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Promoting Psychological Resilience in Healthcare Workers in Times of Crisis: Lessons Learned from the Covid-19 Pandemic

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PROMOTING PSYCHOLOGICAL RESILIENCE IN HEALTHCARE WORKERS IN TIMES OF CRISIS: LESSONS LEARNED FROM THE COVID-19 PANDEMIC

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Summary

HIV-related services in SC have been interrupted by the COVID-19 pandemic, yet many ASOs have demonstrated their organizational resilience in adapting. One facilitator of organizational resilience, psychological resilience, has become increasingly studied during the COVID-19 pandemic due to the increased burdens placed on healthcare workers. Current literature has identified facilitators for psychological resilience in the organization, leadership, and in individual employees. By interviewing representatives from 8 ASOs in SC, this thesis aims to identify facilitators of psychological resilience during the COVID-19 pandemic to determine ways to further support healthcare workers through future crises.

Promoting psychological resilience in healthcare workers in times of crisis: Lessons learned from the Covid-19 pandemic

Abstract

HIV-related services have been interrupted by the COVID-19 pandemic in South Carolina (SC). However, many HIV care facilities demonstrated their organizational resilience (the ability to maintain needed health services amid rapidly changing circumstances) in adapting to new challenges. One facilitator of organizational resilience, psychological resilience, has become increasingly studied in the health area during the COVID-19 pandemic due to the large burdens placed on healthcare workers during this time. Psychological resilience in regard to healthcare facilities is defined as the ability of the health workforce to adapt to adversity and is beneficial to mental health outcomes of the employees. Current literature on psychological resilience has identified facilitators such as support from leadership, a positive work environment, self-care, a manageable workload, flexibility, and adequate planning and protocols. This study aims to identify key facilitators of psychological resilience among the AIDS Services Organizations (ASOs) in SC. In-depth interviews were conducted with 11 leaders in 8 ASOs across SC during summer of 2020. The interviews were recorded after consent and transcribed. All the transcripts were coded using a codebook based on the interview guide. Thematic analysis approach was used in data analysis. NVivo 11.0 was employed in data management and analysis. Findings pinpoint several facilitators, including 1) having planning and protocols to promote staff safety, 2) communication to promote information accuracy and timeliness, 3) support from leadership in the organization and the organization itself, 4) external support to ensure the flow of resources, and 5) a collaborative and supportive work environment. The lessons learned from the front-line healthcare providers will enable the ASOs to better support their employees in the event of another crisis event, thereby improving overall organizational resilience.

Introduction

The COVID-19 pandemic has been a public health crisis that has had a significant impact on South Carolina. According to the Centers for Disease Control and Prevention (CDC), over 60 million COVID-19 cases have been reported since the start of the pandemic in the United States, and over 1 million of those cases were reported in South Carolina.[1] In conjunction with the rise in cases, health service delivery has become a particular area of concern when examining the impact of the pandemic. According to a recent cross-sectional survey study analyzing the impact of COVID-19 on health service delays and interruptions in the United States, nearly half of the

participants reported some health care delay during the pandemic.[2] Such delays were most commonly reported as being in dental (38.1%), preventive (29.2%) and diagnostic (16.4%) treatment.[2]

Regarding health service delays and interruptions in South Carolina, the pandemic has particularly had an impact regarding the treatment of people living with HIV (PLWH). South Carolina reportedly has a high incidence of HIV, with nearly 20,000 PLWH reported in 2019, which is about 406 per 100,000 population.[3] A recent study examining service disruption in SC indicates that the pandemic caused a disruption in the delivery of HIV-related services such that 82% of AIDS Service Organizations (ASOs) in SC experienced some degree of disruption,[4] 56% of ASOs experienced partial disruption, and as many as 26% had to close at some point during the pandemic.[4] The services disrupted included important components of care such as support groups, home visits, walk-in services, and in-person appointments.[4] Disruption to HIV-related services during the pandemic brings serious concerns given several unique characteristics of HIV treatment and care including 1) the importance of medical adherence among HIV patients; 2) the comprehensive services different HIV care facilities provide including psychological counseling, housing, and food service; 3) the impact consistent care has on patients' quality of life; 4) the stigma PLWH are exposed to, which could be worsened during the emergency conditions of the pandemic; and 5) the high proportion of the PLWH population that may be in a socioeconomically vulnerable position and who could experience a harsh environment under the conditions of the pandemic, which could prevent them from seeking care.

As minimizing disruption to delivery of HIV-related services is so crucial, it is important to examine how HIV care facilities can increase their organizational resilience in face of challenges from the COVID-19 pandemic. Organizational resilience has slightly differing

definitions among researchers, but it is broadly defined as an organization's ability to adapt to a crisis such that the organization becomes more resistant to future disruption of services.[5-9] It has become increasingly studied in the area of crisis management and has also been applied to the health area.[5-9] Some general facilitators of organizational resilience identified in the literature subsequently include adequate resources including funding and material supplies, organization-wide and community-integrated communication, both hierarchical and shared leadership practices, situation awareness, established protocols, and psychological resilience of healthcare workers.[5-9]

While overall organizational resilience is loosely defined as the ability of organizations to adapt to crisis situations and change productively to become more resistant to future disruptions, psychological resilience in the workplace refers to the ability of workers in that organization to adapt to adversity in the workplace while maintaining a healthy emotional state.[10-14] Following this concept, organizational resilience measures outcomes in delivery of services during crises, whereas measuring psychological resilience assesses the individual mental health outcomes of employees. Strategies for promoting psychological resilience of healthcare workers has come under increasing scrutiny during the COVID-19 pandemic, as this event has both placed new burdens on healthcare workers and worsened existing ones.[7] A study examining the psychological distress of Chinese healthcare providers found that 38.7% showed psychological distress during the COVID-19 pandemic.[10] Another study comparing this pandemic with the previous SARS and MERS coronavirus outbreaks found that healthcare workers in each of these outbreaks were at an increased risk of experiencing PTSD symptoms.[11] Added stressors in the time of the pandemic have been reported in previous studies as contributing to burnout, anxiety, depression, compassion fatigue, career dissatisfaction, and poor staff retention, all of which can

affect the quality of patient care.[12-14] Because of the increased burdens placed on healthcare workers during the pandemic, it is important then to also examine how the COVID-19 pandemic has impacted mental health outcomes of HIV care providers, as these providers vary widely in the types of services they offer to PLWH. Doing so will have the positive impact of identifying how psychological resilience can be promoted, which can enable improved overall organizational resilience and therefore improved continuity of care during times of crisis.

Current literature has subsequently identified several strategies to reduce psychological distress and facilitate psychological resilience in the workplace. Heath et al. (2020) identified facilitators such as having a communicative work environment, having manageable workloads, being able to have flexible schedules, support from leadership, adequate training, and individual coping skills. Another study generated a model centered around intrapersonal factors to promote psychological resilience of individual workers and therefore overall workforce resilience.[13] Such facilitators of psychological resilience included practicing mindfulness, empowering employees to feel self-sufficient, and having systems in place to support employee coping.[13] Other studies have identified facilitators such as institutional support,[10] having both protocols and flexibility during crises,[7] and having active psychological resilience interventions in place to support workers.[15] Limited studies have identified facilitators of psychological resilience in healthcare providers in HIV clinics though, which have experienced substantial service disruptions during the pandemic. The purpose of this study then is to fill this knowledge gap by examining facilitators of psychological resilience identified by representatives from 8 ASOs organizations in SC. The lessons learned from the front-line healthcare providers will pinpoint sources of psychological distress to healthcare workers as well as strategies to support psychological resilience. This will provide further insight into how the mental health outcomes of healthcare

workers can be improved in times of crisis, which will help bolster overall organizational resilience and reduce future disruptions to service delivery.

Methods

Study design and setting

A qualitative approach was chosen to examine possible facilitators of organizational resilience in HIV care facilities during the COVID-19 pandemic. Qualitative methodology was chosen for this study because an open-ended question format allows for the data collected to be broadened in a way that quantitative data may not convey under these circumstances. To promote flexibility in scheduling and to accommodate the variability in the type of ASO being represented, semi-structured in-depth interviews were led by research assistants with the management staff of an academic medical center, local HIV-related facilities, and the SC Department of Health and Environmental Control (DHEC).

South Carolina, which in 2019 reported 17,589 people living with HIV/AIDS cases and saw 680 new infections be reported in the same year, was where all of the interviews were undertaken.[3] As of February 22, 2022, the total number of COVID-19 cases in SC has risen to 1,449,227.[1]

Study participants, sampling, and recruitment

Eligible participants in this study included management personnel from academic medical centers and ASOs in SC funded by Ryan White HIV/AIDS program as well as representatives from the SC state public health agency. Employees in leadership positions were chosen for this study, as they were expected to be the most knowledgeable about their organizations' activities. In total, twenty-seven medical centers and ASOs in SC that are funded by Ryan White HIV/AIDS were contacted by email to introduce this study and its procedures. A purpose sampling strategy was chosen to invite management personnel from these organizations

to participate in the in-depth interviews. Out of the 12 scheduled in-depth interviews, 10 interviews with 11 management personnel from 8 organizations came to fruition with one interview having 2 interviewees. The sample size is small in comparison to some studies, but the inclusion of personnel from eight different organizations demonstrates a variety of experiences ASOs in SC may have had in response to the COVID-19 pandemic. All interviewees consented verbally to participate in in-depth interviews. The study protocol was approved by the Institutional Review Board at University of South Carolina (Pro00100296).

Data Collection

Using a semi-structured interview guide to assess organizations' adaptive strategies and perceptions of resilience, interviews were conducted virtually in July of 2020 by a team of experienced interviewers. Interviews were semi-structured in that they were guided by the same initial interview questions on challenges, responses, and resilience during the pandemic. Experienced interviewers were then able to propose follow-up questions at their discretion based on the content of the interviewees' responses. To accommodate social distancing guidelines during the COVID-19 pandemic, a teleconferencing platform was used to conduct the interviews. Each interview lasted about 40-50 minutes and were digitally recorded with appropriate consent.

Data Analysis

All interview recordings were transcribed verbatim, and to protect the interviewees' identities, their names, the organizations they represent, and any other identifying information were all removed from the transcripts. Using an online transcription and editing platform called Otter, verbatim transcripts were then reread and corrected where appropriate. The transcripts were then coded line-by-line in NVivo 11.0, which is a qualitative data management and analysis software. Using a preliminary codebook with preemptive structural coding categories and

subcategories that was based on research questions and topics in the semi-structured interview guide, two research staff coded the transcripts. The codebook was also expanded during this process as new codes emerged.

Data analysis for this study was conducted by employing a thematic analysis approach in which notable elements within the main topics of interest preemptively determined in the study were examined in synthesized.[16] Themes and subthemes were subsequently identified by grouping and categorizing the codes. Because we were not directly measuring workers' psychological resilience but rather identifying facilitators of resilience based on their answers, codes were chosen from the organizational resilience bracket, and statements including expressions of morale and staff retention were used as indicators of factors facilitating psychological resilience. Verbatim, representative quotes were chosen to demonstrate some relevant findings. The quotes demonstrates in the resulted section of this paper then were chosen because of their relevance to these facilitators rather than because of their frequency.

Results

Findings subsequently pinpoint several facilitators of positive morale and retention and thereby resilience. Such facilitators include having planning and protocols to promote staff safety, communication to promote information accuracy and timeliness, support from leadership and the organization itself, external support to ensure the flow of resources, and a collaborative and supportive work environment.

Safety of Staff – Planning and Protocols

Having planning and protocols in place to ensure that staff were able to operate safely during the pandemic was cited by several interviewees as being key to alleviating anxiety and making the overall organization more resilient. At the beginning of the pandemic, some described how they felt unprepared such that they "had to come up with a contingency plan kind

of overnight" to figure out how to keep their patients and staff safe (Interview). Such concerns over possible exposures in the workplace due to a lack of protocols to protect them led "[some] staff members who are also living with HIV…. [to be] very, very concerned about what was going on" (Interview). In some organizations, this led to some members feeling "legitimately concerned by going back to the whole normal face to face services," demonstrating the impact not having a plan in place can have on employees' perception of their ability to safely perform their jobs.

To combat feelings of uncertainty and protect the health of their staff, protocols were put in place in each ASO. A step taken by some organizations was "to keep meeting [their] staff in virtual spaces" to reduce risk of exposure (Interview). This was also done in some situations where "[the staff] did not feel comfortable [coming in to work], either because they define themselves as being in a vulnerable population or the uncertainty of what's going on" (Interview). They subsequently found a way for them to work virtually such that they would "still be technically fulfilling their duties" (Interview). This move to virtual workplaces overall functioned then to both protect employees and alleviate anxiety about risk of exposure, which had the positive impact of promoting feelings of safety and competency.

Others still operated in person but reduced capacity, implemented protocols for questioning clients, practiced self-quarantining when exposed, and created plans for proper sanitation. One described method of establishing clear protocols was by emailing "straightforward bullet points, like this is what you're asking, this is what to expect, this is what to do" such that "if you're a screener, you could literally just print that paper out and know exactly what you're looking for and what to ask" (Interview). Such clarity in protocols was described by one interviewee as being reassuring such that she felt that "if [she] was faced with

somebody who needed help, [she] would have been able to navigate that" (Interview). Another conferred with this perspective, saying that working through "a lot of the specifics on, 'How do we do this?' and what 'What do we do for walk-ins?'" via educational sessions and calls has served "to allay some of these fears" (Interview).

Communication – Information Accuracy and Timeliness

A second facilitator of psychological resilience identified was effective communication in the organization.

One component of communication described by ASOs involved taking steps to directly address staff members' concerns. Several interviewees described a "substantial anxiety about the disease itself" and expressed sentiments of anxiety, stress, and being overwhelmed. One way such feelings were addressed was by "having daily meetings… to keep [their] staff abreast of what was going on… [such that they could] keep the anxiety as well as allay some of the fears that they had" (Interview). Another method of communication involved "just one on one with them sitting down talking about what their concerns and fears were" (Interview). Others found more formal means of communication useful such as educational sessions via Zoom to communicate "the flow [of information] that was changing every hour… [which] was very confusing to people" (Interview). Each of these though had the perceived positive effect of reducing psychological distress among staff.

A second component of communication involved equipping employees with updated knowledge so that they felt empowered to perform their jobs effectively. One interviewee subsequently described the COVID-19 pandemic as "a very confusing time, [wherein] the guidance is always changing… that is stressful" (Interview). A solution to this was to "constantly send out information… [that was] bulleted and very precise" in an effort "just to lessen the confusion" (Interview). Other interviewees described similar methods such as having email

updates or even morning huddles to discuss “most recent masking guidelines, hand hygiene, screening questions, that sort of thing” (Interview). In comparison to this, one representative described the negative effects of ineffective communication during this time. A situation was described in which “three quarters of the staff know something that the other quarter doesn’t… because some directors do a better job than others at getting that [information] to their frontline staff” (Interview). This was further described as an issue that fostered frustration and tension among staff members, as it was perceived by some that those less informed were not equally contributing (Interview). Ensuring information accuracy overall then had a positive effect in reducing psychological distress, improving employees’ perceived competency, and in promoting positive relationships among staff.

Support from Leadership/Organization

A third facilitator of psychological resilience identified is support from leadership and the organization overall.

Regarding support from leadership, many interviewees, who were in managerial and leadership positions from the ASOs they represented, expressed perceived positive effects on their staff by providing direct support. One method of providing support was staying connected to their staff members by taking the time to “call [their] staff even though there are 50 of them” (Interview). Another interviewee conferred with this, saying that “[each level of management] has a level of responsibility to check in with [their] staff” and described how another leader in the organization makes an effort to “at least once a week send some word of support and kindness and thanks to all of her staff” (Interview). The importance of giving thanks and recognition was subsequently also emphasized as being a key method by leadership to provide support. Some leaders accomplished this through positive gestures and affirmations that “acknowledge their loyalty and efforts when [they] can” (Interview).

Besides direct actions taken by leadership to show support to their staff, interviewees also identified overall organizational support as being a facilitator of resilience. Organizational support in this context can be defined as the formal systems and practices the organization has in place to support its employees. One form of organizational support described was employee assistance programs. Several interviewees subsequently described their efforts to make sure their staff "get access to the employee assistance programs so that [they] can help assist and support them through this" (Interviewee). One benefit of this was to connect "anybody [who] has issues like mental health or isolation issues" with "someone that can help" (Interviewee). Some indicated though that they had "no direct offering for any kind of mental health or psychological services [at the time] … [but that it may be] helpful to develop psychological counseling for staff who are having to get adjusted to this new normal" (Interview).

A second form of organizational support described was having a "staff engagement council" or an "events committee" that both functioned similarly in expressing gratitude to employees (Interviews). Such expressions of gratitude were seen as tools in uplifting employee morale. In another case, this was handled by the HR team, who organized activities such as an in-home yoga class and sent puzzles with prizes (Interview). The support described by this interviewee though went beyond expressions of gratitude and rewards by allowing employees to make their schedules flexible by working from home, leading them to express that they were "impressed with how much [the organization] is invested in [their] employees" (Interview). On the opposite end of the spectrum though, one interviewee described the negative effects of not having sufficient organizational support, describing how the organization "cut all [their] hours" and described how "the mental health is very exhausted for most of [their] staff. They do a lot of

venting… because it is very frustrating" (Interview). Expressions of gratitude and perception of organizational fairness were therefore both key to improving morale.

External Support to Ensure a Flow of Resources

A fourth facilitator of psychological resilience identified was external support from sources such as the government, charities, and surrounding businesses to ensure that staff were able to get what they needed to maintain operations.

Availability of financial resources was an example cited by some, as effects of the pandemic led to the need to acquire new equipment for capabilities such as telehealth and working from home. This was described as being "very stressful" by one interviewee, as "to have everyone [they] had to buy new computers… [because] there were lots that didn't have video capability" (Interview). This issue was alleviated in many of the clinics by a described "liberal funding" to meet the new demands (Interview). While these funds were described as being beneficial by some, other interviewees expressed stress over the funds available. For some, this "put a lot more work on [them]" such that they had to balance "this money out [there] that everybody wants to access… [with] the day to day stuff [they are] dealing with" (Interview). An influx of financial resources from the government was therefore a relief to some while concurrently being a new source of stress to others.

Besides funding being a source of stress to some ASOs, several interviewees articulated that money was not the most important resource they needed. One interviewee subsequently stated that "the answer is not money… [but rather] how we can reinforce our workforce" (Interview). A key method of reinforcing the workforce cited by interviewees was in making personal protective equipment (PPE), whose distribution was in part regulated by the government, more accessible. Several ASOs interviewed experienced closures due to a lack of

PPE being available, and the process of obtaining PPE was described as being stressful. One interviewee illustrated this by saying that "[they did not] feel like [they] were ever in a panic about anything other than the inability to get the PPE that [they] needed" and subsequently describing the beginning of the pandemic as an "unnerving time" (Interview). Another described this struggle to obtain PPE as "where the frustration is—it's not that [they] don't have the funding; it's that the resources are just not available" (Interview). Such statements emphasize the point that more external support was needed in regard to distribution of supplies as opposed to funding. Such supplies were key not only to ensuring continued delivery of services but also in promoting feelings of safety among staff as well as feelings of anxiety and frustration about how they would remain operational.

Promoting a Supportive, Collaborative, and Flexible Environment

A final facilitator of psychological resilience identified is the existence of a supportive and collaborative workplace environment. Although this is also contributed to by aforementioned facilitators such as support from leadership and communication in the workplace, this facilitator also incorporates employee to employee interactions that boost morale. Such interactions can be as simple as "every meeting [starting] with 'Howdy, how are you?'" Expressions of support and empathy such as "This must be a lot for you. We shouldn't make you take care of us," were also described as being uplifting. These contributed to fostering a positive, friendly environment such that one interviewee described not seeing the testing crew daily as "like we're missing part of our family." Overall, support among staff members was expressed as being protective against psychological distress.

Besides expressions of support, the existence of a collaborative and team-oriented environment was reported by some interviewees as positive for improving staff morale. One

interviewee described how “it was pretty amazing [with the initial wave] when people were able to from different arenas—[their] finance [department], HR, even the physician leadership—all of them come together to address this on a daily basis” (Interview). This is made possible under a “team player atmosphere” wherein “people are willing to do other things besides just say that’s not my job” (Interview). Another interviewee conferred with this, saying that “[the pandemic] really made [their] team more cohesive in jumping in and helping each other out” (Interview). This seemed to be protective against poorer staff morale by reducing burdens placed on individuals, and this sharing of responsibilities was subsequently protective against feelings of being overwhelmed. Working with a collaborative, supportive team also had the effect of bolstering resilience and dedication to the work such that they felt “proud of the work that [they] do. [The interviewee] thinks that they love the work that [they] do, and [they feel] very lucky to have a team that is committed to the clients and committed to the work.”

Discussion

The in-depth interviews with leaders from ASOs in South Carolina identified some unique and diverse facilitators contributing to psychological resilience in HIV care facilities. Although some factors described by interviewees correlate with existing literature on how psychological resilience can be improved in the health area, others point out new potential areas of focus unique to HIV care facilities and in light of the pandemic.[7,10-14]

The described feelings of anxiety and stress over not knowing what to do when the pandemic began due to a lack of planning and protocols in place aligns with the previous literature’s emphasis on these being vital to reducing employees’ psychological distress in times of crisis.[7] One explanation proposed for this is that having protocols in place may empower employees to feel self-sufficient in their roles.[13] Having protocols in place was therefore a facilitator of psychological resilience for ASOs in SC because it enabled them to feel

comfortable performing in their roles. One finding unique to the circumstances of the pandemic is subsequently this new perceived lack of safety some personnel reported experiencing due to not having protocols in place to protect staff from exposure to COVID-19. This is relevant to current efforts to support both the physical and psychological safety of healthcare workers, as previous literature and the current study show that personnel must feel confident in their abilities to conduct themselves safely and accurately.[7,12-15]

Necessity for communication as a means to both address concerns and to ensure information accuracy and timeliness confers with previous studies' expression that an open, communicative environment is important for fostering resilience in employees.[12] An explanation for this is that open communication among employees and between employees and leadership allows for concerns to be addressed and for accurate information to be disseminated, which has the positive effect on psychological resilience of alleviating distress from concerns not being addressed and in promoting feelings of competency. This is significant in the context of the COVID-19 pandemic, wherein there have been new challenges to communication due to reduced capacity in the workplace and shifts to telecommuting. The results of this study therefore diverge from the current literature by identifying a new knowledge gap that has emerged following the pandemic: how telecommuting and reduced interactions with coworkers may affect employee morale and psychological resilience.

Support from the leadership and the overall organization are both highlighted in the literature and in this study as being positive for improving psychological resilience.[10,12,14] This study expands on the previous literature in that it addresses not only positive communication between leadership and staff but also the value in connecting employees with resources such as employee assistance programs and counseling. Access to such resources was described as being

protective against negative mental health outcomes. Findings from this study also demonstrate the outcome of when employees feel that their organization is not supporting them, as this caused a drop in morale and dissatisfaction with their jobs. This expressed value in resources provided by the organization and the perception of the organization as being supportive of its employees is relevant to current research on facilitating psychological resilience because it provides evidence that increased support from organizations is needed to protect the psychological wellbeing of healthcare workers. This is important for both improving mental health outcomes but also in ensuring staff retention, which bolsters overall organizational resilience by facilitating continuity of care. Overall then, this study contributes to the literature by providing examples of how organizations can support the psychological wellbeing of its employees and evidence of the poorer mental health outcomes of employees who do not perceive the organizations they work for as supportive.

The fourth facilitator of psychological resilience, external support to ensure a flow of resources, corroborates with the literature in that financial resources were cited as being important in alleviating stress about maintaining operations during crises.[5-7] However, the results from this study diverge from the literature in that financial resources were not described as being the most important resource in the context of the COVID-19 pandemic. Representatives from ASOs rather expressed that better regulation of the distribution of PPE and greater availability of PPE would be more beneficial in supporting the workforce. The results of this are significant in that it highlights how funding itself may not be the most helpful solution but rather be a source of stress for some employees. This study furthermore provides a unique insight then into how this factor that facilitates overall organizational resilience, as an adequate supply of resources is also key to maintaining operationality, in turn supports the psychological wellbeing of healthcare

workers. One explanation for this is that having adequate PPE during the pandemic enabled healthcare workers to feel safe performing their jobs and allowed them to comply with current public health regulations, which ensured continuity of care.

Lastly, the promotion of a supportive and communicative work environment aligns with the current literature describing its importance in promoting psychological resilience.[7,12,15] Such communication serves to create an environment open to the expression of concerns and an environment conducive to teamwork. Such sharing of burdens may physically support staff by alleviating the impacts of staff shortages and reduced capacity but also emotionally support them. This is comparable to the "Battle Buddies" method used by the U.S. army that was proposed as a valuable psychological intervention for healthcare workers during the COVID-19 pandemic.[15] Findings from this study supports the Battle Buddies approach in that it highlights the value of peer support in reducing risk of burnout while promoting psychological resilience.[15] Support from ones' peers is thus described to function to improve psychological resilience by allowing for sharing of narratives, which has been shown to improve one's perceived self-efficacy and sense of purpose.[15] Although peer support was described as being a facilitator of psychological resilience by interviewees, this study further contributes to the literature by identifying a possible area of interest in how cross-training of employees described by some interviewees may affect mental health outcomes of staff.

Limitations

Although findings from this study are relevant and useful to the study of improving psychological resilience in ASOs, a few limitations should be considered. For one, this study did not seek to directly measure psychological resilience of healthcare workers during the COVID-19 pandemic but rather identified strategies that promoted resilience based on identifiers such as staff morale and staff retention. A more formal analysis of the healthcare workers' psychological

resilience may yield more information on what directly contributed to improving or reducing psychological distress during this time. Furthermore, because questions from the in-depth interview were inquiring about facilitators of organizational resilience, some key facilitators of resilience such as familial support, individual coping mechanisms, or individual financial wellbeing could have been overlooked. Potential stressors such as one's own health status, having family members with preexisting conditions, or having family members contract COVID-19 may have also been excluded by nature of the questioning. Lastly, a final limitation is that interviews were only conducted with representatives in leadership or managerial positions in ASOs in SC by a convenience sampling approach. As such, some key information may be biased or missing about how healthcare workers were directly affected by the pandemic and what most affected their psychological resilience due to this approach having a higher risk for sample bias. To address these limitations, future research would benefit from conducting stratified sampling of employees at different hierarchies and roles within each organization.

Tables

Table 1: Characteristics	n (%)
Organization type	
AIDS Service organizations	6 (75)
Academic medical center	1 (12.5)
State public health agency	1 (12.5)
Size (members and employees)	
>10	6 (75)
Not reported	2 (25)
Number of patients/clients served	
<1,000	2 (25)
≥1,000	3 (37.5)
Not reported	3 (37.5)
Services provided by organizations [a]	
HIV prevention	6 (75)
HIV testing	7 (87.5)
HIV treatment	6 (75)
Case management	4 (50)
Outreach services	4 (50)
Counseling, behavioral health, support groups	5 (62.5)
Transportation	2 (25)
Health insurance assistance	1 (12.5)
Food and clothing services	2 (25)
Housing services	2 (25)
Advocacy	1 (12.5)
Education/Certification of HIV testing staff	1 (12.5)
Provide funding for HIV care by other entities	1 (12.5)

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