The Impact of Peer Support on Patient Outcomes in Adults With Physical Health Conditions: A Scoping Review

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Abstract

Little is known about the impact of peer support programmes on physical health populations or on the methods used to evaluate such programmes. The present study undertakes a scoping review of research related to peer support programmes or interventions in physical health populations, gauging the challenges in methods used to evaluate peer support interventions and programmes in healthcare settings among different physical health populations. It also draws attention to the lack of peer support research in particular areas, including in acute physical health populations such as in major trauma. The scoping review emphasizes the need for future studies to address this gap in peer support research.

Introduction And Background

'Peer support' is a process that involves individuals drawing on lived experience or shared characteristics to provide knowledge, experience, emotional assistance, practical help, and social interaction to help each other [1]. Peer support can take many forms such as one-to-one, group work, and online and telephone-supported sessions. It can be informal or more formalised, with trained peer supporters. Peer support in healthcare settings can be standardized by content or function. A global initiative in 2010 that aimed to promote best practices in peer support for health around the world adopted a functional approach to the standardization of peer support and identified the following four core functions: (1) to provide practical support; (2) to provide social and emotional support; (3) to ensure linkages to clinical care and community resources and (4) to provide ongoing support [2].

There is an abundance of peer support research in healthcare that focuses on mental health and HIV, and now more attention is being directed towards alternative population groups, including those with long-term physical health conditions. Research has also shown that peer support is especially valued by young people and Black, Asian and Minority Ethnic (BAME) adults [3]. Those from "hardly reached" populations have also been found to benefit from peer support interventions, suggesting that peer support is a broad and robust strategy for reaching these groups that health services often fail to engage [4].

There is an increasing evidence base suggesting a range of benefits of peer support for people across various populations. A review commissioned in 2015 that included more than 1,000 research studies concluded that peer support has the potential to improve experience, psycho-social outcomes, behaviour, health outcomes, and service use among people with long-term physical and mental health conditions [5]. A further review of the literature showed that peer support leads to significant improvements for people with long-term physical and mental health conditions across various outcomes such as quality of life, social functioning and perceived support, individual's knowledge, skills and confidence to manage their health and care and physical functioning and ability to self-care [6].

The objectives of this scoping review were twofold. First, to gain a better understanding of how various peer support programmes impact patient outcomes in patients with physical health conditions. Second, to gain an insight into how peer support programmes are evaluated. This method of review was selected to enable outcomes to be synthesized in order to provide more context to the evidence base and clinical practice. The following research question was generated: What is known about peer support programmes in physical health populations, and how are these programmes evaluated in terms of their effectiveness?

Review

Protocol and registration

The final protocol was registered prospectively with Figshare (https://figshare.com/articles/preprint/Scoping_review_protocol_The_impact_of_peer_support_on_patient_outcomes_in_adults_with_physical_health_conditions/15178059) and the review was conducted with reference to this protocol.

Eligibility criteria

Papers were eligible if they: (1) evaluated a peer support programme in a physical health setting(s) including in primary, secondary or community care settings; (2) included individuals with any physical health condition; (5) included any type of peer support programme/intervention; (3) were published in peer-reviewed journals.

How to cite this article

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Information sources
The search was carried out across multiple healthcare databases: Medline (Interface: EBSCOhost), PsycINFO (Interface: Healthcare Databases Advanced Search) and the Central (Interface: Cochrane Library). Search results were imported into a citation manager software (Endnote), and duplicates were removed via a combination of the removal of duplicates function on the programme and a manual check by one of the authors.

Search
The following search terms were used to search for eligible studies in all databases up to July 01, 2021. Search terms were intentionally few to reduce the likelihood of omitting papers that may not have specifically indicated including participants from within the broad umbrella of those with physical health conditions but rather mentioned the condition itself. Search terms were limited to within titles and abstracts of studies.

1. Peer support*

AND

2. Evaluation* OR Review*

Selection of sources of evidence
Screening of papers was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework. One reviewer screened all of the publications, including the title, abstract and full-text screening and was supported by the other reviewers. All reviewers were involved in determining the quality of the screening process and any queries or disagreements were resolved through in-depth discussion.

Data charting process
Data from selected studies were extracted using a standardized data collection form amended for this review. This tool captured information related to the characteristics of studies, including study aim(s), design, population demographics, nature of intervention(s), description of outcome(s) and method(s) of evaluation of data. One reviewer extracted data from the studies with guidance from the other two reviewers. Data were then added to the characteristics of sources of evidence table (Appendix).

Data items
Data abstracted included country of origin, population group, type of peer support programme or intervention, including method of delivery, evaluation methods used, main outcomes, including objective measures for quantitative studies, and derived themes for qualitative studies and conclusions.

Synthesis of results
Studies were grouped by their method of evaluating the peer support programme (either quantitatively or qualitatively). Synthesis of quantitative findings within studies involved summarizing the population group, peer support intervention(s) (including mode of delivery and evaluation methods) and primary outcome measures described. Similar qualitative findings between studies were grouped and over-arching themes are discussed.

Results
Selection of Sources of Evidence
Following the removal of duplicates, a total of 4,151 studies remained. Figure 1 shows the PRISMA flow diagram used for the identification of eligible studies [7].
Sample sizes of the included studies varied considerably, ranging from eight participants [8] to 1,229 participants [9]. There was considerable heterogeneity in the population groups of included studies. Seven studies included patients with type 2 diabetes (33.3%) [9-15], five studies included cancer populations (24%) [8,16-19], two studies included patients with spinal cord injuries (9.5%) [20-21], seven studies (33.3%) included participants from other physical health populations; stroke [22], fibromyalgia [23], alopecia [24], polycystic ovary syndrome [25], HIV [26], cardiac [27] and burn injury patients [28].

Peer support interventions

**Mode of Delivery**

Table 1 shows variation in studies for the mode of delivery of peer support.
Author(s) [ID] | % of studies | Mode of delivery of peer support
--- | --- | ---
Smith, Paul, Kelly et al., 2011[11]; Shen, Wang and Edwards, 2017[13]; Ono, Tsuyumu, Ota et al., 2017 [17]; Legg, Oczepiński, Ferguson et al., 2011[18] | 19% | Facilitated programme of face-to-face peer support led by trained peer supporters
Power and Hegarty, 2010[8]; Piatt, Rodgers, Xue et al., 2018[15], Clark, Munday and McLaughlin et al., 2012 [27] | 14% | Facilitated programme of face-to-face peer support led by both peer supporters and health professionals
Percy, Gibbo, Potter et al., 2009[25] | 5% | Facilitated programme of peer support led by health professionals alone
Chan, Sui, Oldenburg et al., 2014[10]; Dale, Caramlau, Sturt et al., 2009[14], St-Pierre, Bouchard, Gauthier et al., 2018 [16]; Goby, Monypour, Unger et al., 2007[19] | 19% | Telephone-based peer support programme with trained peer supporters
Muller, Toth-Cohen and Mulcahey, 2014[22] | 5% | Broad programme of support with peer support components
Wingate, Graffy, Holman et al., 2017[9]; Ayala, Ibarra, Cherrington et al., 2015 [12] | 10% | Mixed delivery of peer support (telephone and face-to-face)
Haas, Price and Freeman, 2013[20]; O'Dell, Earle, Rixon et al., 2019[21]; Saltinen, Kukkurainen and Peltokallio et al., 2011 [23]; Biffle and Thompson, 2019 [24]; Monroe, Nakigoz, Ddaaki et al., 2017 [26]; Grieve, Shapiro, Wibbenmeyer et al., 2020 [28] | 29% | No peer support intervention but evaluations of previously completed peer support programmes

TABLE 1: Mode of delivery of peer support.

Evaluation Methods

Nine studies (43%) utilized quantitative means of outcome evaluation in order to determine the efficacy of peer support programmes or interventions [9-11,15,18-19,27-29]. Nine studies (43%) involved exploratory qualitative analyses of participant perceptions, feedback or experiences of peer support programmes [8,16-17,20-21,23-26]. Three studies (14%) incorporated both quantitative and qualitative analyses to evaluate peer support [13-14,22].

Primary Outcomes

Self-report measures used to assess primary outcomes are presented in Table 2.
The psychological outcome measures cited across included studies varied greatly, with self-efficacy the most commonly reported psychological outcome. A community-based peer-led diabetic self-management programme that involved face-to-face peer support, concluded that self-efficacy significantly improved during the 12-week study period [13]. Notably, the intervention itself centred around self-efficacy enhancing group activities, therefore the programme was tailored to impact this particular outcome. Quality of life among participants, however, did not change significantly. A further study that evaluated a telephone peer-delivered intervention for individuals with type 2 diabetes, found no statistically significant difference in self-efficacy scores at six months [14]. However, multiple differences existed between the studies, despite similarities in the population group and the targeted outcome construct. These differences included the tools used to assess self-efficacy (see Table 2), the delivery of peer support itself (group versus telephone) and the length of time at follow-up (4 versus 6 months).

One study reported a beneficial impact of peer support on diabetes-related distress [15]. In this study, participants were individuals with type 2 diabetes and were randomly allocated to either the intervention group, which involved diabetes self-management education alongside peer-led diabetes self-management support or the Enhanced Usual Care (EUC) group, which was similar to the intervention group, however, it had no components of peer support. The study revealed that peer-led diabetes self-management support was more effective than EUC at improving diabetes distress [13].

One study reported no impact of peer support on psychological outcomes. This study considered the impact of a peer-delivered telephone intervention for women experiencing a breast cancer recurrence [19]. The study concluded that at the three-month follow-up, there were no differences in psychological distress or depressive symptoms between the intervention and control groups.

One study detected a possible detrimental impact of peer support on psychological outcomes for individuals with type 2 diabetes. This randomised controlled trial (RCT) involved a peer-led face-to-face peer support programme that took place over a two-year period. At the two-year follow-up, it was concluded that for the intervention group, there was a reduction in wellbeing (non-significant) compared to the control group [11]. Importantly, the measure used to assess wellbeing was not reported in this paper, thereby it is difficult to assess its validity and reliability.

Two studies [10,18] reported that peer support was more effective in psychological outcomes in population groups that experienced higher levels of negative psychological affects compared to those with low levels. The first study involved telephone-based peer-support and reported that participants with greater negative

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emotions seemed to benefit significantly more in terms of their psychological health compared with patients with lower levels of negative emotions. These participants also showed greater treatment compliance and reduced hospital admissions [19]. The second study included a peer-delivered face-to-face peer support programme for individuals with breast cancer and concluded that participants that engaged in positive upward comparison to the breast cancer survivor and who also regarded their cancer diagnosis as more threatening in the first instance, appeared to benefit psychologically by showing lower levels of depressive symptoms [18]. These findings suggest that peer support interventions could be more effective in individuals that demonstrate high levels of negative psychological affect.

Functional, Behavioural and Social Outcomes

The impact of peer support on reported functional, behavioural and social outcomes is mixed. A study that evaluated long-term social reintegration outcomes for burn survivors concluded that those who reported peer support attendance had better social interaction scores than those who did not. This included fewer restrictions in participating in social activities, relating and maintaining friendships and dealing with strangers [20]. A study that evaluated a community-based peer-led diabetic self-management programme concluded that social support and self-management behaviours improved significantly during the 12-week study period [15]. Another study revealed that peer-led diabetes self-management support was as effective as Enhanced Usual Care in helping participants to maintain self-monitoring of their blood glucose levels [15].

In comparison, a longitudinal study that involved a facilitator-led programme of face-to-face peer support alongside group-based education for people with heart disease who had completed centre-based cardiac rehabilitation reported that social support did not change between baseline and 12-month follow-up [27]. Additionally, there were no changes in the amount of physical activity reported among programme participants.

Physical Health Outcomes

One study in this review reported a positive impact of peer support on physical health outcomes in individuals with uncontrolled diabetes [23]. A mixed peer-delivered peer support programme concluded that peer support was effective at reducing glycated haemoglobin in intervention versus usual care arm participants [12].

In contrast, an RCT that evaluated the effect of a telephone-based peer support programme in patients with type 2 diabetes found that peer support did not improve cardiometabolic wellbeing [10]. Another study involving participants with type 2 diabetes that utilized a programme of peer-led face-to-face peer support concluded that peer support did not significantly improve physical outcomes (haemoglobin levels, systolic blood pressure and cholesterol levels) [11].

Economic Outcomes

An economic evaluation of a mixed delivery peer support intervention concluded that peer support was associated with lower overall total healthcare costs, which were largely due to a decrease in hospitalization expenses [9]. The evaluation also found that the intervention was associated with a modest increase in out-of-pocket costs for participants and implementation costs. The authors suggested that the increase in out-of-pocket costs may be explained by an increase in participants’ engagement in self-care activities. This study was the only one included in the review that considered economic outcomes following peer support therefore there is a limited evidence base to validate its findings. Moreover, this study reported findings over a relatively short time period (6-12 months).

Qualitative Findings

Some participants described peer support as “a significant turning point in their lives” [23] and something that had a “major personal impact” [25]. Some participants reported that peer support allowed them to “dare to be oneself” [23] whilst others expressed their view that peer support is essential to patients who undergo rehabilitation in a general hospital [20]. A common theme reported among the included studies was peer support leading to a sense of belonging or feeling as though participants were part of a community, which led to reduced isolation and feeling understood [15,16,17,23]. Another key theme was peer support as a means of providing and/or consolidating information [8,22,26]. Peer support proved helpful for some participants in their decision-making [8,16]; others described peer support as responsible for feelings of empowerment [23,25] as well as helpful in aiding self-management behaviours [25].

Much of the qualitative findings suggest that peer support can be beneficial for individuals across various population groups. However, some limitations of peer support were discussed among these positive findings. For example, one study reported that participants experienced raised anxiety related to the future, occasional hopelessness and despair as a result of seeing others with more severe functional disabilities [23]. Furthermore, participants with spinal cord injuries and healthcare practitioners reported in a study that the timing of peer support is essential, as it is not always feasible to deliver in the acute stages of injury [21]. Some practical limitations of peer support programmes were offered, notably matching limitations, strict management of personal information [17] and participants wanting more time to engage in peer support [8].

Discussion

The heterogeneity in findings within the included studies is clear across the various outcomes, namely, psychological, functional/social/behavioural, health and economic. Studies that included qualitative analysis as their method of evaluating peer support programmes appear to offer more consistency in terms of findings, with most suggesting a beneficial impact for participants. This could mean that the impact of peer support is experienced by participants in various settings, however, the actual impact may not be observable or measurable.

There was considerable variation in the methods used for the delivery of peer support in the included studies. It is therefore difficult to review study findings as a collective. Some interventions focused predominantly on the delivery of peer support as its main component, whilst others were focused heavily on education methods with additional peer support. Consequently, it would not be appropriate to attribute peer support as the main influence of outcomes.

Noteworthy, the majority of included studies did not report any long-term outcomes of associated peer
support interventions. One study that did, discussed negative feelings reported by participants as a result of seeing others with more severe functional disabilities [23]. This suggests that the functional capabilities of peer supporters as well as the level of exposure to other peers with more severe disabilities need to be considered when developing a peer support programme. Future studies aiming to evaluate peer support programmes should seek to include longitudinal follow-up outcome measures.

Studies that included a measurable peer support component ranged considerably in terms of the length of time of the delivery of peer support, from four weeks [19] to two point eight (2.8) years [16]. Attendance in peer support programmes/Interventions was episodic and the number of peer support sessions within the study duration differed enormously. For example, one study [22] reported a sample size of 15, however, only three (23%) participants attended all of the described peer support sessions.

There was considerable variation in the measures used to quantify the impact of peer support. For example, the most commonly cited psychological outcome measure was self-efficacy with two of the included studies reporting this outcome [15-14]. However, the methods used to assess this psychological construct were different for each study (Table 3). Moreover, the term ‘self-efficacy’ was used in these studies to reflect individuals’ experience with their diabetes, rather than self-efficacy as a general psychological construct. Further condition-specific outcomes reported in the included studies were healthy adjustment after stroke [22] and diabetes distress [15]. One of the aims of this review was to draw conclusions on the impact of peer support for physical health populations, however, the variation in population groups of included studies as well as differences in outcome measurement, make it challenging to systematize findings under one umbrella.

We also examined the impact of timing provision of peer support. O’Dell et al. reported that spinal cord injury patients were not always prepared to process information in the acute stages after injury, therefore consideration needs to be made around when the patient is the most receptive to receiving peer support [21]. No findings within included studies suggest a beneficial impact for the delivery of ‘early’ peer support on patient outcomes. This is likely to be due to the lack of focus on physical health populations in the acute stage.

Limitations
This scoping review is limited in terms of the population group considered, namely, those with physical health conditions. Alternative populations that have been shown in the literature to utilize peer support include families and carers of individuals with physical health conditions [29-31], mental health populations [32-36] and diabetes [35-37]. ‘At-risk’ groups [41], veterans [42] and those that are homeless [43].

Conclusions
In conclusion, this scoping review draws attention to the difficulty in assessing the impact of peer support on general physical health populations due to the heterogeneity in participants, study design, intervention implementation, outcome measures and findings within the included studies. In terms of answering the research question, there appears to be greater consistency in the qualitative methods of the evaluation of peer support as compared to objective methods of evaluation. Synthesis of qualitative findings was grouped into general themes across included studies: (1) peer support leading to a sense of belonging or a sense of community, leading to reduced isolation and being understood; (2) peer support as a means of providing and/or consolidating information; (3) peer support as helpful for decision-making; (4) peer support leading to empowerment; and (5) peer support helpful for aiding self-management behaviours. The impact of peer support on objective outcome measures is mixed, with some research suggesting that peer support has a greater impact on those with higher levels of negative psychological affect than those with lower levels. Further research could look to explore this suggestion. Finally, this scoping review has highlighted the need for the piloting of peer support in acute physical health settings in order to bridge the gap that this review has identified in peer support research.

Appendices
Can peer support be used as a stand-alone intervention in people with type 2 diabetes?

An economic evaluation of PEARL (PS, Empowerment for Action, Research and Learning)-Tel: Telephone-based PS in Type 2 Diabetes.

Can peer support be used as a stand-alone intervention in people with type 2 diabetes?

The programme was also tested in three diabetes centres - provided bi-monthly structured comprehensive assessments via the "JADE portal" (web-based multi-structured comprehensive assessments via diabetes centres - provided fortnightly). Peer supporters were trained.

Primary outcomes: (1) HbA1c (mmol/mol) - measured with Reverse phase cation exchange liquid chromatography with an automatic glucose-haemoglobin analyser. (2) Systolic blood pressure - measured with an automatic BP monitor. (3) Cholesterol (mmol/l) - measured with automated clinical chemistry analysers. (4) Patient Health Questionnaire for Depression (PHQ-9) & Chinese 15-item diabetes Distress Scale for Psychological Distress (DASS-21) & Euro-QoL (EQ-5D) (2) Depression - assessed with automated clinical chemistry analysers. (4) Wellbeing in the "JADE portal" (web-based multi-structured comprehensive assessments via diabetes centres - provided fortnightly) (5) Smoking (self-reported) (6) Prescriptions (aspirin, statins, ACE-inhibitors, beta-blockers) (7) Measures of the economic evaluation of PEARL (PS, Empowerment for Action, Research and Learning)-Tel: Telephone-based PS in Type 2 Diabetes.

Secondary outcomes: (1) Body mass index (BMI) - measured with an automatic BC analyser. (2) Systolic blood pressure - measured with an automatic BP monitor. (3) Cholesterol (mmol/l) - measured with automated clinical chemistry analysers. (4) Patient Health Questionnaire for Depression (PHQ-9) & Chinese 15-item diabetes Distress Scale for Psychological Distress (DASS-21) & Euro-QoL (EQ-5D) (2) Depression - assessed with automated clinical chemistry analysers. (4) Wellbeing in the "JADE portal" (web-based multi-structured comprehensive assessments via diabetes centres - provided fortnightly) (5) Smoking (self-reported) (6) Prescriptions (aspirin, statins, ACE-inhibitors, beta-blockers) (7) Measures of the economic evaluation of PEARL (PS, Empowerment for Action, Research and Learning)-Tel: Telephone-based PS in Type 2 Diabetes.

Peer support for patients with type 2 diabetes: cluster randomised controlled trial.

China, Hong Kong

China, Hong Kong

China, Hong Kong

China, Hong Kong

Extracts from the abstract:

Methods: Type 2 diabetes patients were recruited from the diabetes centres in China, Hong Kong. Peer supporters were trained.

Participants: 1,299 (130 in 3 clusters) peer supporters were trained. The programme was carried out in three diabetes centres - provided bi-monthly structured comprehensive assessments via the "JADE portal" (web-based multi-structured comprehensive assessments via diabetes centres - provided fortnightly). Peer supporters were trained.

Results: The programme was also tested in three diabetes centres - provided bi-monthly structured comprehensive assessments via the "JADE portal" (web-based multi-structured comprehensive assessments via diabetes centres - provided fortnightly). Peer supporters were trained.

Conclusions: This pilot study shows the feasibility of implementing a telephone-based PS programme in Type 2 Diabetes.

Keywords: Type 2 Diabetes - Peer Support - Telephone-based Programmes - Economic Evaluation - China - Hong Kong

References:

Kelly et al., 2014

Holman et al., 2017

Oldenburg et al., 2018

Wingate, Graffy, Kelly et al., 2014

Table 1: Randomised controlled trial of peer support in people with type 2 diabetes compared to usual care alone in East of England communities

| Study | Country | Sample Size | Type 2 Diabetes | Number of Clusters | Study Duration |
|-------|---------|-------------|----------------|-------------------|---------------|
| Grant et al. | United Kingdom | People with Type 2 Diabetes | 1,299 (130 clusters) | 12 months | |
Education, and Support: Results

Management Leaders for Utilization of Peer intervention for diabetes delivered effective: 12-week programme be management diabetic self-based peer-led. (1) Social support - from a peer to educational diabetes educators with class peers and peer leaders attended four weekly groups merged into 4 larger peer groups. (2) Social network - the group comprised 21-27 peers and were led by 1-4 peer leaders.

Bridges to a better life.

Can a community-based peer-led diabetes self-management programme alter effectiveness 12 week evaluation.

Telephone peer-delivered intervention for diabetes education and support: Facilitate explanatory RCT.

Integration and Utilization of Peer Leaders for Diabetes Self-Management Support: Results from Project Support Diabetes, Challenges, Education, and Evaluation in

Primarily the use major role (Obligaciones a la Batería)
group, peer leaders facilitated DSM (1) version of DSM-5, with the interview used to assess (2) the same items included in the Facet-Scale. (3) Telephone DSM-5, following in-person support meetings, calls delivered over a period of an additional 6 months. Peer leaders facilitated all calls in the intervention group and diabetes educators made the calls in the usual care group.

### Participants

**Women with breast cancer:** A qualitative study.

**Breast cancer** (diabetes). The statistical analysis incorporated description and inferential statistics.

| Participants | Evaluating the intervention of the telephone-based peer support programme with trained peer supporters. The combination shows peer supporters are essential in the process of delivering a tailored support programme to breast cancer survivors. Two patients were asked to participate in the study and were followed up for 1 year after study end. The interviews were conducted by the coordinator and the qualitative analysis was performed by the same peer or another peer. Feedback from peers was requested. The study coordinator contacted the participants to determine whether the recipients wanted to undergo surveillance (peers). Telephone calls were made with the support programme participants. (2) Telephone DSMS, following in-person support meetings, calls delivered over a period of an additional 6 months. Peer leaders facilitated DSM-5, following in-person support meetings, calls delivered over a period of an additional 6 months. Peer leaders facilitated all calls in the intervention group and diabetes educators made the calls in the usual care group.

| **Data collected from 31 recipients (2.5 years)** | **Data collected from 10 recipients (2.5 years)** |
| --- | --- |
| Interviews (lasted between 34 mins and 64 mins). | Interviews (lasted between 34 mins and 64 mins). |
| **Perspectives of recipients:** (1) Benefits of the intervention for women considering prophylactic mastectomy. (2) Disadvantages of the intervention for women considering prophylactic mastectomy. (3) Peers' Perspectives (descriptive analysis) of the Palmer et al., 2018 recommendations for participating in study intervention. (4) Participants' perspectives (qualitative analysis) of the evaluation questionnaire (diabetes). The statistical analysis incorporated description and inferential statistics. |

| **Positive changes:** | **Positive changes:** |
| --- | --- |
| Participants to maintain glycaemia control and self-monitoring of blood glucose. | Participants to maintain glycaemia control and self-monitoring of blood glucose. |

### Study conclusions

A qualitative study. A quality improvement project.

| Trial: Telephone-based peer support programme with trained peer supporters (n = 10 recipients) | Trial: Telephone-based peer support programme with trained peer supporters (n = 10 recipients) |
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Development and evaluation of a hospital-based peer support group for younger individuals with stroke.

United States of America, Younger individuals (<65yrs) who have had a stroke (YESS)

Muller, Toth-Cohen and Mulcahey, 2014

Format: Education and support group delivered by health professionals in a group setting, included a peer support buddy (not peer-led or facilitated at all). The YESS group met 9 times over an 18-week period. Each 90-minute group module focused on a specific topic. An Occupational Therapist coordinated and facilitated the group sessions which sometimes had content experts providing the primary education for specific modules. Other members of the stroke team participated and assisted in the groups.

MM Questionnaires (SIS and CIQ) were completed at the first and ninth group sessions. A participant feedback survey was completed once after the ninth session.

Analysis:
Change scores were calculated. The Wilcoxon ranked sum test was used to determine if differences in scores reached significance. The thematic analysis utilized the two open-ended questions in the survey.

1. Healthy adjustment after stroke - The Stroke Impact Scale (SIS) (assesses 8 specific domains: hand function, strength, mobility, activities of daily living (ADL), instrumental activities of daily living (iADL), memory, emotion, communication and handicap).
2. Home integration, social interaction and productivity - The Community Integration Questionnaire (CIQ)

Themes identified:
(1) Permission to talk
(2) Need for experiential knowledge
(3) Reciprocity
(4) Self-evaluation through comparison

Positive impact of PS:
Some participants viewed PS as a “significant turning point in their lives: they were finally heard, believed and accepted”. PS allowed participants to dare to be themselves, provided a sense of community and enhanced empowerment through validation of experiences.

The negative impact of PS: Seeing others with more severe functional disabilities or depression led to some anxiety related to the future, occasional disappointments.

Finally heard, believed and accepted--peer support in the narratives of women with fibromyalgia.

Finland, Women with fibromyalgia

Sallinen, Kukkurainen and Peltokallio et al., 2011

Format: Attendees of a previous rehabilitation course with education and counselling components. Included lectures, group discussions, physiotherapy group exercises and individual treatments. Participants encouraged to share major themes and further discussions with group members. Study participants attended rehabilitation courses in Rheumatism Foundation Hospital which included PS opportunities (as well as lectures, group discussions, physiotherapy group exercises and individual treatments). Each course of 10-12 patients was completed in 17-20 days, divided into two or three intensive in-patient periods.

Qualitative interview method used: Semi-structured

Thematic analysis:

Themes identified:
(1) Permission to talk
(2) Need for experiential knowledge
(3) Reciprocity
(4) Self-evaluation through comparison

Positive impact of PS: Change scores reached significance. A useful element from the group described was learning about rare information, education, and inspiration. The group facilitated: engagement in new activities - half reported that they began to engage in various leisure opportunities beyond the group sessions; life changes - The self-perceived recovery score and the CIQ, social, and productivity domains did show a significant change.

Negative impact of PS: Some participants were upset that they began to engage in negative activities which affected opportunities for social and community engagement.

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| Study | Participants | Method | Intervention | Findings |
|-------|--------------|--------|--------------|----------|
| Rakai, Uganda. | Women with polycystic ovary syndrome | Qualitative phenomenological analysis using online interviews. | Nurse-led peer support intervention in the study. | Positive impact of PS allowed a feeling of belonging, which could lead to a sense of acceptance and belonging. |
| Ddaaki et al., 2017 | Women with polycystic ovary syndrome | Qualitative phenomenological analysis using online interviews. | Nurse-led peer support intervention in the study. | Positive impact of PS helped to reduce isolation and provided an opportunity for social comparison and accessibility. |
| Monowe et al., 2018 | Women with polycystic ovary syndrome | Qualitative phenomenological analysis using Facebook messenger. | Nurse-led peer support intervention in the study. | Positive impact of PS improved engagement in social media use, and condom use. |

Note: PS = Peer Support.
### Long-Term Social Reintegration

#### Positive Impact of PS: Burn survivors who reported attendance to PS had higher social interaction scores.

#### Negative Impact of PS: Burn survivors who reported attendance to PS had significant decreases in physical activity levels.

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| Format | United Kingdom, People with heart disease who had completed centre-based cardiac rehabilitation were matched with peers who were former patients who had completed centre-based cardiac rehabilitation 1 to 2 years previously and were still participating in community-based physical activity at local municipality-funded gyms or other fitness facilities throughout the region. Peer mentors engaged in an off-line training programme provided by health professionals of the centre-based cardiac rehabilitation team who explained mentor roles and responsibilities and highlighted key physical activity research based principles and messages. |
| --- | --- |
| Long-Term Social Reintegration | Positive impact of PS: PS participants provided more total physical activity versus the non-programme group (though did not reach statistical significance). No change in the difference between groups in total amounts of work related physical activity at baseline or 12 months. Social support levels were also similar between groups at 12 months. Negative impact of PS: At 12 months, pedometer count and average step count remained higher in the non-programme group versus the programme group. Other women were significantly more likely to join the PS program compared to men. A significant decrease in physical activity levels was shown in the non-programme group. |
Table 3: Characteristics of sources of evidence

RCT: randomized controlled trial; PS: peer support; QT: quantitative methods; QL: qualitative methods; MM: mixed methods

| Outcome for Burn Survivors with and Without Peers | British Columbia, Canada; United States of America | Shcherbak et al., 2020 | | | |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Format | No peer support/programme. Cross-sectional study that evaluated "peer support attachment" with no peer support intervention on an ontological perspective. Collected data for participation on PS, via online PS programme/intervention detailed. | | No interaction | Multivariable linear regression models | Burn Recovery Evaluation Profile |
| CF: Technical analysis: info | Support needs and | | | | |
| | | | | | |

Additional Information

Disclosures

Conflicts of interest: In compliance with the ICMJE uniform disclosure form, all authors declare the following: Payment/services info: All authors have declared that no financial support was received from any organization for the submitted work. Financial relationships: All authors have declared that they have no financial relationships at present or within the previous three years with any organizations that might have an interest in the submitted work. Other relationships: All authors have declared that there are no other relationships or activities that could appear to have influenced the submitted work.

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