening or who had any other health and well-being related concerns. To be included, studies had to be randomised controlled trials. Interventions described in this review involved peer support telephone contact (of any duration and frequency), provided by an individual who shared a similar health experience. Outcomes measured included: physical (e.g. blood pressure); psychological health (e.g. depression); behavioural health (e.g. duration of breastfeeding); and social (e.g. health service use). Authors report that peer support telephone calls appear to be effective for some health conditions (e.g. increased mammography screening, reduced postnatal depression symptoms). The included studies, however, were of low methodological quality so their findings must be interpreted cautiously.

Comments on this review's methodology

This is a methodologically strong systematic review. A focused clinical question was clearly identified. Appropriate inclusion criteria were used to guide the search. A comprehensive search was employed using multiple health databases; online trial registers; reference list review; and, contact with experts. The search was not limited by language. Primary studies were assessed for methodological quality based on their use of blinding, allocation concealment, completeness of follow-up data, and study design. The methods were described in sufficient detail so as to allow replication. It was unclear if two independent reviewers were involved in the quality appraisal. The results of this review were transparent. Results were clearly presented in tables so as to allow for comparisons across studies. Meta-analysis was not suitable due to the heterogeneity between primary studies; thus, a narrative analysis was undertaken. The authors considered the quality of primary studies in their conclusions.

Why this issue is of interest to public health

Interest in the use of peers and/or lay health workers to deliver health interventions is steadily growing. Such interventions are intended to meet the support and informational needs of patients, and relieve the pressure on mainstream health services.¹ Alongside interest in peer support, there is increasing interest in telephone support, as this type of support has the advantage of greater accessibility and potential availability than face-to-face contact. The telephone is increasingly used in health care and there are studies on the effects of interventions delivered by telephone for a wide range of health conditions. A move toward the use of telephone-delivered interventions also reflects the current emphasis on implementing more cost-effective healthcare.¹ As an added benefit, evidence suggests that the peer helpers experience improved health themselves.¹

Evidence and implications

Evidence points are not in order of the strength of evidence

What's the evidence?	Implications for practice and policy:
<p>1. Physical health outcomes (3 studies)</p> <p>1.1. In all three studies there were no statistically significant improvements in physical health outcomes between telephone peer support intervention groups and control groups (i.e., other types of intervention and/or usual care) from baseline to up to six months follow-up.</p> <p>2. Psychological health outcomes (5 studies)</p> <p>2.1. Self-efficacy (2 studies)</p> <p>2.1.1. In both studies there were no statistically significant improvements in self-efficacy between telephone peer support intervention groups and control groups up to six months follow-up.</p> <p>2.2. Mental health status (2 studies)</p> <p>2.2.1. Among two studies that evaluated mental health status outcomes, one study reported statistically significant differences, while the other study reported no difference between the intervention and control groups from baseline up to 12 weeks follow-up.</p> <p>2.2.2. In the study that reported differences, the intervention group showed statistically significant improvement in postnatal depressive symptomatology at both 4 and 8 weeks. The intervention group was 6.23 times more likely to have decreased depressive symptomatology at 4 weeks compared to controls. The true effect ranged from 1.15 to 33.77 times more likely to have decreased symptomatology (OR 6.23; 95% CI 1.15 to 33.77). The intervention group was also 6.23 times more likely to have decreased depressive symptomatology at 8 weeks compared to controls with the true effect ranging from 1.40 to 27.84 times more likely to have decreased symptomatology (OR 6.23; 95% CI 1.40 to 27.84).</p> <p>2.3. Emotional quality of life (1 study)</p> <p>2.3.1. There were no statistically significant improvements in emotional quality of life from baseline up to six months follow-up between intervention and control groups on emotional quality of life following post-myocardial infarction.</p> <p>2.4. Satisfaction with infant feeding (1 study)</p> <p>2.4.1. Women in the intervention group expressed less dissatisfaction with their method of infant feeding than controls (1.5% versus 10.5%; P = 0.02).</p>	<p>1. Physical health outcomes</p> <p>1.1. Public health practitioners should be aware that the findings from a limited number of methodologically weak studies suggests that telephone peer support should not be implemented if the expected impact is improvement in physical health outcomes such as cholesterol level.</p> <p>2. Psychological health outcomes</p> <p>2.1. Public health practitioners should be aware that the findings from a limited number of methodologically weak studies suggest that telephone peer support should not be implemented if the expected impact is improvement in self-efficacy, mental health status or emotional quality of life.</p> <p>2.2. There is some evidence to support using telephone peer support intervention when the intended outcome is reduced postnatal depression or increase in satisfaction with infant feeding among new mothers, however, the costs associated with implementing these interventions may outweigh the small to modest short-term benefit that is gained.</p>
<p>3. Behavioural health outcomes (5 studies)</p> <p>3.1. Duration of exclusive breastfeeding (1 study)</p> <p>3.1.1. Mothers who received telephone peer support were 1.21 times more likely than controls to breastfeed exclusively at 12 weeks post partum. The true likelihood ranged from 1.04 to 1.41 (RR 1.21; 95% CI 1.04 to 1.41).</p> <p>3.2. Behaviours after myocardial infarction (2 studies)</p> <p>3.2.1. In one study individuals exposed to the intervention following myocardial infarction were more likely than controls to report having changed their diet (54% versus 44%; P = 0.03), while no difference in recovery behaviours was reported in the second study.</p> <p>3.3. Mammography screening (2 studies)</p> <p>3.3.1. Both studies reported statistically significant positive effects of telephone peer support on maintaining mammography screening at one year: study 1 (23.3% versus 15.8%; P = 0.029); study 2 (RR 1.4 with the true effect ranging from 1.2 to 1.7).</p>	<p>3. Behavioural health outcomes</p> <p>3.1. There is some evidence, albeit of weak methodological quality, that telephone peer support interventions could be implemented as a way to encourage dietary change in patients after myocardial infarction, prolong breastfeeding among new mothers, or increase the uptake of mammography screening.</p>

<p>4. Social outcomes (1 study)</p> <p>4.1. No difference was found between individuals exposed to telephone peer support and controls in terms of social items on a quality of life scale.</p>	<p>4. Social outcomes</p> <p>4.1. There is limited evidence pertaining to the impact of telephone peer support interventions on social outcomes, therefore, public health practitioners should not implement telephone peer support interventions at this time if the expected impact is improvement in social outcomes.</p>
<p>5. Impact on peer supporters (3 qualitative studies)</p> <p>5.1. The findings from all three studies suggest that peer supporters:</p> <p>5.1.1. Need to feel that they help the recipient;</p> <p>5.1.2. Value the sharing of experience; and</p> <p>5.1.3. Sometimes feel confronted by their anxieties and vulnerability.</p>	<p>5. Impact on peer supporters</p> <p>5.1. If telephone peer support is implemented, public health practitioners should assess the positive and negative effects on peer supporters and develop strategies to address / minimize any negative effects such as anxiety.</p>
<p>6. Methodological Issues with the Primary Studies in the Review</p> <p>6.1. The quality of the studies was generally weak in regards to:</p> <p>6.1.1. Describing theoretical underpinnings;</p> <p>6.1.2. Allocation concealment;</p> <p>6.1.3. Intention-to-treat analysis;</p> <p>6.1.4. Participant drop outs;</p> <p>6.1.5. Blinding of participants, providers/caregivers, outcome assessors and data analysts;</p> <p>6.1.6. Reliance of self-report measures; and</p> <p>6.1.7. Describing how peers were recruited trained and supported.</p>	<p>6. Implications for Future Research</p> <p>6.1. Rigorous RCTs and qualitative studies are needed to examine telephone based peer support interventions</p> <p>6.2. Future research should explore:</p> <p>6.2.1. Combining emotional and/or appraisal peer telephone support with informational support;</p> <p>6.2.2. The impact of the approach taken towards peer recruitment, and the quantity and quality of training offered to peers, on the effectiveness of peer support telephone calls;</p> <p>6.2.3. Different approaches to telephone support (e.g., proactive versus reactive support); and</p> <p>6.2.4. Specific elements of peer support telephone calls most associated with positive outcomes.</p>
<p>7. Cost Benefit or Cost-effectiveness Information</p> <p>7.1. No evidence related to the cost-effectiveness of telephone peer support interventions was provided in any of the studies included in the review.</p>	<p>7. Cost Benefit or Cost-effectiveness Information</p> <p>7.1. Future research should assess the cost benefit or cost-effectiveness of telephone peer support interventions.</p>
<p>General Implications</p> <ul style="list-style-type: none"> • There is some limited evidence to support using telephone peer support interventions to reduce postnatal depression, increase satisfaction with infant feeding among new mothers, encourage dietary change in patients after myocardial infarction, prolong breastfeeding among new mothers, and increase the uptake of mammography screening. However, telephone peer support should not be implemented with the expectation of producing positive impacts on physical health outcomes, self-efficacy, mental health status, emotional quality of life or social outcomes. • The findings of this review should be interpreted cautiously as the design of the interventions varied and outcomes were diverse preventing the data to be pooled statistically. • There is a need for high-quality research to assess the cost and clinical effectiveness of peer support telephone call interventions. 	
<p>Legend: CI – Confidence Interval; OR – Odds Ratio; RR – Relative Risk **For definitions see the healthevidence.org glossary http://www.healthevidence.org/glossary.aspx</p>	

References used to outline issue

1. Dale, J., Caramlau, I.O., Lindenmeyer, A., & Williams, S.M. (2008). Peer support telephone calls for improving health. *Cochrane Database of Systematic Reviews*, 1, Art. No.: CD006903

Other quality reviews on this topic

- Evans, D., Pilkington, P., & McEachren, M. (2010). Rhetoric or reality? A systematic review of the impact of participatory approaches by UK public health units on health and social outcomes. *Journal of Public Health*, 32(3), 418–426.
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Related links

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