

# Self-Care and the Impact on Compassion Fatigue and Patient Outcomes in Coronavirus

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**Abstract:** *The way we practice self-care is critical to our long-term health. This is particularly essential for healthcare professionals who work in high-stress settings. A review of the literature shows that acute care COVID-19 healthcare professionals' psychological discomfort is linked to greater compassion fatigue and its consequences. Compassion fatigue and burnout may lead to patient safety problems, therefore adopting self-care and resilience measures at the person and system level is essential to avoid bad consequences. The PICOT question for this research was: How does the use of a self-care tool (I) compared to existing practice (C) affect compassion fatigue and clinical performance measures (O) over 10 weeks among direct care professionals caring for patients during the COVID-19 pandemic (P)? (T)? This study used a retrospective-prospective approach to gather quantitative data to look into the relationship between compassion fatigue, self-care adoption, and high-quality patient outcomes. The study aimed for 120 volunteers who worked for a company, but owing to the pandemic, only 26 were able to participate. Participants were asked to fill out pre- and post-surveys to assess compassion fatigue, as well as utilize a self-care tool. The Item Set Comprehensive Assessment Measure quality outcome measure was gathered before and after the instrument was implemented. The project intervention did not result in a statistically significant improvement in total CF scores, according to the results of paired t-tests of pre- and post-surveys. This was most likely due to COVID-19's demands on the participants. This study emphasizes the necessity for a solid foundation for implementing inclusive resilience measures.*

**Keywords:** *compassion fatigue, burnout, COVID-19, self-care*

## Introduction

As the severe acute respiratory illness coronavirus 2, COVID-19 pandemic continues to affect the United States (US), clinicians and organizations have seen increased acuity, a lack of PPE, and increased turnover, with little attention and assistance (Los Angeles Times, 2020). Caring for patients with severe illnesses may put caregivers' mental health at jeopardy, leading to burnout, compassion fatigue (CF), and attrition (Wells-English et al., 2019). According to Kamal et al. (2016), doctors have a burnout rate of 62 percent, with nurses having even higher rates (66 percent). Most importantly, when physicians' degrees of compassion fatigue and psychological discomfort increased, so did patient safety (Dyrbye, et al., 2017). To avoid these negative consequences, exercising self-awareness, self-evaluation, and self-care is essential (Goldberg, 2020).

The project's goal was to use a self-care tool to decrease CF self-reported by physicians and improve quality performance HIS ratings during a 10-week period during the COVID-19 pandemic. Nursing staff may be able to utilise the findings of this study to get more engaged in their own self-care by forming committees to offer direct support, mentorship, and chances to avoid CF. Nursing and healthcare leaders can use the findings of this project as the foundation for future studies and models that look at the link between CF and patient outcomes in order to develop new macro and micro strategies to improve employee wellness and initiatives during the COVID-19 pandemic and beyond.

What we do as individuals or groups to guarantee and maintain our health is referred to as self-care (World Health Organization, 2020). At the site organisation, there are no established standards of practise or resilience techniques for clinical personnel who offer direct treatment. While employees are aware that bereavement services and an Employee Assistance Program (EAP) are available, there are no indications, information, or training regarding self-assessment, whether to use them, or how to maintain anonymity if they are used. When COVID-19 started to have an effect on the site organisation in March 2020, there was an increase in online learning courses on the virus, PPE requirements, and how to support families with stress and self-care; however, there was no education or guidance about self-care for employees.

By raising general knowledge of self-care, resilience, and CF among direct care clinicians throughout the site organisation, the initiative altered existing practise. The organisation was able to evaluate the prevalence of CF among clinical personnel thanks to the assessment of CF, the adoption of a validated self-care tool, and the connection with quality indicators. This information was used to create practical and successful resilience measures for employee onboarding, retention, emergency preparedness, and continuing professional development, as well as serve as a model for other companies to follow.

## Theoretical background

An electronic literature search was performed using the University Library and database resources. Compassion fatigue, burnout, nurse turnover, COVID-19, burnout, and quality delivery of care were all searched using conventional search techniques and keywords in ProQuest, CINAHL, and PubMed Central. The Centers for Disease Control, and the Research Gate database were used to conduct further searches. The papers had to be published within the past five years, and they had to come from academic journals, peer-reviewed journals, or government websites and databases.

There were 47 papers identified in total, with 21 being selected for evaluation. The literature from various nursing practise areas was included in the search results, which were not restricted to or palliative care nursing. Other health-related professions, such as doctors, social workers, and other health-related fields, were also permitted. The 21 papers selected for evaluation were chosen for their methodology, emphasis on burnout and resilience, and clinical relevance in the context.

### **Compassion Fatigue**

In the papers examined, compassion fatigue is characterised in a variety of methods and symptoms; nevertheless, they consistently define CF as an experience by a healthcare professional who cares for people who are experiencing severe and serious effects as a result of job pressures (The Mayo Clinic, 2018). General negativity, a lack of sympathy, decreased productivity, boredom complaints, and greater usage of sick days are all symptoms of CF (Adimando, 2018). Compassion fatigue, according to Cocker & Joss (2016), may lead to a lack of compassion, cynicism, severe colleague stress, boredom, and reduced productivity among nurses.

There aren't as many articles on CF for and palliative care doctors as there are for acute care. The absence of study is important since the job of caring for patients at the end of life may put palliative care professionals' mental health at danger (Cedar and Walker, 2020). COVID-19 has increased this risk because of the increased number of unexpected deaths, the increased use of pull-on beds, the increased safety precautions for nurses and clinical staff, and the ethical demand for family and patient rights at the end of life as a result of the virus's rapid transmission (Pattison, 2020). Compassion fatigue, burnout, and increased turnover rates are the results of these variables (Wells-English, et al., 2019), which are mainly "derived from emotional weariness..." when examined. p.2) (Kamal et al., 2016). Nurses are especially susceptible to CF because, as advocates, they work with patients and families at the most personal and crucial times of their lives, coping with mortality, sorrow, and loss (Flynn and Gullatte, 2017). Participants in a Chinese study on COVID-19 and its effect on clinical care delivery indicated that frontline healthcare professionals suffered psychological load during and after caring for COVID-19 patients, and that the risk of CF is increased as a result of this increased stress (Lai, et. al., 2020). This is also true for doctors; although they were not originally designated as frontline, they soon had to adjust when COVID-19 patients started to choose after they had exhausted all other treatment choices and were declared terminal.

### **Quality and Safety**

All of the studies examined found a link between compassion fatigue, burnout, and poor quality or unsafe care delivery. Suboptimal processes, workload weariness, loss of autonomy, and a work–life balance, according to the research, combine to cause clinician and staff burnout. Cross (2019) points out that compassion fatigue is found in a variety of nursing practise settings, and that recognising symptoms is critical for decreasing compassion fatigue and enhancing patient care. Compassion fatigue is a chronic condition that manifests itself in five distinct domains: emotional and psychological, intellectual and professional, physical, social, and spiritual (Cross, 2019). Empathy imbalance, an emotional and psychological trait, refers to therapists who are either too empathic or underly empathic (Cross, 2019).

While previous research has shown a link between clinician-patient communication and patient satisfaction, few of them have focused on the individual physician (Chang, et al., 2019). Burnout, on the other hand, was shown to be substantially related with patients' perceptions of clinician-patient communication by Chang et al. (2019). This is in line with the Institute of Medicine's (IOM) landmark study Crossing the Quality Chasm, which said that greater patient-centeredness and communication will result in better healthcare (IOM, 2001). The Composite Process Measure – Item Set (HIS) Comprehensive Assessment Measure is a comprehensive approach to evaluate whether basic delivery of care was given (Centers for Medicare & Medicaid Services (CMS), 2020). Patient centeredness is a fundamental value of care. If this score is equal to or greater than the average, one may expect good patient satisfaction and results since the typical patient's specified requirements were fulfilled (Heath, 2017). As a result, the research supports the notion that the connection between high-quality patient outcomes (quality measures) and physician self-care is a key predictor of overall healthcare delivery. Compassion fatigue, mental health problems, and low employee engagement may result if optimal practises for self-care and resilience are not provided (Well-English et al., 2019). As a result, higher wait times, medication mistakes, poor communication, and eventually worse quality ratings may occur (Wells-English et al., 2019).

### **Financial Implications**

In the literature, the exact economic consequences of burnout and CF have not been fully established. As a result, there isn't a comprehensive assessment of the benefit of resolving this problem. The financial consequences of healthcare organisations and

systems, on the other hand, are often described as substantial, linked to turnover, and having a major effect on the evaluation of all articles. According to a 2018 research by the National Taskforce for Humanity in Healthcare (HTHH), physician burnout costs \$17 billion and nursing burnout costs \$14 billion yearly in hospital systems alone. This emphasises the severe consequences and link between ill health, CF, turnover, lost productivity, and healthcare expenditures.

Han, et al. (2019) discovered that firms that modestly engage in reduction and well-being initiatives at the policy and programme level may reap significant economic benefits. Other publications' results about the recent rise of people dying outside of hospitals in the United States support this. According to the CDC (2017), the total mortality rate in hospitals has decreased by 8%. Teno, et al. (2018) concurred, adding that this may be attributed to increasing availability, accessibility, and acceptability of home and settings. This implies that, in comparison to burnout and CF, there will be a greater need to attract and retain nurses and other direct care clinical personnel as this trend continues. This acceptance has become reality in the COVID-19 pandemic, as home health care organisations have experienced double-digit increases in admissions since the epidemic started (The Associated Press, 2021).

Nurses are dealing with increasingly traumatic death and dying for patients in their care as the trend toward palliative home care and care continues (Cedar and Walker, 2020). As a result, organisations that do not provide the necessary support and self-care strategies will, at the very least, jeopardise employee well-being, reduce the delivery of high-quality patient care, and potentially face higher turnover rates (Rodger and Atwal, 2018), resulting in high financial costs.

### **Healthy Work Environments**

In order to provide high-quality treatment, several studies suggested self-care methods for doctors to minimise compassion fatigue, burnout, and turnover. Cedar and Walker (2020) and The Joint Commission (2019), among the articles reviewed, focused on traditional organizational-based education strategies to promote healthy work environments and identified nurse burnout as a risk to patient safety, and outlined specific self-care strategies and techniques for individual professionals to incorporate, such as rest and relaxation, getting exercise, and so on. Self-care implementation helps physicians (and others) to avoid a buildup of negative or toxic elements of employment, according to the research. Self-care, as previously said, is defined as what we do individually or as a group to guarantee and maintain our health (WHO, 2020).

The sixth article of the American Nurses Association's (ANA) Code of Ethics for Nurses says that nurses have the same obligations to themselves as they have to others, including fighting for their own health (ANA, 2015). According to some sources, enhancing clinical work conditions lowers compassion fatigue and the likelihood of turnover, while also increasing patient satisfaction with their treatment (Nolte, et. al, 2017). The authors of NTHH (2018), on the other hand, disputed this conventional perspective, advocating for a new model that focuses more on system-level change implementation. This consensus study report suggests establishing an organisational executive leadership role "responsible for improving and sustaining well-being throughout the organisation" (NASEM, 2019, p. 9) and forming shared governance teams, which include staff from all levels and departments and provide oversight and recommendations for programmes as well as support improvement processes and initiatives.

The literature review included research from the past five years that focused on the risk, symptoms, and impact of CF on healthcare professionals and organisations. The connection between CF and poor quality care delivery was discovered, as was the fact that inefficient processes, task exhaustion, loss of autonomy, and other imbalances, such as those seen during the COVID-19 epidemic, may exacerbate CF. Self-care and resilience techniques may help to minimise these impacts and change healthcare organisations and systems, empowering practitioners and fostering a well-being culture.

### **Results**

The goal of the research was to create a self-care toolbox that physicians could use to reduce overall CF scores by 25% using the EE, DP, and PA domains of the MBI:HSS (MP) survey and improve patient outcomes by 20% using the complete HIS score. The total moderate to high CF score before adoption was 48 percent, while the HIS score was 73.8 percent. The overall medium to high CF score did not reduce after adoption, increasing from 48 percent to 50 percent, and the HIS score did not improve, decreasing from 73.8 percent to 65 percent. There were 36 people who responded to the demographic survey, with 49 percent of them being nurses (RN/LPN), 19 percent being nursing aides (CNA), 18 percent being social workers, 7% being chaplains, 2% being doctors, and 5% being advanced practise nurses or physician assistants.

Female responders made up 86 percent of the total, with 78 percent saying they provided direct patient care for COVID-19 patients and 65 percent saying they worked full time. The majority (56 percent) identified as White/ Caucasian, with others identifying as Black/ African American (30 percent), Hispanic/ Latino (9 percent), and Asian/ Pacific Islander (5%). The majority of respondents (66 percent) said they were married or in a domestic relationship, and 44 percent said they were Christians.

Data analysis utilising dependent paired t-tests for both the before and post-surveys revealed that participants across all domains and clinical disciplines had a moderate to high degree of CF. The pre- and post-survey difference in CF was not statistically significant

(EE  $p= 1.00$ ; DP  $p= 0.753$ ; PA  $p= 0.250,=0.05$ ) across the three domains examined (EE, DP, and PA). That is, there was no statistically significant improvement in total CF scores as a result of the project intervention. The use of any particular self-care toolkit, such as the Self-Care ToolKit™, to decrease CF has little research; nevertheless, the literature strongly supports the use of self-care to reduce CF. Cross, 2019; Adimando, 2018; Cocker, F. & Joss, 2016; Adimando, 2018)

The bulk of post-survey responders (n=26) were nurses (58%) followed by social workers (19%), chaplains (12%), doctors (4%), and advanced practise nurses or physician assistants (8%). The post-survey was unfortunately not completed by any of the CNAs. According to the results of the post-implementation survey, 88 percent of respondents utilised The Self Care ToolKit™. The "Reading definitions of burnout/ compassion fatigue/ self-care" section of the toolkit was the most popular (85 percent), followed by "Learning about Coping with Stress" (69 percent) and "Doing the Self-Awareness Exercise" (62 percent) (Table 1). The reason given by those who did not utilise the toolkit (15%) was a lack of time or being too busy.

**Table 1**

Utilization of The Self-Care ToolKit™

What parts of the Self-Care ToolKit™ did you use?

Answer Choices	Responses
Reading definitions of burnout/ compassion fatigue/ self-care	84.62% 22
Learning about Coping with Stress	69.23% 18
Doing the Self-Awareness Exercise	61.54% 16
Performing one or more of the Arousal Reduction Exercises	38.46% 10
Reading the Eight Dimensions of Well-Being Model	46.15% 12
Performing Healthy Coping Strategies	38.46% 10
Using the Self-Assessment Tool	50.00% 13
Setting Goals	34.62% 9
Other (please specify)	0.00% 0
Answered	26
Skipped	0

According to the raw data from the post-survey, 50% of respondents had a very high or moderately high Emotional Exhaustion (EE) score, and 7% had a moderate Depersonalization (DP) score, suggesting a greater degree of CF/burnout following the intervention. In the Personal Achievement (PA) category, 7% of respondents had poor ratings, indicating a high or moderate level of CF/burnout. This DNP candidate rescored the pre-intervention CF data using just those participants who also completed the post-survey (n=26) due to the sample sizes being varied and correct analysis of all data sets.

The comparisons for each domain (EE, DP, PA) for both the pre- and post-implementation surveys are shown in Table 2. Using SPSS, paired sample t-tests were used to analyse the data. It was discovered that doctors' ratings did not alter significantly after utilising The Self-Care ToolKit™ compared to before using the instrument.

**Table 2**

Comparison of Each CF Domain Paired Samples Test

	Paired Differences					Significance	
	M	SD	SEM	95% CI		t	df (2-tailed)
				Lower	Upper		
EE MeanPre EE Mean Post	.000001	1.93639	.37976	-.78212	.78212	.000	251.000
DP MeanPre DP Mean Post	-.08461	1.3555	.2658	-.6321	.4629	-.318	25.753
PA MeanPre PA Mean Post	.35381	1.5316	.3004	-.2648	.9725	1.178	25.250

Further data analysis revealed that the only way to increase CF scores was to compare raw mean scores at the individual level. Sixty-two percent of those surveyed said they had improved in at least one CF area (Table 3). According to the MBI:HSS scoring criteria, a negative mean change in both the EE and DP domains indicates a reduction in CF. A decrease in CF may be viewed as a positive mean change in the PA domain.

**Table 3**

*Individual Pre and Post CF Scores (by domain)*

Clinical Discipline	EE Mean Change	DP Mean Change	PA Mean Change
(RN/LPN)	-0.6	+0.4	+1.4
(RN/LPN)	+0.2	0.0	+0.9
(RN/LPN)	+0.6	0.0	-0.6
(RN/LPN)	+1.2	+0.6	-1.7
(RN/LPN)	+0.2	-0.4	-2.0
(RN/LPN)	+0.6	+0.6	+1.4
(RN/LPN)	-3.8	-0.8	+0.5
(RN/LPN)	+2.9	+1.6	-2.0
(RN/LPN)	-1.7	-1.0	+1.5

(RN/LPN)	+1.3	-1.0	+0.1
(RN/LPN)	+3.5	+3.6	-0.4
(RN/LPN)	+0.6	-0.4	-1.9
(RN/LPN)	+1.0	+0.2	-2.8
(RN/LPN)	-4.4	-0.6	-3.3
(RN/LPN)	-0.6	+0.2	-0.7
(Chaplain)	-0.8	-0.4	-0.4
(Chaplain)	-0.3	-0.4	+1.6
(Chaplain)	-1.4	+1.2	-0.2
(SW)	-0.6	-0.6	-0.8
(SW)	+1.5	+0.6	-0.9
(SW)	-1.7	-1.0	-0.6
(SW)	+1.6	+0.6	-0.2
(SW)	-0.7	-0.8	+2.5
(NP/PA)	+1.3	+0.8	-1.5
(NP/PA)	2.1	0.0	4.6

### Patient Outcomes

The site organization's quality department provided quality data from the Comprehensive HIS scores (Centers for Healthcare Services, 2020), which reflected post and post-implementation/post-survey quality scores (Table 4). The Arlington, VA service area's pre-survey/pre-implementation HIS score of 73.8 percent is far below the national standard and target of 94.3 percent. The post-survey/post-implementation results revealed that the Arlington, VA service area fell even farther below the national standard and target of 93.7 percent, with a score of 65 percent.

**Table 4**

#### Comprehensive HIS scores

##### Retrospective Data

##### Pre-Intervention

Sample Team HIS - 73.8%

National Benchmark - 94.3%

##### Prospective Data

##### Post Intervention

Sample Team HIS - 65%

National Benchmark - 93.7%

### Recommendations

During the project's timeframe, the use of The Self-Care Toolkit TM (Goldberg, 2020) as a self-care technique was not shown to be helpful in decreasing overall CF or improving quality patient outcomes. Participants utilised parts of the tool kit at the individual



level, and certain domains of CF scores were decreased post-intervention; thus, suggestions may include the use of a self-care tool as a resilience strategy and as a method to reduce CF to improve patient outcomes.

The project's findings point to the need for more information and amplification of wellness policies at the system/organizational level in order to enhance CF and maintain or improve patient outcomes. Individuals must be given the chance to be self-reliant for their own treatment, according to Orem (2001); therefore, adapting culture to decrease CF and improve clinician wellbeing would be a component of an organisational strategy.

As a result, this DNP candidate suggests that organisations consider forming staff-level shared governance wellness teams, which would include a diverse range of employees from all levels and departments and would provide recommendations for resiliency programmes as well as assist with improvement processes and initiatives. Second, and probably more importantly, organisations must adopt inclusive leadership methods, including the inclusion of an executive member exclusively responsible for the well-being of clinical personnel. This role would assist organisations in abandoning previous assumptions that self-care was solely the responsibility of healthcare workers and replacing them with the idea that, particularly in high-stress environments, employees require a structure of support in dealing with grief, ethical issues, and CF (NASEM, 2020). This inclusion will almost certainly need a system or organisational culture change, since it requires them to be fully engaged in the well-being plan. Leadership must also be willing to embrace a patient- and human-centered culture, offering inclusive leadership to everyone, and promoting health regardless of position inside or outside the company.

### **Sustainability**

All quality improvement programmes and efforts are aimed at finding solutions to problems in order to enhance performance or safety. This is accomplished by adopting and effectively executing a new method, technique, or procedure as shown by result data (Agency for Healthcare Research and Quality, 2021). It is critical to maintain and evaluate methods to guarantee sustainability after they have been adopted. This DNP candidate used a variety of methods to convey sustainability to the nursing leadership, the site organisation, and the community. The project findings were first reported and informed to the site organization's main stakeholders (staff participants, managers, and leadership). Due to COVID-19 limitations, this presentation took place through virtual meeting software and was recorded for future viewing. We utilised visual aids, handouts, and open conversation.

### **Future Practice**

As previously mentioned, altering the mindset that CF, self-care, and resilience are entirely the responsibility of the individual clinician is necessary. At the micro-system level, staff and direct care managers should establish frequent unit-based support meetings or committees, as well as customised programmes, to foster and maintain inclusiveness and general support. To achieve lasting change at the macro-system level, decision-makers such as directors, executives, educators, and safety and quality experts must be involved. Internal compassion fatigue, burnout, and the clinical workforce's general well-being should be tracked and reported on using quality metrics. Future emergency management practises should involve full support and inclusion of providers, since they, like their acute care colleagues, serve the community.

### **Limitations**

A limited sample size, inadequate use of the self-care tool, and low response rates were among the project's drawbacks. COVID-19 interruptions, such as staff turnover, low staffing levels, increasing patient acuity level and volume, particularly in the acute care unit, are thought to be the reason for the lower than anticipated n=120. Another potential stumbling block was the toolbox itself, which has yet to be thoroughly tested. Furthermore, the limited time allotted to participants to learn how to utilise the toolkit, which has been extended for the last five weeks, may be helpful. During the pandemic and during the project's timeline, the site organisation also introduced a new electronic medical record system, a new pharmaceutical supplier, and sent out a staff satisfaction survey, all of which were unexpected. General human variables and the absence of a control group were other issues to consider or risks to internal validity.

Finally, owing to the survey style technique and questions on sentiments on the MBI:HSS, unintended bias may have occurred (MP). While the MBI:HSS (MP) has been shown to be valid and trustworthy, it is possible that asking participants to remember information from the recent past in a high-stress setting influenced the findings (Boston University, 2019). Despite these flaws, the initiative offers a valuable picture of what organisations and doctors went through throughout the COVID-19 epidemic.

### **Conclusion**

While the emphasis of this research was on the experiences of clinicians, it may be extended to any direct care practise environment where healthcare professionals are employed. The COVID-19 epidemic has put a significant strain on the workforce. The goal of this study was to connect self-care to a decrease in compassion fatigue and an improvement in high-quality patient outcomes. Although the project's overall objectives were not fulfilled, it did provide additional valuable knowledge at the individual and organisational levels that may be applied to other situations.

Organizations should adapt their rules and culture to reflect that CF, health, and self-care are systemic issues, not just personal issues. Because the person may not have the ability to do so on their own due to stress, reimagining a culture of inclusiveness to guarantee staff health is cared for and valued is essential to consider. Building workforce resilience techniques as part of a human-centered care culture and purpose will eventually assist in high-stress circumstances and settings like the COVID-19 epidemic.

Finally, there is a paucity of data on the impact of the COVID-19 pandemic on nurses caring for patients dying from COVID-19 complications; therefore, further research and practise improvement in this area is critical. The project's results on the effect of the COVID-19 pandemic on clinicians have important implications for developing creative and evidence-based disaster management strategies to create and maintain a robust healthcare workforce. This will require creative leadership that is prepared to cope with possible compassion fatigue as a result of delivering treatment during a pandemic and beyond, and it may drastically alter how companies manage clinical workforce resilience and wellbeing.

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