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, guided by the Preferred Reporting items for Systematic Reviews and Meta-Analyses extension for scoping reviews (PRISMA-ScR).

The search was carried out across the Medline, PsycINFO, and Cochrane databases and focused on papers that evaluated peer support intervention(s) in adults with physical health conditions. The search identified an initial 7,903 records, which were narrowed down to 21 records that met the inclusion criteria; their findings were narratively synthesized.

The scoping review found considerable heterogeneity among eligible records in terms of their study design, outcome measurements and findings reported. Qualitative methods of evaluation generated more consistent findings compared to objective outcome measures and suggested that peer support was beneficial for patients’ health and wellbeing by reducing feelings of isolation and creating a sense of community as well as providing an opportunity for information consolidation. The scoping review highlights the inconsistencies 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 support 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 to best 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

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].
Characteristics of Sources of Evidence

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.
<table>
<thead>
<tr>
<th>Author(s) [ID]</th>
<th>% of studies</th>
<th>Mode of delivery of peer support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith, Paul, Kelly et al., 2011[11]; Shen, Wang and Edwards, 2017[13]; Ono, Tsuyumu, Ota et al., 2017[17]; Legg, Ozc hippi, Ferguson et al., 2011[18]</td>
<td>19%</td>
<td>Facilitated programme of face-to-face peer support led by trained peer supporters</td>
</tr>
<tr>
<td>Power and Hegarty, 2010[8]; Piatt, Rodgers, Xue et al., 2018[15], Clark, Munday and McLaughlin et al., 2012[27]</td>
<td>14%</td>
<td>Facilitated programme of face-to-face peer support led by both peer supporters and health professionals</td>
</tr>
<tr>
<td>Percy, Gibbs, Potter et al., 2009[25]</td>
<td>5%</td>
<td>Facilitated programme of peer support led by health professionals alone</td>
</tr>
<tr>
<td>Chan, Sui, Oldenburg et al., 2014[10]; Dale, Caramlau, Sturt et al., 2009[14], St-Pierre, Bouchard, Gauthier et al., 2018[16]; Golay, Mooypour, Unger et al., 2007[19]</td>
<td>19%</td>
<td>Telephone-based peer support programme with trained peer supporters</td>
</tr>
<tr>
<td>Muller, Toth-Cohen and Mulcahey, 2014[22]</td>
<td>5%</td>
<td>Broad programme of support with peer support components</td>
</tr>
<tr>
<td>Wingate, Graffy, Holman et al., 2017[9]; Ayala, Ibarra, Cheraghty et al., 2015[12]</td>
<td>10%</td>
<td>Mixed delivery of peer support (telephone and face-to-face)</td>
</tr>
<tr>
<td>Haas, Price and Freeman, 2013[20]; O’Dell, Earle, Rixon et al., 2019[21]; Saltine, Kukkurainen and Peltohakko et al., 2011[23]; Biffle and Thompson, 2019[24]; Monroe, Nakigoz, Diaa et al., 2017[26]; Grieve, Shapiro, Wibbenmeyer et al., 2020[28]</td>
<td>29%</td>
<td>No peer support intervention but evaluations of previously completed peer support programmes</td>
</tr>
</tbody>
</table>

**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 [9-11,13-18,19-27-29]. Nine studies (43%) involved exploratory qualitative analyses of participant perceptions, feedback or experiences of peer support programmes [8,16-17,20-23-26]. 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 [15]. 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 [15].

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...
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 [13]. 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 [12].

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 [13]. 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 "speak their mind" [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 supportive for feelings of empowerment [25,29] 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 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.
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 [41]. 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 [32-34]; children and young people [35-36]; ‘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 structured 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 feeling understood; (2) peer support as a means of providing and/or consolidating information; (3) 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**

<table>
<thead>
<tr>
<th>ID</th>
<th>Title</th>
<th>Author(s)</th>
<th>Country &amp; population group</th>
<th>Number of study participants</th>
<th>Intervention</th>
<th>Length of time of peer support</th>
<th>Design and evaluation methods</th>
<th>Main outcomes</th>
<th>Main conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Expanding access to breast cancer survivor peer support programmes</td>
<td>Hegarty, Ireland, Republic of Ireland</td>
<td>10; women</td>
<td>30</td>
<td>Facilitated face-to-face peer support programme involving informational components and opportunities for sharing experiences, facilitate health professionals and a peer supporter who received training. 7-week PS programme led by a breast cancer survivor counsellor, a volunteer retired.</td>
<td>7 weeks</td>
<td>Interviews, focus group interviews</td>
<td>Increased perceived empowerment of survivors</td>
<td>Increased perceived empowerment of survivors</td>
</tr>
<tr>
<td>2</td>
<td>Peer support programme evaluation of women’s experiences and perspectives of breast cancer</td>
<td>O’Dell, et al.</td>
<td>Republic of Ireland</td>
<td>40</td>
<td>Facilitated face-to-face peer support programme involving informational components and opportunities for sharing experiences, facilitate health professionals and a peer supporter who received training. 7-week PS programme led by a breast cancer survivor counsellor, a volunteer retired.</td>
<td>7 weeks</td>
<td>Interviews, focus group interviews</td>
<td>Increased perceived empowerment of survivors</td>
<td>Increased perceived empowerment of survivors</td>
</tr>
</tbody>
</table>

**Further Points**

- **Diabetes:** Individuals’ experience with their diabetes, rather than self-efficacy as a general psychological construct.
- **Timings:** Evaluation of timing provision of peer support.
- **Population Groups:** Alternative populations that utilize peer support include families and carers of individuals with physical health conditions, mental health populations, children and young people, ‘at-risk’ groups, veterans, and those that are homeless.

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<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Setting</th>
<th>Participants</th>
<th>Interventions</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Randomized controlled trial</td>
<td>United Kingdom</td>
<td>People with Type 2 Diabetes (395 clusters)</td>
<td>Peer support in telephone-based format</td>
<td>A 12-months follow-up showed positive impact on psychological outcomes.</td>
</tr>
<tr>
<td>2</td>
<td>Randomized controlled trial</td>
<td>China, Hong Kong</td>
<td>Patients with Type 2 Diabetes (128)</td>
<td>Peer support in telephone-based format</td>
<td>A 12-months follow-up showed positive impact on psychological outcomes.</td>
</tr>
<tr>
<td>3</td>
<td>Randomized controlled trial</td>
<td>Republic of Ireland</td>
<td>Patients with Type 2 Diabetes (168)</td>
<td>Peer support in telephone-based format</td>
<td>No changes. The study's data didn't report on the measure used.</td>
</tr>
</tbody>
</table>

**Table 1:** Effects of telephone-based peer support on patients with type 2 diabetes receiving usual care alone compared to usual care received in East of England communities.
**Table 1:** Summary of intervention, delivery, and outcomes from diabetes self-management and peer-led support programmes in English-speaking countries.

<table>
<thead>
<tr>
<th>Study Description</th>
<th>Country</th>
<th>Setting</th>
<th>Intervention Type</th>
<th>Sample Size</th>
<th>Duration</th>
<th>Key Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes Self-Management Education, and SEED (Support, Utilization of Peer Integration and exploratory RCT).</strong></td>
<td>United States</td>
<td>Individual with uncontrolled diabetes</td>
<td>Face-to-face</td>
<td>12 weeks</td>
<td>Physician delivered peer support, including telephone contact, in person, and group support. Peer educators were trained. Peer leaders worked with small to moderate diabetes groups weekly. The intervention involved four 12-week sessions delivered as traditional, group-based diabetes education and telephone peer support. The control group received usual care. Outcome measures included blood glucose (SMBG), A1C, diabetes distress and health care such as knowing where to go to obtain specialty services.</td>
<td>Positive impact at P&lt;0.05. Significant reductions in glycaemic outcomes.</td>
</tr>
</tbody>
</table>
group, peer leaders facilitated DSMS on telephone, in the enhanced usual care group, the initiative included facilitated sessions. (2) Telephone DSMS, following in-person support meetings, calls delivered over a period of 18 weeks. Peer leaders facilitated all calls in the intervention group and diabetes educators made the calls in the enhanced usual care group.

**Perspectives of Women**

**Distance**

Distance from the study site influenced the number of calls a peer supporter attended. Women who attended the training course over three days more readily agreed to become peer supporters.

Women who had been trained Telephone-based PS described the programme as helpful and useful for managing depressive symptoms and anxiety. Telephone-based PS allowed participants to speak to the same peer or another peer. Participants were able to request the order of conversation topics and were not limited in the number of calls they could receive. The study coordinator contacted participants at any time to discuss potential issues about their supportive relationship with the peer. Telephone-based PS was found useful in their consideration of psychosocial maintenance.

**Format**

Telephone-based PS was preferred by participants. Participants were satisfied with the satisfaction with the peer, topics discussed, phone calls made with the peer, and the telephone.

**Participants**

Women who had undergone bilateral surgery (cancer-free, PM) and women who had undergone prophylactic bilateral mastectomy were considered eligible. Telephone-based PS was found useful in the management of psychosocial maintenance.

**Positive impact of PS**

**Negative impact of PS**

**Participants’ perspectives**

Participants found the programme useful for participating in programmes that matched their needs as well as the programme being excellently coordinated. Telephone-based PS was found to be helpful due to it being delivered face to face by peer support programme with trained peer supporters. The combination of peer supporters and patients facilitated the programme.

**Data collection**

Data were collected at baseline (3.2 years). The statistical analysis incorporated description and inferential statistics.

**Recipients**

Recipients were scored with open-ended and closed-ended questions. Response formats for the closed-ended questions included dichotomous options and Likert scales. This questionnaire measured the number of days participants were satisfied with the intervention, and whether the intervention was helpful for participation in programmes that matched their needs as well as the programme being excellently coordinated. Telephone-based PS was found useful in the management of psychosocial maintenance.

**Evaluation of evaluation questionnaire**

Evaluation of evaluation questionnaire (lasted between 10 to 15 minutes). The statistical analysis incorporated descriptive and inferential statistics.

**Inductive coding.**

Phenomenological

**Data collection**

Phone-delivered face-to-face peer support programme with trained peer supporters. The combination of peer supporters and patients facilitated the programme. Telephone-delivered face-to-face peer support programme with trained peer supporters, based on the requests of patients. PS meetings lasted one hour. Contacted on follow-up, reasons for participating in programme, content discussed in a meeting with a peer supporter, how the participants met after receiving PS, to identify things that were best about PS and isolation, and improvements could be made for the programme: face-to-face. Qualitative interview analysis.

**Data were categorised into**

(1) Benefits of the PS programme (2) Benefits of the PS programme that was received (3) Disadvantages of the PS programme. (4) Recipients’ perspectives (5) Recipients’ perspectives (6) Evaluation of evaluation questionnaire.
<table>
<thead>
<tr>
<th>Study</th>
<th>Participants</th>
<th>Design</th>
<th>Intervention</th>
<th>Follow-up</th>
<th>Outcomes</th>
<th>Analysis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant et al.</td>
<td>People with spinal cord injury</td>
<td>Qualitative evaluation of a community peer support service for people with spinal cord injuries</td>
<td>Telephone interview</td>
<td>1 month</td>
<td>No intervention</td>
<td>Univariate analyses</td>
<td>No change for differences in distress or depressive symptoms at 3 months between the intervention and control groups.</td>
</tr>
<tr>
<td>Rixon et al., O'Dell, Earle, &amp; Freeman</td>
<td>People with breast cancer</td>
<td>Qualitative evaluation of a community peer support service for people with spinal cord injuries</td>
<td>Telephone interview</td>
<td>1 month</td>
<td>No intervention</td>
<td>Univariate analyses</td>
<td>No change for differences in distress or depressive symptoms at 3 months between the intervention and control groups.</td>
</tr>
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<td>Unger et al., Moinpour, Gotay</td>
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<td>No change for differences in distress or depressive symptoms at 3 months between the intervention and control groups.</td>
</tr>
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</table>

**Intervention:** Peer-delivered face-to-face peer support. The intervention consisted of four to six peer-delivered telephone calls delivered over a one-month period. The calls were conducted by trained peer counsellors at a breast cancer advocacy organization (the Y-ME National Breast Cancer Organization) and followed a standard curriculum.

**Follow-up:** 1 month

**Outcomes:**
- Psychological distress - The Hospital Anxiety and Depression Scale (HADS)
- Psychological affect - The Hospital Anxiety and Depression Scale (HADS)
- Psychological adjustment - Centre for Epidemiologic Studies Depression Scale (CES-D)
- Psychological adjustment - Centre for Epidemiologic Studies Depression Scale (CES-D)

**Analysis:** Univariate analyses.

**Findings:**
- No change for differences in distress or depressive symptoms at 3 months between the intervention and control groups.

**Limitations:**
- The sample size was relatively small.
- The study was conducted in a single geographic area.
- The results may not be generalizable to other populations.

**Conclusion:** The intervention did not show a significant impact on psychological distress or depressive symptoms at 3 months. However, further research is needed to understand the effectiveness of peer support interventions for people with breast cancer.
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<tr>
<th>Development and Evaluation of Hospital-Based Peer Support Group for Younger Individuals with Stroke</th>
<th>Muller, Toth-Cohen and Mulcahey, 2014</th>
<th>United States of America</th>
<th>128 Younger individuals (≤65yrs) who have had a stroke (YESS)</th>
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<tr>
<td>Format: Education and support group delivered by health professionals in a group setting included a peer support module (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.</td>
<td>18 weeks 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.</td>
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<td>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) Participant feedback about the process &amp; additional evidence supporting the achievement of programme objectives, such as group members' self-perceptions of change in socialization, coping strategies and role attainment following group participation and identification of social activities outside of the group context.</td>
<td>The positive impact of PS: Change scores of the SIS handicap domain, total the CIQ and home integration domain scores of the CIQ showed significance. A useful element from the group described was learning about rare information, education, and motivation. The negative impact of PS: seeing others with more severe functional disabilities or depression led to some anxiety related to the future, occasional improvements.</td>
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<th>Finally heard, believed and accepted - peer support in the narratives of women with fibromyalgia</th>
<th>Sallinen, Kukkurainen and Peltokallio et al., 2011</th>
<th>Finland</th>
<th>20 Women with fibromyalgia (≥18yrs)</th>
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<td>Format: Attendees of a previous rehabilitation course with education and counseling components. Included lectures, group discussions, physiotherapy group exercises and individual treatments, participants were encouraged to share own themes and further discussions with group members. Study participants attended rehabilitation courses in the 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 5-day periods.</td>
<td>17-20 days QL Narrative interview method used. Analysis: Thematic analysis.</td>
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<td>QL Transversal interview method used: Analysis: Thematic analysis.</td>
<td>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 &quot;significant turning point in their lives: they were finally heard, believed and accepted&quot;. 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 improvements.</td>
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Investigating the beneficial experiences of online peer support for those affected by polycystic ovary syndrome using a qualitative phenomenological analysis.

**United Kingdom,** 12 respondents from the Polycystic Ovary Syndrome (POCS) Facebook Support group, diagnosed with at least one family member of someone diagnosed with polycystic ovary syndrome.

**Format:** No peer support intervention or online interviews. The interview schedule consisted of open-ended questions and prompts. Analysis: Interpretative Phenomenological Analysis.

**Themes identified:** (1) Gradual healing (2) Informational function (3) Personal aspirations for POCS; expectations and experience of POCS; including related to: current and future treatment needs, psychological reactions, and physical symptoms. (4) Behavioural skills (5) Motivation (6) Hopes. Themes identified: (1) Gradual healing (2) Image concern (3) Belonging (4) New identity and self-acceptance. (5) Behavioural skills (6) Motivation (7) Hopes. (8) Emotional and physical well-being (9) Informational function (10) Personal aspirations for POCS; experiences of POCS services and suggestions for improving POCS services.

**Positive impact of PS:** Improved engagement in HIV care (e.g., increased medication adherence). Some participants reported that peer supporters helped them to understand health messages and enabled them to make better health decisions. PS improved motivational and behavioural skills, leading to increased engagement in HIV care. Some participants reported that peer supporters helped them to overcome barriers to effective health management and improve adherence to medication and appointments.

**Facilitated face-to-face peer support group experiences of women with polycystic ovary syndrome**

**United Kingdom.** Female patients with polycystic ovary syndrome (POCS).

**Format:** Facilitated face-to-face peer-support programme led by nurses with a heavy focus on providing information and components of peer support. PS improved engagement in HIV care (e.g., increased medication adherence). Some participants reported that peer supporters helped them to understand health messages and enabled them to make better health decisions.

**Thematic analysis:** (1) Gradual healing (2) Image concern (3) Belonging (4) New identity and self-acceptance. (5) Behavioural skills (6) Motivation (7) Hopes. (8) Emotional and physical well-being (9) Informational function (10) Personal aspirations for POCS; experiences of POCS services and suggestions for improving POCS services.

**Positive impact of PS:** Improved engagement in HIV care (e.g., increased medication adherence). Some participants reported that peer supporters helped them to understand health messages and enabled them to make better health decisions. PS improved motivational and behavioural skills, leading to increased engagement in HIV care. Some participants reported that peer supporters helped them to overcome barriers to effective health management and improve adherence to medication and appointments.

**Qualitative insight into implementation, processes, and outcomes of an internet-based peer support and HIV care navigation service in Rukwa, Tanzania.**

**Tanzania.** People living with HIV who have not yet initiated antiretroviral therapy (ART) and staff (n=52) in rural Rukwa.

**Format:** Qualitative evaluation following RCT with qualitative feedback: no peer support intervention in this study. The intervention (first part of the exploratory study) consisted of monthly structured home visits by peers to intervention arm participants to provide psychosocial support and service engagement in ART. (e.g., adhering to clinic appointments) and a home care package of preventive care items including medicines, prophylaxis, safe water, and other aids. (n=38) and qualitative feedback through focus groups and unstructured group discussion.

**Themes identified:** (1) Gradual healing (2) Informational function (3) Personal aspirations for POCS; expectations and experience of POCS services and suggestions for improving POCS services. (4) Behavioural skills (5) Motivation (6) Hopes. (7) Emotional and physical well-being (8) Informational function (9) Personal aspirations for POCS; experiences of POCS services and suggestions for improving POCS services.

**Positive impact of PS:** Improved engagement in HIV care (e.g., increased medication adherence). Some participants reported that peer supporters helped them to understand health messages and enabled them to make better health decisions. PS improved motivational and behavioural skills, leading to increased engagement in HIV care. Some participants reported that peer supporters helped them to overcome barriers to effective health management and improve adherence to medication and appointments.

2021 Grant et al. Cureus 13(8): e17442. DOI 10.7759/cureus.17442
Other: Practical challenges of PS delivery were found: insufficient messaging surrounding ART initiation, lack of care continuity after ART initiation, care breaches in confidentiality, and structural challenges.

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 adherence between groups in total amounts of work-related physical activity or leisure-related activity at 12 months. Social support levels were also similar between groups at 12 months and no change in either group from baseline levels.

Negative impact of PS: At 12 months, participants in the non-programme group showed a significant decrease in physical activity levels compared to the programme group. 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.

Positive impact of PS: Participants who reported attendance to PS had higher social interactions.


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TABLE 3: Characteristics of sources of evidence

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

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<tr>
<th>Evaluation</th>
<th>Recovery</th>
<th>Attendance</th>
<th>Characteristics of sources of evidence</th>
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<tr>
<td>(LIBRE) Study</td>
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<td>(1) Social participation - The Life Impact</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>No interaction</td>
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<tr>
<td></td>
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<td>Burn Recovery Evaluation Profile</td>
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<tr>
<th>Outcome measure</th>
<th>Evidence type</th>
<th>Reference</th>
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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.

References