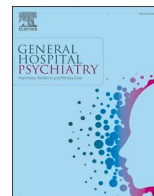




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The CopeNYP program: A model for brief treatment of psychological distress among healthcare workers and hospital staff

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ABSTRACT

In the midst of the Spring 2020 initial surge of the COVID-19 pandemic in New York, members of the Psychiatry Department of Weill Cornell Medicine/NewYork-Presbyterian Hospital rapidly created and implemented a brief, behavioral skills-based intervention program, “CopeNYP”, to address the immediate mental health needs of the employees of the hospital and medical school. We describe the development, implementation and evolution of this telehealth-delivered program staffed primarily by in-house clinical psychologists, postdoctoral fellows, pre-doctoral interns and counselors who were redeployed or volunteered their time to provide urgent support for employees. We discuss the challenges and lessons learned in providing brief, skills-based psychological interventions for employees subjected to chronic stress. As the impact of the pandemic became prolonged, employees faced compounding stressors including social isolation, fear of infection, grief and loss, and sequelae of COVID-19-related illness combined with work-related demands. Our goal is to present our program design, implementation, and utilization as a blueprint for other institutions that would like to develop an evidence-based clinician-staffed psychological intervention program to support ongoing employee mental health needs.

1. Introduction

In February of 2020, “Patient Zero” was hospitalized and treated at New York Presbyterian Hospital (NYPH), one of the largest hospital systems at the epicenter of the first surge of the COVID-19 pandemic in the United States. Employees across all levels of NYPH were faced with sudden multifaceted stressors including the uncertainty of a new virus, rapidly shifting job responsibilities, COVID-19 illness in themselves and/or their family members, death of family, loved ones and colleagues, disruption in availability of childcare, school systems, and other family caregiver services, and innumerable combinations of the above.

As COVID-19 cases began to rise in New York, data emerging from China warned of the severe mental health toll of the pandemic on healthcare workers [1,2]. To prepare for the impending tsunami of mental health needs, NYPH in collaboration with Weill Cornell Medicine (WCM), rapidly developed and deployed a virtual psychological support service named “CopeNYP.” As part of a larger effort to support employees, CopeNYP aimed to deliver evidence-based psychological interventions to mitigate pandemic-related emotional distress among healthcare workers (HCWs) including hospital and medical school employees.

We describe the evolution of CopeNYP from an in-house pandemic-driven acute crisis support program, to a brief psychological intervention for ameliorating distress and preventing mood symptom exacerbation among HCWs. We aim to present the CopeNYP program as blueprint for an in-house mental health service for hospital employees of all levels. To this end, we describe our program rationale and structure, mental health delivery triage algorithms, skills-based interventions, assessments, staff and clinician perspectives, challenges, and lessons learned.

2. A model for healthcare employee psychological support and triage: CopeNYP

The CopeNYP program was developed by clinical psychologists and administrative leaders of WCM Psychiatry in March 2020 in anticipation of a significant pandemic-driven elevation in mental health needs among healthcare workers [1,3]. Emerging evidence from the initial pandemic response in China suggested that compared to employees in other fields, HCWs endorsed greater psychological distress [3–5] including depression (50.4%), anxiety (44.6%), and insomnia (34.0%) [1]. Pooled estimates from studies of HCWs involved in prior pandemic

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responses reported symptoms of acute stress disorder (40%), anxiety (30%), “burnout” (28%), depression (24%) and Post Traumatic Stress Disorder (PTSD;13%) [6]. To mitigate immediate and long-term adverse psychological outcomes among HCWs, WCM Psychiatry clinicians rapidly mobilized to develop an accessible intervention for all NYPH system employees.

Based on published data of responses to other healthcare crises, we focused on interventions targeting anxiety and depression, while recognizing that a subset of employees would need specialized care for PTSD, grief, or family mental health concerns. We initially developed CopeNYP as a psychological first aid (PFA) intervention, adapted to address the unique needs of HCWs, including ongoing job-related stress. PFA is intended to provide acute support during times of heightened distress by eliciting existing coping skills and providing concrete aid such as connection to longer term care or acute problem solving [7]. Whereas PFAs typically engage peer-support [e.g., RISE program; 8] or community-support [e.g., 9–11], our program leveraged doctoral-level psychologists and advanced psychology trainees within our institution to deliver crisis care. While our initial interventions were PFA-focused, we shifted to broader skills-based strategies as the pandemic persisted, to address chronic distress and support healthy coping [12]. Over time, CopeNYP evolved into a cohesive, institutionally supported intervention incorporating evidence-based skills to target symptoms of anxiety,

Table 1
Summary of interventions used in the CopeNYP program.

Session	Assessment	Interventions
1	PHQ-9 and GAD-7; If suicidality present, C-SSRS	<ul style="list-style-type: none"> • Psychoeducation regarding the effects of chronic stress; post-traumatic stress reactions • Goal setting: discussing realistic short-term goals for brief treatment and expectations for improvement • Normalization of emotional responses: validating emotional distress and destigmatizing symptoms of anxiety and depression • Evaluation of support system and resources • Brief Behavioral Activation Techniques: facilitate engagement in pleasurable and rewarding activities
Sessions 2–3	PHQ-4; If suicidality present, C-SSRS	<ul style="list-style-type: none"> • Continued normalizing and psychoeducation • Mindfulness and Relaxation techniques: deep breathing, meditation, progressive muscle relaxation • Coping strategies: coping with experiences of loss, grief, and sadness, loneliness and social isolation • Problem Solving Techniques: resolving conflicts with colleagues and family members, navigating varying life demands and stressors • Continued Behavioral Activation: increase engagement in pleasurable and rewarding activities
Session 4	PHQ-9 and GAD-7; If suicidality present, C-SSRS	<ul style="list-style-type: none"> • Reviewing therapeutic gains and changes in symptoms • Continued application of interventions used in previous sessions • Relapse prevention and plans to maintain gains and reduce stress following termination • Discussing follow-up plans for long-term therapy as needed
Additional sessions	PHQ-4; If suicidality present, C-SSRS	<ul style="list-style-type: none"> • Consolidation of gains • Continued application of interventions used in previous sessions • Additional skills training or review as needed

depression, and acute distress (Table 1).

3. Clinician training and supervision

Clinicians attended a two-hour orientation which included training on PFA, brief skills-based interventions, assessment tools, triage procedures, and documentation. Lead clinicians developed a treatment manual for the program (Supplementary Material) for consistency of clinical implementation. The manual included summary checklists of risk factors for worsening psychopathology and common CopeNYP interventions.

To respond to stressors and alleviate therapist fatigue, we established a structured internal support system, including weekly peer group supervision, comprised of clinicians of all levels of experience. Supervision teams consisted of three to five clinician members, who met weekly and provided support and case consultation. We also implemented on-call access to a clinical supervisor for immediate consultation during all scheduled employee sessions. Additionally, supervisors provided as-needed follow-up intervention training.

4. Assessment of symptoms & outcome measures

Structured symptom assessment was an inherent facet of our protocol and informed triage and treatment decisions (Table 1). We relied on validated questionnaires to evaluate symptoms of anxiety and depression, including the Generalized Anxiety Disorder –7 item scale [GAD-7; 13] the Patient Health Questionnaire-9 [PHQ-9; 14] and the Patient Health Questionnaire-4 [PHQ-4; 15], using standard anchors to determine symptom severity. The PHQ-9 and GAD-7 were administered during the first and final sessions, while the PHQ-4 was used to monitor symptom severity over the course of intermediate sessions and for any additional sessions. If employees endorsed suicidal ideation, CopeNYP clinicians systematically assessed level of suicidality using the Columbia-Suicide Severity Rating Scale [C-SSRS; 16]. Program utilization measures included tracking the number of employees using CopeNYP according to profession. We report the number of sessions utilized by employees over time, as well as the results of a linear mixed effects regression (to account for correlations within-subjects) of calculated PHQ-4 scores over the course of the intervention, elsewhere [17].

5. Triage of callers

CopeNYP callers were triaged based on severity of symptoms at the initial session guided by a pre-determined algorithm combined with clinical judgement of severity (Fig. 1). Clinicians initially gathered information from employees using a combination of clinical interview techniques (active listening, validation) and standardized measures. Employees presenting with acute safety concerns (e.g., active suicidal ideation, non-suicidal self-injurious behaviors) were referred to their local emergency room or urgent care center. If symptom severity or presentation dictated clinical care or support exceeding the scope of CopeNYP (e.g., substance use, eating disorders), clinicians collaborated with administrative staff to connect employees with licensed professionals and where needed to bridge employees to further psychotherapy or pharmacotherapy assessment/management.

6. Session structure

CopeNYP consisted of a four-session model of brief interventions delivered via telehealth (Table 1; Fig. 1). As noted above, the first session primarily focused on information gathering, but also included psychoeducation, validating and normalizing reactions to stress and destigmatization of mental health needs and services. Employees deemed clinically appropriate for CopeNYP had the option of scheduling up to a maximum of three subsequent follow-up sessions. The second and third sessions included continued psychoeducation, behavioral activation (i.

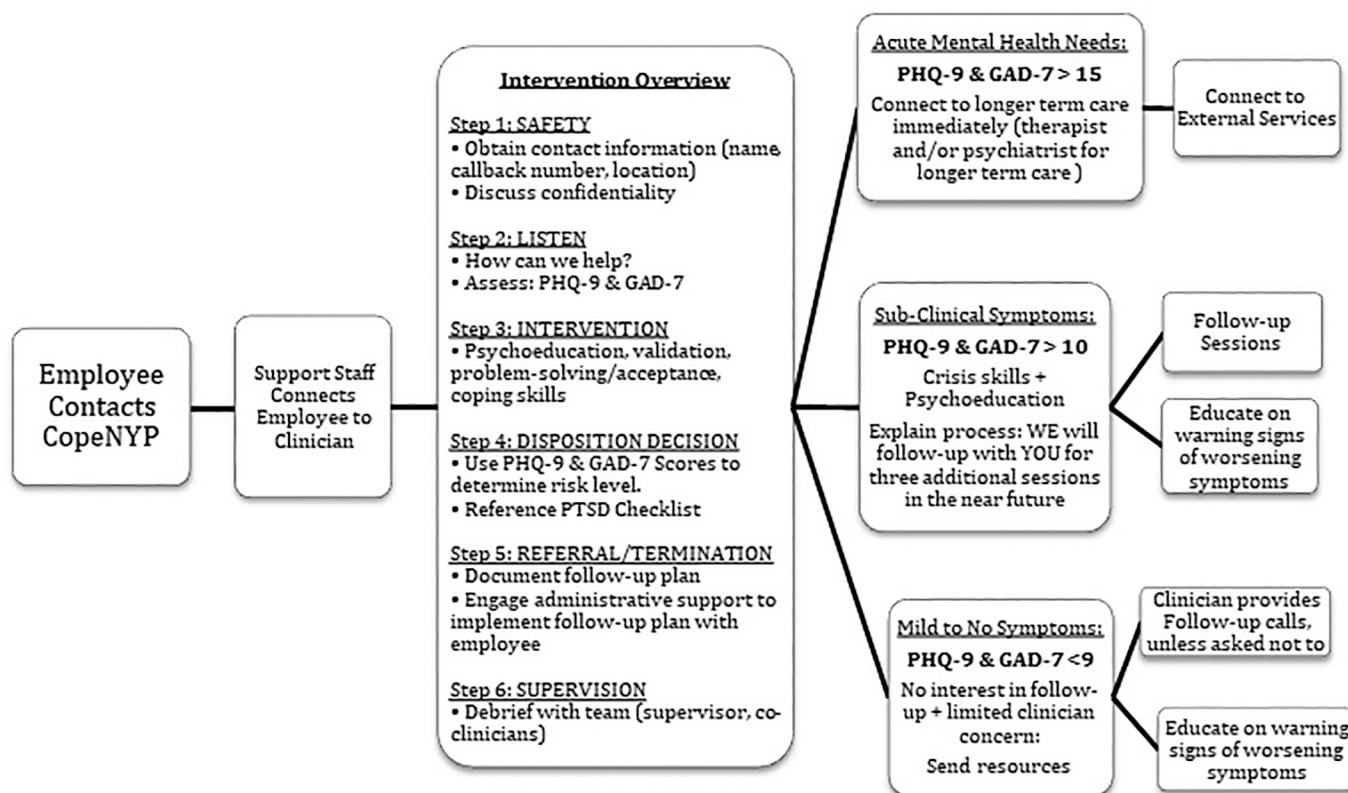


Fig. 1. CopeNYP program flow.

e., increasing engagement in pleasurable and rewarding activities), emotion regulation skills, mindfulness, and relaxation exercises for reduction of physiological arousal and anxiety, as well as problem solving and acceptance-based interventions (Table 1). The final session provided employees the opportunity to reflect on strategies and techniques they found to be most helpful to them. Warning signs of worsening symptoms and risk factors (e.g., lack of sleep, poor diet, substance use) were reviewed, and resources for accessing care in the future were provided, if needed. In many cases, clinicians assisted employees in navigating crises related to loss of housing, child-care solutions, case management referrals, and access to external resources.

CopeNYP was developed as a modular and flexible intervention, tailored to meet the specific needs and circumstances of employees. While employees were offered up to four sessions, they could end their participation at any point if they felt better and no longer required support. Conversely, those employees experiencing severe psychological distress were offered immediate referrals to longer-term clinical treatment prior to the completion of all four sessions. Notably, due to the sudden overwhelming demand on psychological services during the pandemic, connecting employees with outpatient referrals was challenging. Therefore, in a small number of cases ($N < 20$), employees continued to be seen by a CopeNYP therapist past the four-session program plan until a referral to longer term treatment was completed.

7. Program utilization

CopeNYP was available to all hospital staff, including frontline workers, general hospital and support staff. To promote the availability of CopeNYP, hospital leadership periodically announced the program during COVID-19 webinar and email updates. To increase employee awareness of symptoms of psychological distress, the WCM Psychiatry Department created an optional personalized online symptom tracker survey called START- Symptom Tracker And Resources for Treatment [18,19]. Although evidence exists that tracking of emotional symptoms

in itself can ameliorate experienced distress [20], the broader function of START within our program was to establish a way to alert some employees to concerning levels of psychological distress and direct them to CopeNYP resources [21]. Over time, word-of-mouth referrals grew as employees with positive experiences began to recommend the service to their co-workers.

Employees accessed CopeNYP through multiple channels including a CopeNYP-designated email address, telephone number, and a direct access software application that could be downloaded on phones and tablets. During the Spring 2020 surge, these channels were staffed seven days per week by redeployed administrative support staff who facilitated appointments with CopeNYP clinicians (Fig. 1). Very quickly, CopeNYP experienced a surge in callers; employees were offered to be seen at any time that was convenient for them during all hours of the day on weekdays and weekends. This flexibility was essential to the success of the program as many employees worked different shifts and therefore needed to access CopeNYP at off hours/days (Fig. 2).

Since the launch of CopeNYP, the volume of employees seeking services fluctuated in line with COVID-19 hospitalization trends in New York State, suggesting that callers may have utilized the program in response to increasing stressors (Fig. 3).

From March 2020 to April 2021, CopeNYP clinicians delivered a total of 1423 sessions. Frequency of session use by timepoint is reported elsewhere [17]. Initially, 47 volunteer clinicians staffed the program. Doctoral-level psychology trainees including postdoctoral fellows and interns were integral to the ongoing nature of the program, and CopeNYP was incorporated into their training plans. Over time, and with clinician redeployments ending, more volunteers were recruited into the program, including clinical social workers and pastoral care counselors, culminating in a total of 67 clinicians at the height of the program. Some clinicians volunteered for brief periods of time while others provided support consistently. Most clinicians were clinical psychologists ($N = 41$) or clinical psychology doctoral or postdoctoral trainees ($N = 19$); the remaining volunteers included psychiatrists ($N = 4$) and clinical social

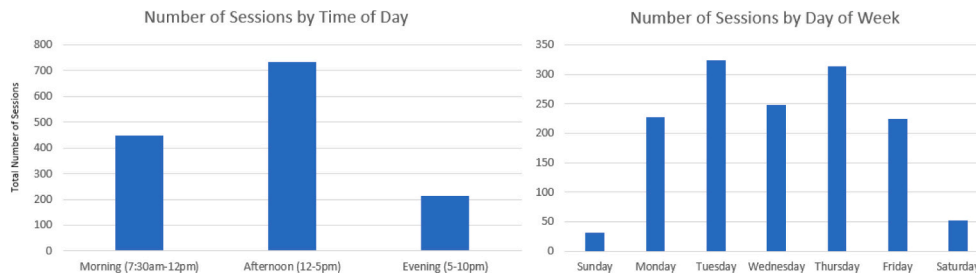


Fig. 2. Utilization of CopeNYP by time of day and day of week.

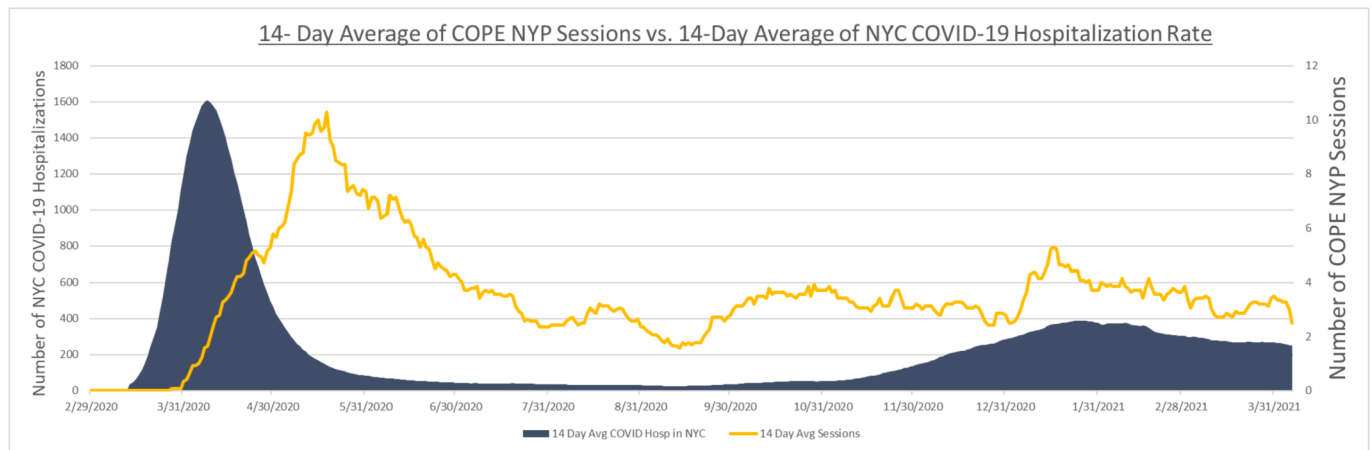


Fig. 3. Utilization of CopeNYP relative to local COVID-19 hospitalizations.

workers ($N = 3$). The program was utilized by employees across all professions and specialties, with nurses utilizing it the most, followed by patient support and administrative staff (Table 2).

8. Lessons learned

8.1. Common stressors reported by healthcare employees during a pandemic

During the Spring of 2020, employees most often contacted CopeNYP to address acute work-related stress. Commonly reported themes included feeling psychologically unequipped to witness sudden, severe illness and multiple patient deaths, and feeling helpless and responsible for their inability to save more patients. This was an especially poignant concern for employees who had been redeployed to newly created Intensive Care Units (ICUs) due to the rapid inflow of patients. In tandem, employees endorsed distress due to illness, hospitalization and/or death of colleagues and loved ones, and fear of contracting COVID-19 and of infecting their patients and/or significant others. Many reported concurrent stressors including childcare responsibilities and

Table 2
Use of CopeNYP support services by profession for 534 Health Care Employees March 2020–April 2021.

Profession	N (%)
Nursing (RNs, NPs)	188 (35)
Patient Support Staff (Mental Health Workers, Unit clerks, Technicians, Medical Assistants, Speech & Occupational therapists)	130 (24)
Administrative Support Staff (Administrators, finance, research support, development, information technology, Human Resources)	122 (23)
Physicians/Doctoral Level Faculty & Trainees	74 (12)
Maintenance and Utility	13 (2.4)
Family Members/Other	7 (1.3)

worries that they would be unable to function due to their level of distress.

In May 2020, following the death of Mr. George Floyd and the resurgence of the Black Lives Matter (BLM) movement, employees sought support for distress related to issues of racism, discrimination, and social injustice. Over the summer of 2020 and leading up to the 2020 U.S. presidential election that November, many callers reported increased stress due to social instability and the polarized political climate. These reports are in line with previous work demonstrating an increase in psychological needs and rates of intakes in mental health programs during the 2016 election period [22] and clients’ need to discuss politics in session [23]. Employees reported political conflicts with family members and colleagues, many of whom denied the reality of the COVID-19 pandemic, and experienced stress related to the infiltration of conflictual political viewpoints into an already stressful and taxing work environment.

8.2. Clinician experiences

Clinicians faced several challenges over the course of the program. New York was the epicenter of the first surge of the COVID-19 pandemic in the U.S. and experienced high rates of COVID-19 cases, hospitalizations, and deaths during a time of great uncertainty. As such, volunteering clinicians were experiencing similar stressors to those reported by employees using CopeNYP. This shared context included fear of exposure, social isolation, illness and loss, the burden of childcare and remote schooling, work from small city apartments with limited resources for prolonged periods, and financial difficulties. Containing and addressing the emotional distress of employees while simultaneously facing some of the same challenges was an experience unique to most of our clinicians. These shared experiences often contributed to the therapeutic alliance and allowed clinicians to model psychological flexibility and radical acceptance in the face of mutually held uncertainty.

Many pre-doctoral interns and postdoctoral fellows who participated in the CopeNYP program were new to implementing brief skills-based interventions, and, as with most established clinicians, to delivering services via telehealth. Nevertheless, trainees were rapidly redeployed to this program, with limited time to prepare. Trainees simultaneously navigated their own anxiety related to working in a new treatment setting and modality, along with escalating clinical responsibilities of their current placements and personal concerns related to COVID-19. Weekly peer clinical supervision groups involved trainees and helped attenuate anxiety surrounding varying skillsets and increase expertise in delivering brief, skills-based interventions. In addition, trainees were encouraged to verbalize if they were experiencing any extension of their limits and to request reductions of their caseloads, if needed.

Despite the challenges experienced by clinicians, participating in this program was aligned with their core values and as such became a meaningful experience. Finding purpose in a time of acute stress was for many clinicians a way of coping with the uncertainty and sense of helplessness that were elicited by the sudden onset of the COVID-19 pandemic.

8.3. Elements of a successful employee psychological intervention program

Several factors contributed to CopeNYP's success. First, the in-house provision of services to employees within our healthcare system facilitated access, ease of delivery, and streamlined referrals for follow-up treatment. Clinicians embedded within our institution were already familiar with the culture, structure, strengths, and limitations of the organization and thus spoke a common language with employees, fostering a productive working relationship relatively quickly. Second, the intervention was delivered by skilled clinicians, the majority of whom had advanced training in evidence-based psychological interventions. As such, clinicians were able to flexibly evolve the program to incorporate skills-based approaches. Further, clinicians understood the importance of symptom assessment and outcome tracking, which contributed to efficiency of follow-up and coordination of referrals for disposition. Third, CopeNYP leveraged technology to rapidly establish a confidential web-based portal for tracking employee symptoms and treatment strategies which allowed for seamless continuity of care. Fourth, strong communication and support among our network of administrative staff who took referrals and coordinated follow-up treatment, paired with consistent supervision and support for clinicians, were integral components of the service. Fifth, a large pool of volunteer clinicians allowed us to offer psychological services during all hours of the day on weekdays and weekends to accommodate employee schedules and increase access to care. Finally, CopeNYP succeeded because of the dedication of dozens of volunteer clinicians and administrative staff who were committed to supporting employee mental health throughout the pandemic. We recognize that a volunteer-run model is not viable for employee psychological support outside of acute crisis situations; where feasible, future employee psychological intervention programs may benefit from dedicated full-time in-house clinicians and administrative support staff to ensure consistency and continuity of care. The practical benefits of addressing employee mental health needs outweigh the cost of such programs.

8.4. Challenges and opportunities for healthcare employee psychological services

CopeNYP faced several challenges. First, the program was developed in response to a global crisis; it was an iterative program with heavy reliance on clinician volunteerism, involving caller scheduling, referrals, and sessions. However, administrative demands were mitigated by the evolution of a strong administrative support infrastructure. Further, due to high demand and limited resources, we offered most employees the four-session model. While this brief intervention appeared to be

beneficial [17], many employees expressed a wish to continue to engage with their clinician and may have benefited from additional sessions. During the pandemic, a shortage of mental health professionals made disposition to ongoing insurance-based treatment challenging. Our organization addressed this challenge by rapidly empaneling faculty and staff clinicians into employee insurance plans and by adding staff to affiliated outpatient psychological service providers. Future psychological support programs will have to address logistical challenges, including a shortage of mental health professionals and limitations of insurance-based mental health care.

9. Future directions

The widespread acceptability and use of CopeNYP among healthcare workers led NYPH to incorporate this model into its Employee Assistance Program (EAP), as an in-house psychological intervention service. This program will have dedicated clinicians and support staff to target the evolving mental health needs of healthcare workers throughout the NYPH system.

The deployment of CopeNYP during crisis taught us that a flexible infrastructure for psychological support, that can be scaled up or down as needed, can be well utilized by employees and may contribute to reductions in symptoms of depression and anxiety [17]. In the next and ongoing iteration of our in-house mental health program, we have thus incorporated flexibility of use as well as the availability of more sessions (eight sessions versus four) for ongoing support of employee psychological well-being. As psychological treatment becomes widely destigmatized during the COVID-19 pandemic, we anticipate that this new iteration of CopeNYP will continue to be widely utilized.

Programs aimed at addressing the mental health needs of employees may also include group sessions focused on intensive support of at-risk employees (e.g., nursing-specific support groups) and preventative wellness sessions (e.g., group mindfulness practices, yoga, workshops on sleep hygiene) for employees and their families as well as addiction-specific treatments. These approaches can augment or supplant the need for individual psychotherapy. Further, as parents continue to face unique and significant challenges, employee-focused clinical programming will incorporate rolling parenting groups grounded in evidence-based parenting protocols (e.g., Parent-Child Interaction Therapy, Parent Management Training, Supportive Parenting for Anxious Childhood Emotions, Modular Approach to Therapy for Children) to address socio-emotional issues in children of employees. Further, ongoing outreach efforts to promote destigmatization of psychological treatment can support employee resiliency in seeking help at times of crisis or stress.

The weight of the pandemic has disproportionately impacted ethnic minority communities and in tandem with the resurgence of BLM, highlights the need for culturally informed psychological interventions for hospital employees. Clinicians working with BIPOC employees are recommended to engage in self-reflection, adopt a stance of cultural humility, and broaden their understanding of oppressive systems that marginalize and negatively impact the mental health of people of color [24]. Cultivating a deeper sense of self-awareness and recognizing the implications that sociohistorical inequities have on BIPOC employees can help clinicians better identify and treat racial trauma [25].

10. Summary and conclusions

The CopeNYP program can serve as a blueprint for future in-house brief psychological intervention services for HCWs and hospital staff. While CopeNYP was originally developed to mitigate psychological distress in hospital employees during an acute healthcare crisis, it evolved into a well-utilized program for delivering triage and brief psychological intervention to employees across our hospital system. Although facing similar challenges as the employees seeking support from CopeNYP, clinicians and trainees in coordination with support staff

rapidly delivered care to healthcare workers for over a year throughout the COVID-19 pandemic; the shared context of experiences may have enhanced therapeutic alliance between clinicians and employees. CopeNYP appeared to destigmatize mental health care as it was accepted by healthcare workers who provided word-of-mouth referrals and who utilized CopeNYP in patterns consistent with the broader context of environmental stressors. Utilization of services across the spectrum of hospital employees, particularly frontline workers, supports high scalability and reach of the program. Future programs can be developed based on the CopeNYP blueprint to support the mental health needs of employees, especially those in professions subjected to chronic stress and stigmatization of mental health care.

Credit author statement

Dora Kanellopoulos: Project conceptualization and implementation, formal analysis, manuscript preparation, review, and editing. Nili Solomonov: Conceptualization, project administration, formal analysis, writing-original draft, writing- review & editing. Shira Ritholtz: Conceptualization, project administration, writing-original draft, writing- review & editing. Victoria Wilkins: Conceptualization, project administration, writing-original draft, writing- review & editing. Rachel Goldman: Conceptualization, project administration, writing-original draft, writing- review & editing. Maddy Schier: Data curation, formal analysis, project administration, writing-original draft, writing-review & editing. Lauren Oberlin: Project implementation, writing-original draft, writing-review & editing. Christina Bueno-Castellano: Project implementation, writing-original draft, writing-review & editing. Monika Dargis: Project implementation, writing-original draft, writing-review & editing. Stephanie Cherestal: Project implementation, writing-original draft, writing-review & editing. Faith Gunning: Conceptualization, project implementation, supervision, writing-original draft, writing-review & editing. All authors provided critical feedback, contributed to the refinement of procedures and contributed to the final draft of the manuscript.

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Declaration of interest

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Appendix A. Supplementary data

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