The Role of Self-Compassion in Chronic Illness Care

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ABSTRACT

- Objective: To present current research and theory on the potential of self-compassion for improving healthrelated outcomes in chronic illness, and make recommendations for the application of self-compassion interventions in clinical care to improve well-being and facilitate self-management of health in patients with chronic illness.
- Methods: Narrative review of the literature.
- Results: Current theory indicates that the self-kindness, common humanity, and mindfulness components of self-compassion can foster adaptive responses to the perceived setbacks and shortcomings that people experience in the context of living with a chronic illness. Research on self-compassion in relation to health has been examined primarily within non-medical populations. Cross-sectional and experimental studies have demonstrated clear links between self-compassion and lower levels of both perceived stress and physiological indictors of stress. A growing evidence base also indicates that selfcompassion is associated with more frequent practice of health-promoting behaviors in healthy populations. Research on self-compassion with chronic illness populations is limited but has demonstrated crosssectional links to adaptive coping, lower stress and distress, and the practice of important health behaviors. There are several interventions for increasing self-compassion in clinical settings, with limited data suggesting beneficial effects for clinical populations.
- Conclusion: Self-compassion holds promise as an important quality to cultivate to enhance health-related outcomes in those with chronic health conditions. Further systematic and rigorous research evaluating the effectiveness of self-compassion interventions in chronic illness populations is warranted to fully understand the role of this quality for chronic illness care.

iving with a chronic illness presents a number of challenges that can take a toll on both physical and psychological well-being. Pain, fatigue, and decreased daily functioning are symptoms common to many chronic illnesses that can negatively impact psychological well-being by creating uncertainty about attaining personal goals [1], and contributing to doubts and concerns about being able to fulfil one's personal and work-related responsibilities [2]. The stress associated with negotiating the challenges of chronic illness can further complicate adjustment by exacerbating existing symptoms via stress-mediated and inflammation regulation pathways [3-5] and compromising the practice of important disease management and health maintenance behaviors [6,7]. These experiences can in turn fuel selfblame and other negative self-evaluations about not being able to meet personal and others' expectations about managing one's illness and create a downward spiral of poor adjustment and well-being [8,9].

A growing evidence base suggests that self-compassion is an important quality to help manage the stress and behavior-related issues that can compromise chronic illness care. Defined by Neff [10] as taking a kind, accepting, and non-judgmental stance towards oneself in times of failure or difficulty, self-compassion is associated with several indicators of adjustment in non-medical populations including resilience [11,12] and adaptive coping [13]. In support of the notion that self-compassion can play a role in promoting health behaviors, a recent metaanalysis found that self-compassion is linked to better practice of a range of health-promoting behaviors due in part to its links to adaptive emotions [14]. Research on the role of self-compassion for health-related outcomes with chronic illness populations is limited but nonetheless promising [15–17], and suggests that self-compassion

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may be a worthwhile quality to cultivate to improve wellbeing and facilitate disease self-management.

In this article we present current research and theory on the potential of self-compassion as a clinical concept for improving health-related outcomes in chronic illness. After presenting a brief overview of the theoretical underpinnings of self-compassion and its measurement, we present the current state of research on the role of self-compassion in reducing stress and facilitating health behaviors in general medical populations. We then outline the emerging evidence illustrating a potential role for extending this research to chronic illness populations and make recommendations for the application of self-compassion interventions in clinical care, as a means to improving well-being and facilitating self-management of health for this group.

Self-Compassion: A Healthier Way of Responding to Challenges

Research into the correlates and effects of self-compassion has been primarily guided by the model of self-compassion proposed by Kristen Neff [10]. This view of selfcompassion is derived from Buddhist psychology and reconceptualised in a secular manner to refer to the compassion expressed towards the self when experiencing suffering, whether it be due to circumstances beyond one's control or within one's control [18]. The 3 key components of self-compassion are proposed to work synergistically to promote kind rather than critical responses to failures and difficult circumstances. Self-kindness (versus self-judgment) involves taking a kind, caring and nonevaluative stance towards perceived inadequacies, shortcomings, and mistakes, and may be particularly valuable for countering the negative self-evaluations that can accompany not being able to meet one's expectations due to the restrictions of living with a chronic condition [9]. Common humanity (versus isolation) refers to the sense of connection to others that arises from acknowledging the common human experience of imperfection and making mistakes, and being more aware that others may face similar challenging circumstances [18]. Framing hardship from this perspective can help people let go of the "why me?" view of their illness which can compromise adjustment [19], and instead foster a greater connection with others who live with similar conditions. Mindfulness (versus over identification) is the final component of selfcompassion as conceptualised by Neff [10], and refers to taking a balanced and non-judgmental view of emotional experiences, grounding them in the present moment and neither ignoring nor becoming overly embroiled in the negative feelings that accompany painful experiences. Neff [10,18] proposes that mindfulness helps counteract the over-identification with one's suffering that can reduce objectivity and taking a larger perspective on the situation. This mindful stance may be particularly beneficial for dealing with the ongoing pain and suffering of living with a chronic health condition, and encourage healthier ways of viewing the limitations associated with chronic illness. Correlational evidence from a study of healthy students further suggests that certain individual components of self-compassion may be particularly beneficial in the context of health, as the self-kindness and common humanity components were each found to be linked to better physical health and managing life stressors [20].

Although there are other conceptualizations of selfcompassion [21], this 3-faceted model is the most widely used in research, in part because of the availability of a measure, the Self-compassion Scale [22], which explicitly assesses each of the facets of self-compassion. The 26-item scale is designed to assess positive and negative dimensions of each facet of self-compassion, but the total score is used more often than the separate subscales [23]. The measure assesses dispositional or trait self-compassion, with an underlying assumption that some individuals can be more or less self-compassionate in the way they regularly respond to challenges or failures. Importantly, selfcompassion can also be prompted or fostered as a way of responding to failures and challenges, presenting the possibility that self-compassion can be increased among those who may benefit the most from responding with greater self-kindness and less self-judgement [24-26].

Whether conceived of as a momentary state or as an enduring quality, self-compassion has demonstrated consistent links with an array of indicators of psychological well-being. For example, one meta-analysis found that self-compassion is robustly and negatively linked with psychopathology (average r = -0.54), including depression and anxiety [27], 2 mental health issues that are prevalent in chronic illness populations [28,29]. Several studies have also noted associations of self-compassion with emotional resilience [18,30], and better coping and lower stress [12,13].

Self-Compassion Is Associated with Lower Perceived Stress

Relevant for our focus on chronic illness care, there is some evidence that self-compassion can be effective for improving well-being, and reducing stress in particular, in people with chronic illness. Across two illness samples, cancer and mixed chronic illnesses, those who scored low on a measure of self-compassion had higher levels of depression and stress compared to a healthy control sample [15], suggesting self-compassion may be protective against poor adjustment. Similar results have been found for breast cancer patients, with self-compassion explaining lower distress related to body image [16], and HIV patients, with self-compassion linked to lower stress, anxiety, and shame [31].

The protective role of self-compassion for stress appears to be explained primarily by the set of coping strategies that self-compassionate people use to deal with challenging circumstances. In their review, Allen and Leary [13] noted that self-compassionate people use coping styles that are adaptive and problem-focused (e.g., planning, social-support-seeking, and positive reframing), and tend to not use maladaptive coping styles (e.g., cognitively or behaviorally disengaging from the stressor and other escape-avoidance coping). Consistent with appraisal-based models of coping [32], adaptive coping strategies focus on removing the stressful event, garnering resources to better deal with the stressor, or recasting the stressor as less threatening, and therefore are instrumental in reducing the levels of stress that might normally be perceived in the absence of such coping approaches. Having access to a repertoire of adaptive coping strategies is particularly important in the context of chronic illness which can present a variety of daily challenges related to pain, functional and psychosocial limitations that require a flexible approach to changing demands.

Self-compassion with its links to adaptive coping may be particularly relevant for coping with such demands. One study put this assertion to the test by examining the role of coping strategies in explaining the link between self-compassion and stress in two chronic illness samples, inflammatory bowel disease (IBD) and arthritis [17]. In both samples, higher trait self-compassion was associated with a set of adaptive coping strategies which in turn explained greater coping efficacy and lower perceived stress, with the overall model explaining 43% of the variance in stress after controlling for health status and disease duration. Key adaptive coping strategies included greater use of active coping (a problem-focused coping strategy aimed at removing or reducing the stressor), positive reframing, and acceptance. The self-compassion-stress link was also explained in part

by less use of maladaptive strategies, including denial, behavioral disengagement, and self-blame coping [17]. The latter coping strategy in particular is linked to poor adjustment in chronic illness as it reflects efforts to take control over uncontrollable symptoms by viewing illnessrelated changes, such as flare-ups, as a personal failure to manage one's illness [9,33]. Together these findings, which were remarkably consistent across 2 distinct chronic illness groups, provide solid evidence to suggest that selfcompassion provides individuals living with a chronic illness with a coping advantage that fosters adjustment through engaging in appropriate cognitive and behavioral coping strategies to minimize perceived stress.

Self-Compassion Can Reduce Physiological Stress

A caveat regarding the research to date on selfcompassion and stress in chronic illness is that all studies are cross-sectional, which limits any conclusions about the direction of causality. Ignoring the fact that self-compassion in each of these studies was assessed as a relatively stable trait-like quality, one could argue that individuals who are less stressed have a greater opportunity to express kindness to themselves as they are not preoccupied with illness-related demands and challenges. However, emerging research on self-compassion and the physiological correlates of stress provide a compelling case for the directionality assumed in the cross-sectional research. In one study, healthy young adults were subjected to a standard stress-inducing laboratory task (involving mental mathematics and public speaking), with plasma concentrations of the pro-inflammatory cytokine, interleukin-6 (IL-6), assessed before and after the task on 2 days [34]. Those with higher trait self-compassion responded to the stress task with significantly lower IL-6 levels even after controlling for other potential confounds such as demographics, self-esteem, depressive symptoms, and distress. Self-compassion was also linked to lower baseline levels of IL-6 on both days. These findings suggest that self-compassion may be both an enduring and response-specific protective factor against stress-induced inflammation.

There is also evidence supporting the efficacy of selfcompassion interventions for reducing stress. In a study of healthy young women, those who underwent a brief training in self-compassion were found to have lower sympathetic nervous system reactivity (salivary alphaamylase), and more adaptive parasympathetic nervous system reactivity (heart rate variability) in response to a stress-inducing lab task, compared to placebo control and no-training control groups [35]. That this study was conducted with women only is notable, as research indicates that women tend to have lower levels of self-compassion compared to men [18]. Together with the study on trait self-compassion and biomarkers of stress-induced inflammation, this research provides supportive evidence for the role of self-compassion in reducing the harmful physiological effects of stress. Self-compassion may therefore be particularly beneficial for both psychological and physical well-being in chronic illness given the known and negative impact of stress on symptoms for a number of chronic illnesses such as diabetes [36], cardiovascular disease [32], arthritis [4], and IBD [38].

Self-Compassion and the Regulation of Health Behaviors

Another key role for self-compassion in chronic illness care is through the facilitation of health-promoting behaviors. Health maintenance and disease management behaviors, such as getting diagnostic tests, taking medication, and weight management, are central for managing symptoms and minimizing the risk of disease progression or complications. For example, staying physically fit, maintaining a healthy diet, managing stress, and getting adequate sleep are critical for weight management and the behavioral control of symptoms for a number of chronic diseases [39,40]. Nonetheless, weight management behaviors often require initiating significant lifestyle changes which need to be maintained in order to be effective. Such behaviors can be particularly challenging for individuals with chronic illness symptoms such as pain and fatigue, which can present significant barriers [41] and trigger self-critical coping about not being able to adequately self-care or manage one's disease [8,9]. Rather than being motivating, theory and evidence indicate that negative evaluations tend to increase stress and promote procrastination of important health behaviors [7,42].

In addition to theory noting why self-compassion may facilitate the regulation of important health behaviors [43,44], there is now a burgeoning body of research supporting the beneficial role of self-compassion in health behaviors [12,43,45]. Each of the 3 components of self-compassion (self-kindness, common humanity, and mindfulness) are posited to facilitate adaptive selfregulatory responses to the inevitable and momentary failures that occur when people try to enact their health goals. For example, not following through with dietary recommendations and giving into temptation can result in feelings of shame, negative self-evaluations, and reactive eating [46], which in turn can result in discontinuation of one's diet. These minor failures would be viewed less negatively by people who are self-compassionate, because they realise that others have made similar mistakes (common humanity) and, therefore, do not become excessively self-critical (self-kindness) or immersed in feelings of guilt, shame or frustration (mindfulness), negative emotions which are known to interfere with self-regulation [43,47]. Indeed, self-compassion is associated with having fewer negative reactions in response to imagining a scenario in which a diet goal is transgressed [48].

There is also evidence that collectively, these components of self-compassion facilitate experiencing a healthy balance of positive and negative emotions in the context of health behavior change. Self-compassion appears to temper the negative responses to minor setbacks and failures that occur whilst trying to reach health goals, and foster the positive emotions required to maintain motivation during the pursuit of health goals. The most compelling support for this proposition comes from a meta-analysis of 15 samples (n = 3252) in which selfcompassion was consistently and positively (average r = 0.25) associated with the practice of a range of healthpromoting behaviors relevant for chronic illness care, including healthy eating, regular exercise, healthy sleep behaviors, and stress management [12]. The explanatory roles of positive and negative affect were also tested, with the results indicating that higher levels of positive affect and lower levels of negative affect were significant mediators of the link between self-compassion and health behaviors.

With respect to mood regulation, it is important to note that self-compassion is not simply an optimistic bias that predisposes individuals towards responding only in a positive way to perceived failures or setbacks. Rather, self-compassion fosters taking a balanced perspective on one's failures, recognizing both the positive and negative aspects, and harnessing the negative mood that arises from a state of discrepancy to motivate self-improvement. For example, in experimental studies, both enduring and momentary self-compassionate states are associated with increased self-improvement motivation and behavior after experiencing failure and regret [49,50], in part because self-compassion fosters personal acceptance [50]. This adaptive responding can translate into better adherence and health behaviors in chronic health conditions after lapses in self-care which might otherwise foster selfcriticism and poor disease management. Preliminary evidence from the author's lab supports this proposition, as self-compassion was positively associated with both treatment adherence and the practice of wellness behaviors, due in part to lower levels of perceived stress, in samples of cancer patients and survivors [51], and people with chronic fatigue syndrome [52].

Clinical Applications of Self-Compassion for Chronic Illness Care

Given the growing evidence linking self-compassion to well-being and health behaviors, the next logical step is to consider ways of cultivating self-compassion for those individuals experiencing chronic health conditions.

Training in mindfulness might be one way to foster self-compassion within a health care setting. Mindfulness-Based Cognitive Behavior Therapy (MBCT [53]), and Mindfulness-Based Stress Reduction (MBSR [54]), are both programs that use mindfulness skills to notice distressing thoughts and feelings, hold these experiences in awareness, and cultivate acceptance and self-compassion [53]. MBSR, usually delivered as an 8-week group-based program, has been found to have significant effects on depression, anxiety and psychological distress in people with chronic somatic diseases [55]. However, fostering self-compassion forms only part of MBCT and MBSR. Indeed there are very few therapeutic interventions that specifically and primarily target self-compassion; however, where they are used they show promise.

Compassionate Mind Training (CMT [24]), Compassion-Focused Therapy (CFT [21]), and the Mindful Self-Compassion program [26] are examples of such targeted interventions. These therapeutic models, again usually delivered in group settings, aim to foster a kinder and more accepting attitude towards oneself through the use of formal meditations (such as living kindness meditation; LKM), home practice and informal practices for daily life (such as self-compassionate letter writing), and have been demonstrated to be effective with, for example, community participants [26], people who hear malevolent voices [56], and those with chronic mood difficulties [24].

Additionally, there are a number of brief selfcompassion practices that have been evaluated as an intervention in their own right and demonstrate positive effects. LKM aiming to develop a state of unconditional kindness towards both oneself and others and compassion meditation (CM [57]), are the most commonly described. CM involves techniques to cultivate compassion, or deep, genuine sympathy for those stricken by misfortune, including oneself, "together with an earnest wish to ease this suffering" [58]. The effects of these kindness-based meditations on health and well-being have been summarized in a recent review [59] which illustrates that, whilst limited data exists currently, promising effects have been shown for a number of different groups. Positive effects have for example been demonstrated for patients with chronic back pain [60] and for people with experiences traditionally conceptualized as psychosis [61], suggesting these practice may also be beneficial for other chronic health conditions.

Alongside the potential benefits, how interventions cultivating self-compassion can be delivered in clinical practice is worthy of consideration. Previous applications have included group work (including MBCT, MBSR), one-to-one therapy (such as CFT) and self-directed practice via bibliotherapy or online materials. The different options available here suggest this kind of intervention is highly accessible, potentially inexpensive and could be used as a complimentary approach alongside other more traditional medical disease management treatments or as a stand-alone psychotherapeutic intervention when required.

In order to best support the successful introduction and evaluation of such interventions, consideration of compassionate practice by staff within health-care settings is also needed. Cultivating a culture of compassion through compassionate leadership [62] is required. We know services with higher levels of caring practice have higher quality care, greater well-being for staff and in turn more compassionate care for patients [63] than those services that are struggling. It is hoped that taking a broad systemic compassionate approach (via training, ongoing supervision and ethos cultivation) would ensure that the language used, information communicated, and disease management approaches are planned and delivered in a way that fosters patients' sense of self-efficacy and kindness towards themselves, with all the benefits outlined above.

Conclusion

Theory and research indicate that self-compassion fosters adaptive responses to perceived failures and setbacks, and

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is therefore associated with well-being, reduced stress and more frequent health behaviors. The emerging evidence base on the benefits of self-compassion for coping with the challenges of chronic health conditions is promising, and suggests that the benefits of self-compassion noted in non-medical populations may extend to chronic illness care. Interventions cultivating self-compassion may be especially beneficial for those with chronic health conditions through the mechanisms identified earlier; reducing stress (and thereby impacting on an individual's relationship with their physical health); improving selfmanagement skills with condition related behaviors and health-promoting behaviors; altering one's relationship with illness-related shame and self-blame; and in boosting resilience. Systematic and rigorous evaluation of such interventions with people with chronic health conditions is now needed, evaluating impacts on well-being, health behaviors, and disease management and outcomes.

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