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Research Article

Compassionate Mind Training Group Programme: Implementation and Evaluation within an NHS Physical Health & Rehabilitation Psychology Service

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Abstract

There is increasing evidence for the effectiveness of brief, group-based compassionate mind training (CMT) in reducing shame and self-criticism, and increasing self-compassion. The current evaluation of an 8-week CMT group programme in an NHS Physical Health Psychology Service supports these findings. Based on a cross-diagnostic sample of 25-39 participants with physical health difficulties, results demonstrate significant reduction in depression and anxiety, significant increase in perceived wellbeing and acceptance, and a significant increase in self compassion following attendance at the group. These findings indicate a potential benefit of compassionate mind training for individuals accessing NHS services due to physical health difficulties including chronic pain, cancer, and long-term conditions such as diabetes.

Keywords

Compassion focused therapy; compassionate mind training; self-compassion; self-criticism; shame; group; intervention; community; NHS, physical health psychology

1. Introduction

Around 15 million people are estimated to be living with a long-term physical health condition such as diabetes, cancer, or cardiovascular disease [1]. People living with long-term conditions (LTCs) are more likely to have lower levels of wellbeing and higher levels of anxiety and depression [2]. Living with a physical health problem requires adaptation and adjustment. People living with LTCs can experience stigma, shame [3] and self-blame, which are associated with increased emotional distress [4]. Stigma around health conditions can impact on social interactions with families and friends, support-seeking, and individual self-image [5].

Compassion focused therapy (CFT) is an integrated therapy, which posits that individuals with high shame and self-criticism find it difficult to access and utilise a specialised affect regulation system which underpins feelings of reassurance, safeness and wellbeing [6]. CFT has a particular focus on reducing shame and self-criticism and developing compassion and self-compassion, in order to support experiences of safeness, soothing and inner warmth. This approach may be especially relevant to individuals experiencing LTCs and physical health difficulties due to the high levels of shame and self-criticism often experienced, which can contribute to poor psychosocial adjustment and increased severity of physical symptoms [7, 8].

Research suggests that self-compassion is associated with better physical wellbeing [9] and can support adjustment to poor physical health [10]. Recent systematic reviews have been conducted to explore the potential benefits of compassion-focused interventions for individuals with long-term physical health conditions [11-13]. Despite being a relatively new research area, findings indicated that compassion-focused interventions significantly reduced anxiety and depression, and significantly improved self-compassion. Three main themes were also identified by Austin et al., [11] around changes and benefits for participants: acceptance of the condition, increased emotion regulation skills, and reduced sense of isolation. These findings indicate that compassion-focused interventions can be beneficial for people with long-term physical health conditions.

The Physical Health & Rehabilitation Psychology (PHRP) service forms part of the North Cumbria Integrated Care NHS Foundation Trust. The service comprises eight specialist teams and offers a range of services across Cumbria to help individuals living with long-term or complex health conditions to manage their physical symptoms and lead a happier, healthier life. The PHRP Compassionate Mind Training group (PHRP-CMTg) programme was introduced in December 2018, in response to an identified need for group-based support for patients experiencing difficulties with self-criticism and shame, in the context of traumatic life experiences and complex health conditions.

Compassionate mind training (CMT) is one of the key components of compassion focused therapy (CFT) [14-16] and has a growing evidence base [17]. It can be offered as either a standalone intervention; as part of the initial stabilisation and resource-building phase of therapy; or as a framework for consolidation of individual therapy. One of the central tenets of CFT is the notion of 'common humanity' and the model thus transcends diagnosis and psychopathology.

This paper aims to evaluate the implementation of the PHRP-CMTg and determine its effectiveness for improving patient outcomes within our service.

1.1 Group Details

PHRP-CMTg was initially based on material provided by Tobyn Bell (Compassion Focused Therapist and Trainer, Greater Manchester); however the model was subsequently adapted with permission to the 8-week CMT group format developed by Dr Chris Irons and Dr Charlie Heriot-Maitland [18]. As this model has been tested on the general population to positive effect [18], the decision was made to offer PHRP-CMTg to mixed diagnostic cohorts representing the entire service, rather than subdivide based on clinical presentation.

PHRP-CMTg is facilitated by two senior psychological practitioners, with postgraduate training in CFT. With regards to group structure, sessions were hosted weekly for a total of eight weeks and each session lasted for two hours, with a ten minute break in the middle. The first group session provides an introduction to the group, the theory of CFT and the application to CMT. Participants are also introduced to mindfulness and guided attention, which represent a core feature of the group moving forward. As of week 2, each session begins with a guided practice and a recap of the previous week's content. At this point, participants are invited to share experiences and reflections of their home practice. An agenda for the session is then set and the facilitators begin covering the week's dedicated content, using a PowerPoint presentation to aid. Throughout each session, there is opportunity for small- and whole-group discussion and guided practices which are led by facilitators, with the aim of illustrating the content. The session is then brought to a close by setting a compassionate intention for the coming week. The full content of each session is outlined in Table 1. There is no expectation that participants will share personal details of their lives and experiences; however all participants are encouraged to actively contribute to discussion of the concepts and exercises covered in the group sessions.

Table 1 PHRP-CMTg session content, as adapted from Irons and Maitland [18].

Session number	Session title and content
1	Introductions - Outline of evolutionary theory and application to CMT, concept of tricky brains, introduction to mindfulness and guided attention and mindfulness of sound/body practices.
2	Introduction to 3 system model of emotion regulation - Role of the soothing system, guided practice of soothing rhythm breathing, use of imagery in CMT, and guided practice of safe place imagery.
3	Role of attachment and introduction to idea of multiple selves - Initial development of compassionate self, guided practice of connecting to a compassionate memory, group discussion on compassionate attributes, and guided practice of stepping into the shoes of compassionate self.
4	Focus on flow of compassion from self to others - Exploring the fears/blocks/resistances to this flow and guided imagery practice of directing compassion towards another (stranger and someone you care about).

5	Focus on flow of receiving compassion from others - Guided memory of receiving compassion, exploring the fears/blocks/resistances to this flow, and guided imagery practice of creating an ideal compassionate other.
6	Focus on flow of directing compassion towards self - Paired exercise directing and receiving compassion, exploring fears/blocks/resistances, identifying a moment of self-compassion, and compassionate letter writing task.
7	Pattern switching – Engaging the compassionate self when in threat using pre-during-after proforma, exploring the form and function of self-criticism, and guided imagery practice of bringing compassion to the self-critic.
8	Exploring our multiple selves and the relationship between these - Paired pattern switch exercise, compassionate selfie, forward planning and endings.

2. Materials and Methods

2.1 Participants

Referrals for PHRP-CMTg were accepted from across the PHRP service pathways, in addition to a small number of staff members accepted via the COVID-19 staff wellbeing support network. Given the holistic approach of CFT and its commitment to universal human suffering, no strict inclusion or exclusion criteria were set [19]. All referrals to the PHRP-CMTg were accepted, provided that the individual could tolerate the group environment.

2.2 Outcome Measures

All PHRP-CMTg participants, with the exception of the in-service staff cohort, were asked to complete a series of outcome measures (OMs) before starting the group, which were then repeated upon programme completion. The OMs adopted by the PHRP-CMTg have been modified as the programme has evolved, in response to consultation with Dr Chris Irons.

The questionnaires used aim to capture a range of experiences and are detailed in Table 2, along with mean scores and normative data for comparison. In addition to the self-report questionnaires, each participant was asked to complete an anonymous evaluation survey during or immediately after the final group session.

Table 2 PHRP-CMTg OMs.

Self-report measure	Construct measured	Score ranges	Clinical cut-off scores/normative data (where available)
Patient Health Questionnaire (PHQ-9 [20])	Depressed mood	0-27	5-9 mild, 10-15 moderate, 16-19 moderately severe, 20-21 severe depression.
Generalised Anxiety Disorder Assessment (GAD-7 [21])	Generalised anxiety	0-21	5-9 mild, 10-14 moderate, 15-21 severe anxiety

EQ-5D-5L Visual Analogue Scale (EQ-VAS [22])	Overall health		0-100	Subjective, percentage based measure
Warwick-Edinburgh Mental Well-being Scale (WEMWBS [23])	Mental wellbeing		14-70	60-70 high wellbeing, 43-59 moderate wellbeing, 14-42 low wellbeing (UK population mean = 51.6)
Acceptance and Action Questionnaire- II (AAQ-II [24])	Psychological flexibility		7-49	24-28 clinical cut-off indicative of underlying mood difficulty
Forms of Self-criticising & Self-reassuring Scale – Short Form (FSCRS-SF [25])	Forms of self-criticism	Inadequate self	0-36	High scores = greater sense of personal inadequacy (16.22 gen pop mean*)
		Reassured self	0-32	High scores = greater ability to self-reassure (18.82 gen pop mean*)
		Hated self	0-20	High scores = greater tendency to persecute/hurt self (3.20 gen pop mean*)
External & Internal Shame Scale (EISS [26])	Forms of shame experience	External	0-16	Higher scores indicate greater perceived judgement and negative evaluation by others
		Internal	0-16	Higher scores indicate greater self-focussed negative evaluation and feeling
Compassionate Engagement & Action Scales (CEAS [27])	To self	Engagement	6-60	40.96 gen pop mean*
		Action	4-40	26.96 gen pop mean*
	To others	Engagement	6-60	45.36 gen pop mean*
		Action	4-40	30.44 gen pop mean*
	From others	Engagement	6-60	35.50 gen pop mean*
		Action	4-40	25.07 gen pop mean*

* General population mean data taken from post-group scores reported by Irons and Heriot-Maitland [18]

2.3 Procedure

PHRP-CMTg was initially offered in-person on a tri-yearly basis and was held at easily accessible community venues across Cumbria, England. Group location rotated between Carlisle, Cockermouth and Wigton, and was later expanded to include Whitehaven and Workington. In response to the recent COVID-19 pandemic, the group was adapted to allow for remote delivery via Zoom video call.

Participants who had been referred to the group were contacted by telephone approximately two weeks before the first group session to confirm interest and attendance. A welcome email was then sent out to those who had consented to attend, featuring an overview of the group, relevant

dates and times, facilitator information, and links to wider CFT resources. The group's workbook and group guide were attached to this email, alongside a link to audio recordings of each of the personal practice exercises on the PHRP service website. A Qualtrics link was included to allow for completion of OMs prior to week one of the group programme. Alternatively, OMs could be accessed by scanning a QR code generated via the Qualtrics platform. Where it was not possible to send a welcome email, all materials were sent via post with a stamped addressed envelope to allow for easy return of OMs.

For virtual group sessions held via Zoom, this procedure remained consistent and the link to access the meeting was added to the welcome email with an accompanying Zoom user guide to assist any technical difficulties. Test calls were offered to those with minimal experience of using the Zoom platform to improve user confidence and answer any potential questions prior to group participation. Finally, a letter to confirm group enrolment was sent to participants for their records and their GP was notified of their plans to engage with the group. All OM data was recorded on a secure Microsoft Excel spreadsheet. Following group completion, an evaluation survey was distributed to capture participants' experiences and recommendations for future programmes.

2.4 Design and Analysis

A quasi-experimental pre-post design was utilised to determine whether completion of the PHRP-CMTg significantly improved participant outcomes. To analyse the data, a paired samples t-test was conducted using SPSS Statistics 26 software. Where t-test assumptions were violated, a suitable non-parametric equivalent was performed.

In addition, a thematic analysis of qualitative data, captured from both written and verbal feedback given throughout the group, was conducted to uncover emergent themes. This process was completed by following the six reflexive phases outlined by Braun, Clarke, Hayfield and Terry [28]: Familiarization with raw data, inductive generation of codes, construction of themes, revision of themes, defining themes, and producing the final report. In the present study, these phases were carried out by the group facilitators (KB and SB) and final themes were independently reviewed by CM.

3. Results

As of May 2022, 76 participants had been enrolled onto the PHRP-CMTg (59 female, 17 male, aged 25-77). A total number of nine patient group programmes were conducted, four of which were face-to-face, four were remote groups, and one final mixed face-to-face/remote group. An additional staff group programme for in-service living well coaches and assistant psychologists was also run, but was excluded from this evaluation as the population were not representative of the PHRP service and formal OMs were not collected.

Due to various challenges in obtaining the OMs from participants, the number of responses collected per questionnaire varied and so only complete responses were analysed for the purposes of this investigation. On average, groups consisted of more female participants than male, with average age ranging from 50.55 to 54.31 (see Table 3).

Table 3 PHRP-CMTg participant characteristics per completed OM.

Participant characteristic	Value							
	PHQ-9	GAD-7	EQ VAS	WEMWBS	AAQ-II	FSCRS-SF	EISS	CEAS
N	39	39	26	26	25	37	27	31
Age (mean years ± *SD*)	51.77 (± 8.36)	51.74 (± 9.03)	54.31 (± 9.79)	54.23 (± 9.75)	53.40 (± 8.80)	52.08 (± 9.51)	54.07 (± 9.68)	50.55 (± 8.74)
Sex (*N*)								
Male	11	11	6	7	6	9	7	9
Female	28	28	20	19	19	28	20	22

Pre-group and post-group means were also calculated for each measure administered (see Table 4).

Table 4 Descriptive statistics.

Outcome Measure	Pre-Group Score		Post-Group Score	
	Mean	*SD*	Mean	*SD*
PHQ-9	15.38	5.42	11.49	6.07
GAD-7	11.38	5.27	8.59	5.40
EQ VAS	49.69	18.12	51.77	23.91
WEMWBS	33.54	10.58	42.92	9.96
AAQ-II	29.44	10.69	24.96	10.57
FSCRS-SF				
Inadequate self	15.22	8.71	11.14	7.17
Reassured self	10.05	6.02	13.30	6.34
Hated self	6.03	4.87	3.95	3.99
EISS				
External	7.56	3.75	6.07	2.97
Internal	8.26	3.85	6.78	3.69
CEAS				
To self				
Engagement	33.32	8.61	39.10	9.23
Action	17.32	8.81	24.77	8.38
To others				
Engagement	46.13	9.89	48.45	8.25
Action	32.00	7.93	33.42	5.92
From others				
Engagement	34.13	14.22	36.61	12.22
Action	24.39	9.00	27.68	8.59

To determine the impact of PHRP-CMTg participation on participant outcomes, a paired samples t-test was conducted (see Table 5). Prior to conducting this analysis, the assumption of normal

distribution was examined and considered satisfied according to guidance by Posten [29] with skewness <2.0 and kurtosis <9.0 for all measures except compassionate action to others, where skewness was observed as -2.06. Here, a Wilcoxon signed ranks test was performed as a non-parametric alternative (see Table 6).

Table 5 Paired samples t-test.

					Paired *t*-test			
		Mean	SD	SE Mean	*t*	df	p value	*d*
Pair 1	PHQ-9 pre-post-group	3.90	5.30	0.85	4.59	38	0.000**	0.74
Pair 2	GAD-7 pre-post-group	2.80	5.08	0.81	3.43	38	0.001*	0.55
Pair 3	EQ VAS pre-post-group	-2.08	17.54	3.44	-0.60	25	0.551	-0.12
Pair 4	WEMWBS pre-post-group	-9.39	9.86	1.93	-4.85	25	0.000**	-0.95
Pair 5	AAQ-II pre-post-group	4.48	8.32	1.66	2.69	24	0.013*	0.54
Pair 6	FSCRS-SF inadequate self - pre-post-group	4.08	5.17	0.85	4.80	36	0.000**	0.79
Pair 7	FSCRS-SF reassured self pre-post-group	-3.24	4.72	0.78	-4.18	36	0.000**	-0.69
Pair 8	FSCRS-SF hated self pre-post-group	2.08	2.97	0.49	4.27	36	0.000**	0.70
Pair 9	EISS external shame pre-post-group	1.48	2.39	0.46	3.22	26	0.003*	0.62
Pair 10	EISS internal shame pre-post-group	1.48	2.68	0.52	2.87	26	0.008*	0.55
Pair 11	Compassionate engagement to self-pre-post-group	-5.77	9.37	1.68	-3.43	30	0.002*	-0.62
Pair 12	Compassionate action to self pre-post-group	-7.45	8.76	1.57	-4.74	30	0.000**	-0.85
Pair 13	Compassionate engagement to others pre-post-group	-2.32	8.50	1.53	0.79	30	0.138	-0.27

Pair 14	Compassionate engagement from others pre-post-group	-2.49	9.52	1.71	1.01	30	0.157	-0.26
Pair 15	Compassionate action from others pre-post-group	-3.29	5.74	1.03	-1.19	30	0.003*	-0.57

* Significant result ($p < 0.05$) ** Significant result ($p < 0.001$).

Table 6 Wilcoxon signed-ranks test.

		Negative ranks			Positive ranks			Test statistic	
Outcome	Ties	N	Mean rank	Sum of rank	N	Mean rank	Sum of rank	Z	p
Compassionate action to others pre-post-group	5	8	13.75	110	18	13.39	241	-1.68	0.93

3.1 Depression and Anxiety

A paired samples t-test revealed that PHQ-9 scores were significantly lower following participation in the PHRP-CMTg, $t(38) = 4.59$, $p < 0.001$, $d = 0.74$, representing a decrease in depressive symptoms. GAD-7 scores were also significantly lower, $t(38) = 3.43$, $p = 0.001$, $d = 0.55$, signifying a reduction in participants' anxiety levels. The effect sizes for these analyses were found to exceed Cohen's [30] convention for a medium effect ($d = 0.50$).

3.2 Mental Wellbeing

WEMWBS scores were significantly higher after completing the PHRP-CMTg, $t(25) = -4.85$, $p < 0.001$, $d = -0.95$, indicating an increase in participants' mental wellbeing. Here, the effect size observed exceeds Cohen's [30] convention for a large effect ($d = 0.80$).

3.3 Acceptance and Action

AAQ-II scores were significantly lower following the PHRP-CMTg with a medium effect size, $t(24) = 2.69$, $p = 0.013$, $d = 0.54$, demonstrating that participants were more able to make contact with the present moment and accept difficult thoughts, emotions and experiences.

3.4 Self-criticism and Self-reassurance

FSCRS-SF scores measuring perceptions of the self as "inadequate", $t(36) = 4.80$, $p < 0.001$, $d = 0.79$, and "hated", $t(36) = 4.27$, $p < 0.001$, $d = 0.70$, were both significantly lower following completion of the PHRP-CMTg. In contrast, "reassured" self scores were significantly higher, $t(36) = -4.18$, $p < 0.001$, $d = -0.69$, suggesting that participants were better able to reassure themselves when things seemingly went wrong for them. The effect sizes for these analyses were also found to be medium.

3.5 Shame Experiences

Both external shame scores, $t(26) = 3.22$, $p = 0.003$, $d = 0.62$, and internal shame scores, $t(26) = 2.87$, $p = 0.008$, $d = 0.55$, were significantly lower following the PHRP-CMTg, each with a medium effect size. These results illustrate that participants' were less critical of themselves and less likely to see themselves as inferior, as well as perceiving less criticism and judgement from others.

3.6 Compassionate Engagement and Action

Compassionate engagement to self scores were significantly higher following the PHRP-CMTg, $t(30) = -3.43$, $p = 0.002$, $d = -0.62$, as were compassionate action to self scores, $t(30) = -4.74$, $p < 0.001$, $d = -0.85$. Compassionate action from others scores were also significantly higher following the PHRP-CMTg, $t(30) = -1.19$, $p = 0 .003$, $d = -0.57$.

A Wilcoxon signed-ranks test revealed that participation in the PHRP-CMTg did not significantly increase scores on the compassionate action to others subscale of the CEAS, $Z = -1.68$, $p = 0.93$ (see Table 6).

3.7 Qualitative Feedback

Thematic analysis of the qualitative data captured through written feedback on the group evaluation form and email correspondence with group facilitators, along with verbal feedback received, revealed three main themes.

The first theme identified was the group creating a psychologically safe environment for participants, within which they could learn and receive compassion. For example, when asked what they found most helpful about the PHRP-CMTg, one participant reported "the ability [to] share and discuss issues with other people in a 'safe' environment", while another agreed that "the safe space created by the group…reinforce[d] that [their] fears and difficulties are, in part at least, just part of the human condition". With regards to learning compassion, one participant reported that the group "has been very helpful and insightful and [they] intend to continue learning about compassion and what it means in every day to day life". Similarly, another stated that "as the sessions continued [they] found [themselves] sharing more, learning more and getting more involved with the group" and "have learned to be more of a compassionate person, to [themselves] and others and intend to continue this". Likewise, another comment received went as follows: "I learned and will continue to learn and practice that I am important and the compassion I give to others is also a necessity to lavish on myself". Therefore, these results suggest that the group process facilitated individuals to learn more about the principles and practice of compassion, along with how to give it and receive it more freely.

The second theme identified was specific skill development which provided participants with a framework for future growth. For example, one participant reported that they have "learnt so much about [themselves] and new skills to help [them]…now and in the future". Moreover, another participant stated that they "often find [themselves] going back to aspects of the course/training and using it to help in a given situation" as "the CFT allows [them] the time to review [their] situation and then decide what to do". Additional comments included participants feeling that they were "being given the ingredients and method for putting together a way forward for a life without being habitually hard on [themselves]" and that they "can deal with things better… now [they] have the

recourses within [themselves]". As such, this indicates that the PHRP-CMTg helped participants to grow and nurture compassionate skills that they could use in their daily lives and could guide them in times of difficulty.

The final theme identified was learning more about the self and others, which increased participants' confidence to implement positive change. For example, one comment received was that participants "loved meeting new people and learning so much", which helped them to feel like they "can now help [themselves] in the future". Participants reported that "this course helped [them] at home and also at work", with one respondent stating that their "new more positive attitude has helped [them] to build [their] business without the hindrance of that voice that says 'you can't do it'". Another participant remarked: "Over the weeks I noticed I was being kinder to myself, and being less critical of myself. It was a subtle shift in my attitude and outlook of life and of myself", while a further participant reported: "it is clear to me now that I am responsible for my wellbeing and that it is often me that stands in the way of progress on this front". Thus, it is clear that the PHRP-CMTg influenced various aspects of participants' lives and enabled them to take steps in valued directions.

Importantly, all of the group participants shared that they had experienced a positive benefit from attending, and would recommend the group to friends or family members. Although some participants disclosed that they would have preferred to meet in-person, this was balanced by the feedback from others that the remote format enabled them to attend more easily. A wider selection of quoted feedback can be found in the appendix, alongside a lengthier email summary shared by one of the group participants. To date, almost all of the groups have independently made arrangements to keep in contact with each other after the group has finished, representing the powerful connecting nature of offering CMT in a group format and the protective function of providing a safe forum for developing compassion.

4. Discussion

The results of this investigation reflect a significant positive shift across almost all of the outcomes measured. A significant reduction in depression, anxiety, perceived shame and unhelpful forms of self-criticism were found, alongside significant increases in mental wellbeing, psychological flexibility, self-compassion and the ability to receive compassionate action from others. These findings are largely in line with existing research, which has shown the efficacy of interventions adopting a CFT approach to reduce symptoms of depression, anxiety, and stress [31-33]. Also, the significant shift observed in levels of self-compassion, wellbeing and self-criticism in the present group were comparable to those obtained in a recent study, which utilised an eight-week CMT framework within the general population [18]. These results therefore represent an important avenue for clinical intervention, particularly among those with LTCs and complex health difficulties, as overall wellbeing and management of depression and anxiety have been associated with improved ability to cope with and manage LTCs more effectively, as well as decreased symptom burden [34, 35]. As such, the findings of the present study complement the existing evidence base and provide further support for the use of group-based interventions for patients experiencing difficulties with self-criticism and shame, in the context of complex health conditions and traumatic life experiences.

It is worthy of note that self-reported overall health scores for participants did not significantly differ post-intervention. However, this finding may be regarded as somewhat unsurprising in the

context of the current participant population. In the present study, all participants suffered from long-term or complex health difficulties which brought about a substantial change to their lifestyle. Research indicates that independent appraisal of health and quality of life are significant impacted by components such as pain, fatigue, and the uncertainty associated with diagnosis of LTCs [36-38]. Moreover, the convergence of these factors can lead to functional impairment and sleep difficulties, which are linked with heightened pain perception [39-41]. These afflictions are largely ever-present in those with complex health difficulties and the cyclical nature of these interactions, alongside the dynamicity of symptoms, serves to solidify perceptions of poor health. Therefore, significant improvements in self-reported health cannot reasonably be expected. In addition, no significant differences were seen in scores for compassionate engagement both to and from others following the intervention. However, pre-intervention scores on these dimensions are often high among participants, as seen in previous investigations [18]. In the present sample, the majority of participants anecdotally reported that they tended to place the needs of others before their own and associated with the role of caregiver, which allows them to extend empathy and support to others. As such, given the tendency for individuals to score highly on these scales at baseline and the value taken from the caregiving role, notable changes in compassion to or from others is unlikely.

With regards to analysis of qualitative feedback provided by participants, three main themes were identified: 1) The group creating a psychologically safe environment in which participants could learn and receive compassion, 2) specific skill development which provided a framework for future growth, and 3) learning more about the self and others increasing confidence to implement positive change. Overall, these themes indicate that the group allowed participants to expand their knowledge as to the principles and practice of self-compassion and provided them the opportunity to develop these skills, which they were then able to implement into their daily lives to encourage positive and meaningful change. To the authors' knowledge, there have been no prior attempts to analyse patient experiences of CMTg's or related CFT-based therapeutic frameworks, as existing research has focused on experiences of staff and professionals. Thus, more research is needed to ascertain the value of this approach within patient populations.

4.1 Limitations

Despite the apparent success of the PHRP-CMTg, there are a few limitations to be aware of. Firstly, the sample size across all OMs was relatively small due to poor rates of completion. Although efforts were made to collect OM data so far as possible and reminders were communicated to participants via email, it was felt by the group facilitators that strong insistence to complete would not be conducive to the supportive, person-centred ethos of the programme. As such, no consideration was given to non-completers of the group in this case. Moreover, the study population may have represented a challenge to OM completion due to their common experience of complex LTCs and persistent pain, which could impact on levels of motivation and ability to concentrate [42]. Furthermore, participant characteristics were largely homogenous, in that the majority were females aged 50-55 years. While the final sample is largely representative of all individuals referred to the group with regards to age (M = 52.25, SD = 10.84) and gender split, there is a need for future research to be conducted with more diverse populations.

In addition, as no comparison group was featured in this investigation, it cannot be stated with certainty that improvements in OM data were a direct result of the PHRP-CMTg intervention.

However, because each intervention within the PHRP service is tailored to meet individual need and length of intervention is not fixed, implementing a comparison group would not have been feasible in this case as no consistent points of comparison were identified. Nevertheless, as the use of structured CMTg programmes is a largely emergent area of research, more studies are required to replicate the present findings and increase reliability in the intervention effects.

There is also a chance that extraneous variables may have influenced the OM data collected, as groups were conducted in community settings. For example, group sessions continued to be offered amidst the global COVID-19 pandemic, where possible emotional distress related to numerous lockdowns, socio-economic pressures, or exacerbated health concerns likely had a significant impact on some of the constructs measured, including depressed mood, generalised anxiety and mental wellbeing. Further, in order to comply with Government guidelines, group delivery and outcome format was adapted to remote format, which resulted in changes to pre-group procedure; where outcomes were previously completed in a face-to-face introductory session with group facilitators, a move to independent, online completion was made. This represented a significant challenge in obtaining OM data; given that the OMs collected for this group are extensive, the requirement for independent completion may have prevented individuals from completing questionnaires in their entirety. Participants may have also experienced confusion towards some of the language used in the scales without group facilitators there to offer guidance where needed and may have therefore chosen not to complete them. Furthermore, the point at which participants accessed the group in their healthcare journey may also have impacted OM data. For example, where participants have received 1:1 therapeutic input prior to group referral, they would be more familiar with the OMs used and how to complete them, compared with those accessing the group following initial assessment. As such, future research should endeavour to implement this programme in a more controlled environment and consider the impact of prior psychological input on participant outcomes.

4.2 Clinical Implications

PHRP-CMTg is now an established part of the overall PHRP service pathway, and the OM data collected reflects the benefit and effectiveness of the approach for this population. PHRP-CMTg offers a unique contribution to the overall service delivery in supporting patients from across all service pathways to manage difficult emotions, build resilience, and increase self-compassion. The model offers flexibility in delivery format, with similar levels of uptake and outcome for both in-person and remote cohorts, and contributes to the service value of compassionate care: treating the individual behind the diagnosis. Participants adapted well to the remote group format, and several reflected that this format had enabled easier access to the group given their physical symptoms, work commitments, and rural Cumbrian geography.

The group format offers resource efficiency, and provides a structured, safe forum for patients with similar life experiences to connect and validate each other. Based on the current evaluation, there appear to be no significant differences in outcome based on the phase of intervention PHRP-CMTg is accessed, or other clinical variables.

5. Conclusions

To the authors' knowledge, this is the first evaluation of a CMTg programme in a cross-diagnostic physical health psychology setting. Despite the limitations outlined above, the significant findings across a range of outcomes support the clinical utility and resource efficiency of this intervention for this population, though more research is needed to replicate and extend these findings.

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Author Contributions

Dr Kay Brewster and Sue Black conceived the paper. The manuscript and quantitative data analysis were completed by Chloe Moran, with contributions from Hannah Shaw. Qualitative data analysis was completed by Dr Kay Brewster and Sue Black, with contributions from Chloe Moran. Revisions of the manuscript were completed by Chloe Moran and Dr Kay Brewster.

Competing Interests

The authors have declared that no competing interests exist.

Additional Materials

1. Qualitative Patient Feedback – Positive Feedback and What Was Helpful.
2. Qualitative Patient Feedback - Suggestions for Improvement.
3. Qualitative Patient Feedback - Advice for Future Participants.
4. Qualitative Patient Feedback - Remote versus Face-to-face Sessions.
5. Email from Participant (October 2020) Following Attendance at a Remote Group.

References

1. Department of Health. Long term conditions compendium of information: Third edition [Internet]. London: Department of Health; 2012. Available from: https://www.gov.uk/government/publications/long-term-conditions-compendium-of-information-third-edition.
2. Clarke DM, Currie KC. Depression, anxiety and their relationship with chronic diseases: A review of the epidemiology, risk and treatment evidence. Med J Aust. 2009; 190: S54-S60.
3. Saunders B. Stigma, deviance and morality in young adults' accounts of inflammatory bowel disease. Sociol Health Illn. 2014; 36: 1020-1036.
4. Callebaut L, Molyneux P, Alexander T. The relationship between self-blame for the onset of a chronic physical health condition and emotional distress: A systematic literature review. Clin Psychol Psychother. 2017; 24: 965-986.
5. Chapple A, Ziebland S, McPherson A. Stigma, shame, and blame experienced by patients with lung cancer: Qualitative study. BMJ. 2004; 328: 1470.

6. Gilbert P. Introducing compassion-focused therapy. Adv Psychiatr Treat. 2009; 15: 199-208.
7. Dunkley DM, Schwartzman D, Looper KJ, Sigal JJ, Pierre A, Kotowycz MA. Perfectionism dimensions and dependency in relation to personality vulnerability and psychosocial adjustment in patients with coronary artery disease. J Clin Psychol Med Settings. 2012; 19: 211-223.
8. Hyphantis T, Goulia P, Carvalho AF. Personality traits, defense mechanisms and hostility features associated with somatic symptom severity in both health and disease. J Psychosom Res. 2013; 75: 362-369.
9. Phillips WJ, Hine DW. Self-compassion, physical health, and health behaviour: A meta-analysis. Health Psychol Rev. 2021; 15: 113-139.
10. Brown L, Huffman JC, Bryant C. Self-compassionate aging: A systematic review. Gerontologist. 2019; 59: e311-e324.
11. Austin J, Drossaert CH, Schroevers MJ, Sanderman R, Kirby JN, Bohlmeijer ET. Compassion-based interventions for people with long-term physical conditions: A mixed methods systematic review. Psychol Health. 2021; 36: 16-42.
12. Hughes M, Brown SL, Campbell S, Dandy S, Cherry MG. Self-compassion and anxiety and depression in chronic physical illness populations: A systematic review. Mindfulness. 2021; 12: 1597-1610.
13. Kılıç A, Hudson J, McCracken LM, Ruparelia R, Fawson S, Hughes LD. A systematic review of the effectiveness of self-compassion-related interventions for individuals with chronic physical health conditions. Behav Ther. 2021; 52: 607-625.
14. Gilbert P. The compassionate mind: A new approach to facing the challenges of life. London: Constable & Robinson; 2009.
15. Gilbert P. Compassion focused therapy: Distinctive features. Hove: Routledge; 2010.
16. Gilbert P. The origins and nature of compassion focused therapy. Br J Clin Psychol. 2014; 53: 6-41.
17. Kirby JN, Tellegen CL, Steindl SR. A Meta-analysis of compassion-based interventions: Current state of knowledge and future directions. Behav Ther. 2017; 48: 778-792.
18. Irons C, Heriot-Maitland C. Compassionate mind training: An 8-week group for the general public. Psychol Psychother. 2021; 94: 443-463.
19. Craig C, Hiskey S, Spector A. Compassion focused therapy: A systematic review of its effectiveness and acceptability in clinical populations. Expert Rev Neurother. 2020; 20: 385-400.
20. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: Validity of a brief depression severity measure. J Gen Intern Med. 2001; 16: 606-613.
21. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: The GAD-7. Arch Intern Med. 2006; 166: 1092-1097.
22. EuroQol Research Foundation. EQ-5D-5L user guide, 2019 [Internet]. Rotterdam: EuroQol Research Foundation; 2019 [cited date 2022 April 29]. Available from: https://euroqol.org/publications/user-guides.
23. Tennant R, Hiller L, Fishwick R, Platt S, Joseph S, Weich S, et al. The Warwick-Edinburgh mental well-being scale (WEMWBS): Development and UK validation. Health Qual Life Outcomes. 2007; 5: 63.

24. Bond FW, Hayes SC, Baer RA, Carpenter KM, Guenole N, Orcutt HK, et al. Preliminary psychometric properties of the Acceptance and Action Questionnaire–II: A revised measure of psychological inflexibility and experiential avoidance. Behav Ther. 2011; 42: 676-688.
25. Sommers-Spijkerman M, Trompetter H, Ten Klooster P, Schreurs K, Gilbert P, Bohlmeijer E. Development and validation of the forms of Self-Criticizing/Attacking and Self-Reassuring Scale-Short Form. Psychol Assess. 2018; 30: 729-743.
26. Ferreira C, Moura-Ramos M, Matos M, Galhardo A. A new measure to assess external and internal shame: Development, factor structure and psychometric properties of the External and Internal Shame Scale. Curr Psychol. 2020; 41: 1892-1901.
27. Gilbert P, Catarino F, Duarte C, Matos M, Kolts R, Stubbs J, et al. The development of compassionate engagement and action scales for self and others. J Compassionate Health Care. 2017; 4: 4.
28. Braun V, Clarke V, Hayfield N, Terry G. Thematic analysis. In: Handbook of research methods in health social sciences. Singapore: Springer; 2019. pp. 843-860.
29. Posten HO. Robustness of the two-sample t-test. In: Robustness of statistical methods and nonparametric statistics. Dordrecht: Springer; 1984. pp. 92-99.
30. Cohen J. Statistical power analysis for the behavioral sciences. New York: Routledge; 2013.
31. Frostadottir AD, Dorjee D. Effects of mindfulness based cognitive therapy (MBCT) and compassion focused therapy (CFT) on symptom change, mindfulness, self-compassion, and rumination in clients with depression, anxiety, and stress. Front Psychol. 2019; 10: 1099.
32. Farokhzadian AA, Mirderekvand F. The effectiveness of self-compassion focused therapy on increase of psychological well-being and reduction of depression in the elderly. Aging Psychol. 2018; 3: 293-302.
33. Krieger T, Altenstein D, Baettig I, Doerig N, Holtforth MG. Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. Behav Ther. 2013; 44: 501-513.
34. Katon W, Lin EH, Kroenke K. The association of depression and anxiety with medical symptom burden in patients with chronic medical illness. Gen Hosp Psychiatry. 2007; 29: 147-155.
35. Tullett M, Neno R. Approaches to long-term conditions management and care for older people: Similarities or differences? J Nurs Manag. 2008; 16: 167-172.
36. Jakobsson U, Hallberg IR, Westergren A. Overall and health related quality of life among the oldest old in pain. Qual Life Res. 2004; 13: 125-136.
37. Rupp I, Boshuizen HC, Jacobi CE, Dinant HJ, van den Bos GA. Impact of fatigue on health-related quality of life in rheumatoid arthritis. Arthritis Care Res. 2004; 51: 578-585.
38. Kang Y. Effects of uncertainty on perceived health status in patients with atrial fibrillation. Nurs Crit Care. 2005; 10: 184-191.
39. Tang NK, Goodchild CE, Webster LR. Sleep and chronic pain. In: Treatment of chronic pain by integrative approaches. New York: Springer; 2015. pp. 203-217.
40. Marty M, Rozenberg S, Duplan B, Thomas P, Duquesnoy B, Allaert F. Quality of sleep in patients with chronic low back pain: A case-control study. Eur Spine J. 2008; 17: 839-844.
41. Abernethy AP. Pain and sleep: Establishing bi-directional association in a population-based sample. Pain. 2008; 137: 1-2.
42. Khera T, Valluvan R. Cognition and pain: A review. Front Psychol. 2021; 12: 673962.