



Adaptive, Persistent, and Available Support: The Crucial Way in Healthcare during Covid-19¹

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ABSTRACT

The aim of this study was to gain knowledge about the work of crisis managers in healthcare during the COVID-19 pandemic. A qualitative and exploratory approach was used with crisis managers who had worked at five different emergency hospitals in one of the Swedish metropolitan regions. An inductive thematic analysis was performed. Major emphasis was placed on the importance of work processes aiming for a high level of accessibility, including having a tangible physical presence in the workplace, plus actively reaching out to the staff. The crisis support provided was adapted to provide a stabilizing factor, promote stamina, and increase motivation. It also included a continuous assessment of mental health status and focused on strengthening management functions. Initially, the support was more focused on stress and anxiety, but then gradually shifted towards maintaining stamina and motivation.

KEYWORDS

COVID-19 / crisis support / motivation / stress / Swedish healthcare / psychological first aid

On 30 January 2020, the WHO classified the coronavirus as a public health emergency of international concern. The following day, the first case of COVID-19 in Sweden was officially confirmed, and after that the infection gradually spread. By March 2020, limitations were imposed on public gatherings and visitor restrictions were introduced in Swedish retirement homes (<https://www.krisinformation.se/nyheter/2020/mars/nationellt-besöksförbud-pa-aldreboenden>). Simultaneously, the strain on the healthcare system and its staff grew in parallel. It was soon evident that there was a great need for support specifically aimed at healthcare professionals.

Klawitter (2021) described how the pandemic caused Swedish healthcare workers to face ethically very difficult situations and exposed them to experiences of a potentially traumatizing nature. At the same time, the healthcare staff themselves were also in the middle of a situation that they felt they could not control, and which brought with it a strong sense of fear concerning their own health as well as that of others. The pandemic constituted a new kind of crisis for the healthcare system, where the members of staff were also personally afflicted by it, at the same time as they were working for a society in crisis (e.g., Björk et. al. 2023).

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Mental health issues among healthcare professionals

Several studies have previously shown that work-related stress is closely connected to mental health issues among healthcare professionals (e.g., Björk et al. 2023; Gadolin et al. 2022; Kim et al. 2018; Rodriguez-Vega et al. 2022; Veje et al. 2023). A study by Zhou et al. (2020) showed that because of the pandemic, healthcare staff had a higher risk of developing mental health problems due to a higher workload than before the pandemic. Other factors that correlated with exhaustion syndrome issues among nursing staff were the number of resources and social support available, as well as the perceived risk of contagion (e.g., Manzano & Calvo 2021). A study by Zhang et al. (2020) also compared the well-being among healthcare workers with the well-being of non-healthcare workers in China during the pandemic. Healthcare workers caring for COVID patients had elevated levels of insomnia, depression, anxiety, obsessive thoughts, and obsessive-compulsive disorders, both compared to before the pandemic and compared to non-healthcare professionals.

Coping strategies

One study in China by Cao et al. (2020) including healthcare staff investigated what coping strategies the staff had for handling stress. The most common strategy was to call or make video calls to their families. Having conversations with colleagues was also perceived as being very helpful. Other strategies were phone support from a psychologist, singing, journal writing, or engaging in sports, etc. Some participants described that they preferred to handle their levels of stress on their own rather than through conversations with others.

Wang et al. (2021) performed a study that aimed to highlight the effects of the efforts made to increase the coping skills among healthcare staff in China during the pandemic. Their results showed that measures that were meant to encourage sharing experiences of emotional exhaustion among colleagues in a worst-case scenario could make the exhaustion worse. On the other hand, they could show positive effects if the efforts were aimed at changing thought patterns or at contributing to cognitive restructuring. In those cases, the efforts could help to reduce the emotional exhaustion.

Several studies highlighted resilience as a main factor for the ability to handle and recuperate from difficult circumstances, for example, Gillberg et al. (2023) and Foster (2020) describe resilience as a mental coping mechanism enabling positive adaptation and recuperation despite adversity. According to the Swedish study by Gillberg et al. (2023) and the Spanish study by Frias et al. (2020), the resilience among the healthcare staff seemed to have been of major importance for how they handled the stress brought on by the pandemic. Further, they claimed that psychological support for healthcare workers could increase their resilience in a situation as challenging as the one brought on by the pandemic.

In one study in Austria focusing on the well-being of hospital staff during the pandemic, performed by Digby et al. (2021), factors such as psychological support for staff, support from managers and the hospital management, and providing clear information were identified as very important factors for reducing the risk of mental health problems among the staff, as well as for increasing their resilience. Maunder et al. (2021) showed in a Canadian study, among other things, that sufficient recuperation through

sleep, as well as a feeling of self-efficacy, that is, trusting one's own ability to handle the situation, worked as protective factors against mental health problems for healthcare professionals. A study from USA by Wei et al. (2020) describes how easily accessible support efforts, both for individuals and for groups, were introduced for healthcare workers during the pandemic. A hotline was opened for psychological support by telephone and the staff were offered webinars on sustainability, health, and grief processes. Special respite rooms for recuperation were also established. On extra heavily burdened units, additional follow-ups were performed to monitor the health status of the staff. In one article from Italy, Presti et al. (2020) described how a major university hospital combined different evidence-based interventions for stress reduction into modules, giving the healthcare staff the opportunity to choose the form of support that suited them best. Among other things, they were offered information about stress reduction and self-care, mindfulness exercises and mindfulness-based psychoeducational materials to enhance cognitive flexibility, psychological support in the form of a phone line manned by psychotherapists, outreach-based support activities aimed at healthcare professionals in coordinating roles with more responsibility, plus group interventions and debriefing sessions for intensive care unit staff.

When looking at support efforts for healthcare professionals during the pandemic, one American study performed by Malik et al. (2021), among others, showed that healthcare workers were hesitant at first to receive psychological support. The study found that for the trust and interest in accepting the support to increase, a high level of physical presence and accessibility at the various care units was required. Studies by Chen et al. (2020), Schechter et al. (2020) as well as Santarone et al. (2020) also indicated that for them to be well accepted, the support efforts needed to be adapted to the wishes and perceived needs of the target group.

There are several theories of crisis management. Bundy et al. (2017) summarize theories and research in the field and suggest a framework for studying crisis management with three stages depending on when the crises occur(-ed) and if the focus area is internal for the organization itself or external, concerning stakeholders. The time frame is Pre-crisis prevention, Crisis management, and Post crisis outcomes. The present study mainly concerns crisis management with an internal perspective for the studied hospital.

Aim

The aim of this study was to gain knowledge about the work of crisis managers in healthcare during the COVID-19 pandemic.

Method

Selection

Out of a group of 28 crisis managers, who all worked at one of five emergency hospitals in one of Sweden's metropolitan areas during the pandemic, 10 participants were randomly selected. The majority of the 28 crisis managers were licensed psychologists and/or licensed psychotherapists with various kinds of undergraduate training, but there were also crisis

managers with other backgrounds and training such as, for example, the emergency services, the police, organizational and leadership development, etc. All of them had many years' experience from working with various kinds of crisis support. The participants in this study all worked with crisis support for emergency care units and intensive care units, as well as hospital care units, surgery departments, radiology, and out-patient care units.

Interviews

To ensure that both the questions included in the study and the participants' own backgrounds and experiences would be accommodated in the interviews, a semi-structured interview guide was used. The questions were phrased to give the respondents' own stories as much space as possible, but still allowing the interviewer the opportunity to delve deeper through follow-up questions. The questions were selected based on our own understanding of the subject area as well as previous research available. Examples of question areas were: How they executed their work, If the supporting work changed over time and in that case how. What kind of support they felt was helpful?

The hour-long interviews were conducted through video calls in September and October of 2021. The interviewees were provided informed verbal consent, giving us permission to conduct the research. The collection, management, and subsequent destruction of data on the interviewees and the interviews themselves were carried out in accordance with the guidelines for research ethics of the Swedish Ethical Review Authority (<https://etikprovningsmyndigheten.se>).

Data processing and analysis

The data processing and analysis were based on the method for an inductive thematic analysis described by Braun and Clark (2006), with the aim of capturing main themes in the material analyzed. The analysis was of a semantic nature, based on the explicitly expressed content from the interviews. Each of the transcribed interviews was read multiple times by both authors and relevant themes based on the aim were marked up. All interviews were handled in the same way. Quotes illustrating each theme were selected with the aim of having representation from all interviewees. When all themes were highlighted with quotes, further thematization of the material followed. Some themes were merged, split into separate themes, or reformulated to better describe the data. This thematic analysis was repeated in several stages with each interview until no new themes were found. In the next step, each theme was analyzed separately, and sub-themes were created. Finally, the structure of themes was examined against the aggregated material. Finally, the resulting theme structure was reviewed in relation to the full material. No conflicts regarding themes appeared.

Results

The analysis performed resulted in two main external themes and one internal. The external themes were about supporting the staff at the hospital and the internal themes

were about the crisis managers’ reflections about their own situation. All three themes are divided into several subthemes.

Table I Themes and subthemes

Theme	Subtheme
1. External arenas for support	1.1 Finding an arena 1.2 Promoting collegial support 1.3 Professional support
2. External focus areas	2.1 Managing stress, fear, and uncertainty 2.2 Unburdening and stabilizing 2.3 Reflection and motivation 2.4 Supporting stamina 2.5 Learning and retrospection
3. Internal perspective	3.1 Handling lack of structure 3.2 Being a part of the crisis yourself 3.3 Science, knowledge, or personal traits

I. External arenas for support

The crisis managers described how the crisis support work process needed to be both exploratory and flexible to map current needs and identify possible external arenas for support (different ways for healthcare staff to get support). The support could be in the form of both pre-planned and spontaneous conversations in the workplace facilities.

1.1 Finding an arena

The participants highlighted the challenge in getting through to the healthcare staff with the support available, because in spite of being perceived as needing it, the group seemed to have difficulties in seeking and accepting help. The hypotheses for the causes behind the low level of help-seeking in this group were several, for example, that the healthcare staff expected themselves to be able to handle crisis situations as part of their everyday work, and that they were used to being the ones providing care instead of the ones receiving it. A stigmatizing culture in the healthcare system was also assumed to exist, with expectations that the staff should be able to take more stress than other people and where seeking help was a weakness.

We are dealing with healthcare professionals who are used to providing care and medical assistance but are very unused to receiving it themselves. They are also not used to talking about their own emotions. (Respondent B, site 1)

The respondents claimed that their assignment required an explorative, flexible, and actively out-reaching approach. Several participants described how this approach developed over time, and how trust and relations were built gradually, which made the support



efforts more sought after. Being physically present and visible over time was emphasized as crucial. They also described the importance of involving the unit managers, both as recipients of support, as the strain upon them increased because of the pandemic, but also as a channel to reach the other members of staff. Some participants said that being physically present at the units gradually made the healthcare staff discuss the available crisis support more among themselves, which seemed to increase the trust in it, which in turn increased the number of staff who sought it out for themselves. This approach seemed to change the culture when it came to seeking help, making the staff gradually more and more active throughout the pandemic in seeking out the crisis support available. Further aspects that were mentioned were that the heavily taxing work situation of the healthcare staff demanded a physical presence, which facilitated access to the support whenever their work situation allowed the staff to seek it. The work situation also required crisis managers to actively reach out and to be very flexible. In addition, the support was also adapted to individual needs and involved a delicate balance between actively seeking people out and leaving the staff alone to let them rest.

What was helpful for the staff I guess was that we were around whenever they had the time./.../ I think the accessibility [was important]. They had never come to see us if we had not been right at their unit. Not with that pace, that exhaustion, and not while having the tunnel vision that the job caused. (Respondent D, site 3)

1.2 Promoting collegial support

Through encouraging a sense of community and a supportive collegial climate, several participants felt that the healthcare staff's perceptions of being alone was reduced in that stressful situation. Group counseling sessions enabled them to share their feelings of uncertainty and loss of control caused by the pandemic with others, to unburden themselves after taxing experiences, and to gain an understanding for others having similar experiences, which helped to alleviate their feelings of being alone. Due to the crisis managers being available at the hospitals, groups could be gathered on short notice after critical events to help debrief the staff and to activate the collegial support. These group conversations also became a way to handle the frustration caused by the lack of adherence to social distancing regulations in society at large. The perceived lack of respect from their fellow men led to feelings of anger, distancing, and an increased isolation, where the sense of community with colleagues facing the same situation proved critical. Group counseling sessions became a way to channel their frustration, gain a sense of community, and maintain their motivation for doing their job.

It was incredibly rewarding that they discovered similarities as a group and had a sense of recognition /.../ In many ways, especially at the beginning, they had felt very alone and thrown into something that was very uncertain. Uncertainty is something that most people find hard to deal with. (Respondent A, site 2)

The participants thought that the managers for the different care units played an important role in encouraging and creating a space for that collegial support. The medical staff needed help to prioritize in a situation where the strain was so immense.

1.3 Professional support

Several participants expressed that the need for professional support for the healthcare staff seemed to have been especially large because of the reduced amount of social contact brought on by the pandemic. The pandemic restrictions imposed, including social distancing, and the fear from others that healthcare staff could themselves be carriers of the virus, reduced the support available from their usual social networks. As a result, there was a perceived increase among staff in the need for contacts with people who understood the specific situation that healthcare professionals faced. On many occasions, medical staff were also the only support available to dying patients who had been placed in isolation, something which also took a great toll upon them and constituted a kind of experience that they could not share in their personal relationships, which further increased the need for professional support.

To get to talk to people who understand exactly what this means. Many people have found it difficult to talk about these things in their personal social life, because other people just don't understand what their reality is like. /.../ They also feel like they have become alone. (Respondent F, site 5)

The professional support was important to the care unit managers as well, who needed management-level guidance for how they could best manage their own work during an ongoing pandemic and support their staff to persevere throughout the lengthy crisis. They had to face difficult ethical dilemmas and needed to constitute a stabilizing factor for their staff, who needed a sense of security at a time when the healthcare units were at many times very chaotic, through clear communication and empathic leadership.

2. External focus areas

The crisis managers described external focus areas (i.e., work toward healthcare staff) as having various functions and content that varied throughout the pandemic.

2.1 Handling stress, fear, and uncertainty

The support provided was aimed at providing help to pause and unwind at the beginning of the pandemic when the staff was perceived as being strongly affected by acute stress. Helping the staff to conserve their energy and wind down and rest whenever possible was an important part of the support. Several of the participants used mindfulness as a recurring resource for various working groups as one way of managing stress.

People there [in the emergency ward] work with a lot of adrenalin /.../ and you might be tempted to think that they are feeling rather well, as they are in high spirits, but they were just geared up. It did not take long before discovering that they were very geared up, but not feeling well at all. (Respondent J, site 1)

The crisis support was also described as focused on managing fear and uncertainty at the beginning of the pandemic, to help the healthcare staff to face their worries with



acceptance and conscious presence, as well as relating to the things that they could influence in that situation. The support was also aimed at helping the medical staff to handle their feelings of powerlessness and helplessness in relation to their work, and to be able to cope with not having better methods of helping all the dying patients, as well as to learn to practice self-compassion in that difficult situation.

2.2 Unburdening and stabilizing

According to several participants, important parts of the counseling sessions were to help the medical staff sort through events and impressions to create order and to handle what was happening around them. Many of them highlighted the importance of acknowledging feelings and making the healthcare staff feel validated, seen, and understood. They also stressed the importance of normalizing different ways of handling crisis and stress reactions.

Further highlighted as an important intervention was providing help to self-help. Through encouraging self-care and self-helping strategies, plus utilizing the social support of their natural networks, the healthcare staff's own ability to handle the situation and recuperate could be strengthened.

It is more a case of validating, verbalizing, normalizing, and helping everyone to sort their experiences, and doing it even if it is only a small part of your reality that you can influence. Not ending up in front of Netflix as soon as you get home, but doing things that make you feel better. (Respondent H, site 2)

2.3 Reflection and motivation

Group counseling sessions were used to reflect upon the work shift of each day and for gathering the experiences and reflections from the group. It also became a way of feeling a sense of community and pride in the things that worked well, which seemed to strengthen the staff's stamina and motivation.

Group reflection sessions were held, for example at the end of the workday, to see how the day had been. /.../ There was a lot of focus on /.../ after action review. "What did you do? What has gone well? What are you proud of? What have you learned? What could be improved?" (Respondent F, site 5)

Several participants highlighted the group's ability to find new motivating factors for the work together, even though the situation was difficult. Group counseling sessions could strengthen the group through uniting the staff. Some participants said that this could replace previous motivators that under the prevalent strenuous situation no longer could be relied on for finding work satisfaction.

In some way, we managed to change this perspective several times from not being enjoyable but having many other aspects that you can replace that enjoyment with. That is, what I do is meaningful, it is important and valuable, both to the healthcare system, the patients, to society at large, and to me individually. /.../ and when those values could guide the work, that was empowering. (Respondent G, site 4)

2.4 Supporting stamina

One important aim of the crisis support was to strengthen the stamina of the health-care staff. Part of this revolved around helping the staff to find ways of maintaining previously well-functioning individual coping strategies. One participant said that this did not only strengthen the staff's ability to take care of themselves, but also, above all, increased their confidence in their own ability for endurance and feeling capable.

There is a great model called the energy wheel /.../ it is drawn just like a bicycle wheel, and the more spokes you have, the more energy the wheel generates. /.../ In addition to that, giving very practical advice and tips for recuperation, to really stress the importance of spending the time not spent at work resting and doing things they really enjoy and find restful, and not be with people they can't truly be themselves with, to choose carefully who they spend time with in their free time. (Respondent E, site 3)

Something a way of strengthening endurance was to help the healthcare staff to maintain their motivation for their work, as motivation and stamina were regarded as closely interlinked. It could not only be individual motivators unique to each staff member, but also motivating factors from the sense of community with their co-workers in their important joint work that helped to increase their stamina.

... was much more a case of some sort of stamina and seeing, "Where are my resources? What do we have that is working?" To work with an appreciative mindset. To see, "What gives me energy?" But also, to identify what I can influence or not. /.../ Many such conversations, sorting through things. /.../ So, they would feel supported in finding their own strength. (Respondent F, site 5)

2.5 Learning and retrospection

Several participants described that the conversations toward the end of the pandemic often involved reflections over and retrospection on the pandemic, the changes in their work brought on by it, and what lessons had been learned from it, both on an individual, working group, and organizational level.

At that time, it was like we were looking back for comparison and bringing some kind of closure. /.../ What kind of feelings remained and how could we handle things if it were to occur again? And what have we learned from this? Lessons learned, so to speak. (Respondent H, site 2)

3. Internal perspective

The crisis managers described an internal perspective (i.e., crisis managers own experience and wellbeing) in the sense of how the pandemic affected them themselves.



3.1 Handling lack of structure

Several participants highlighted the need for a clear structure, as well as guidelines and parameters for their assignment. Some wanted a clearer day-to-day planning and follow-up of the assignment, as well as more clarified roles and mandates, while others mentioned that the lack of predetermined roles had led to some friction among the staff.

Who is in charge here? Who has the mandate to do what? /.../ We need to establish some guidelines, formulate a structure, and clarify the roles /.../ (Respondent A, site 2)

Several participants mentioned different crisis managers' view on the need for a pre-determined structure, while some said that a crisis intervention assignment requires an ability to tolerate, being able to handle, and even enjoy working without any predetermined structure, and that being flexible and having a high tolerance for uncertainty is closely associated with the suitability for the assignment in a crisis manager.

Sometimes you find yourself in a warehouse, dealing with a debrief conversation squeezed in between two shelves, and you must find that /.../ I wouldn't say fun, but you must be comfortable in that setting. (Respondent C, site 5)

Participants described that crisis support work practically always is initiated not knowing what the needs and the structure will end up looking like. One participant also thought that the context in this case was so unique that nobody could have anticipated what kind of structure would be needed, and that an exploratory way of working was a necessity in such an unprecedented situation.

This kind of intervention demands more flexibility, not basing the work on pre-existing templates or knowing exactly what to do, but to approach it with a high level of curiosity, responsiveness, and adaptability to the situation. (Respondent D, site 3)

3.2 Being a part of the crisis yourself

Several participants highlighted the aspect of being a part of the crisis themselves, at the same time as they were providing crisis support for staff in the healthcare system. They claimed that this was yet another dimension making this assignment different compared to other crisis support assignments, where their counterparts are normally more clearly affected, whereas the crisis managers themselves are not personally affected by the crisis in question.

If I come into a workplace where someone has been killed in an accident, I go there and meet the group without being a part of the situation myself. In this case I am a part of it, and my family as well. (Respondent I, site 1)

The participants described personally experiencing similar reactions as the healthcare professionals they met, that they at the beginning of the pandemic were afraid of becoming infected and carrying the contagion home to their families, but at the same time

their assignment felt so important and meaningful that they still wanted to continue with it.

We have sought each other out and talked a lot among ourselves, some of us. I have made sure that I receive my own guidance from outside, and I make sure that I am getting the support I need to have the strength to keep doing this. (Respondent B, site 1)

3.3 Science, knowledge, or personal traits

Some focused on their own ability to be present in the moment and to listen with empathy as important elements, whereas some emphasized the importance of staying calm and listening to the reactions of their own bodies. The ability to use yourself as a tool was described both as an acquired skill that they had gained as a result of their education and training for their profession as well as from previous crisis support assignments, but also as an ability related to their personalities.

Being present and sincere, as well as being curious and really wanting to know what it was like for them /.../ those have been important, valuable conversations where they have been able to reflect upon themselves and the situation they were facing. (Respondent E, site 3)

Most of the participants found it difficult to describe which scientific basis or which specific theory they based their crisis support work on. Instead, they regularly referred to various approaches or personal abilities in a crisis manager that were regarded as important for successful crisis support.

The sense of security must be in the subject, not in a nameplate with a title or in a toolkit. It must lie in the subject. (Respondent F, site 5)

Discussion

1. External areas for support

The situation during the pandemic and how it would end up affecting the healthcare staff was unknown to everyone and it was impossible to fully predict what kinds of crisis support methods would prove to be efficient and helpful in that specific context. It was very clear from this present study that an exploratory way of working was needed to reach the staff with a form of support they would find helpful. Their way of working developed gradually and was adapted throughout as the pandemic progressed. It is evident from previous studies as well (e.g., Chen et al. 2020; Lefèvre et al. 2021; Malik et al. 2021; Wei et al. 2020) that this kind of work involved searching for suitable methods to provide the healthcare staff with the support they needed to be able to carry out their demanding work and avoid being traumatized or developing mental health issues. This seemed to result in a wide variety of diverse efforts mentioned in the research. However, more detailed accounts of how these support measures were implemented and carried out were very scarce.



The results showed a perceived challenge in reaching the healthcare staff with the crisis support efforts as a result of their ambivalent approach to receiving psychological support. The fact that healthcare professionals seem to have a substantial resistance against seeking psychological support has also been confirmed in previous research by, among others, for example, Cantu and Listy (2020) and Wei et al. (2020). Their studies also showed very low rates of using the support available, despite the prevalence of symptoms of mental health problems among the healthcare staff. The results also showed how this hesitation toward accepting support among the healthcare staff gave rise to several adaptations of the work processes among the crisis managers. Among other things, the physical presence on site and the accessibility over time was increased, as that was a prerequisite for establishing trust, building relationships, and making themselves known and accepted in the units. This result can be equaled to the study by Malik et al. (2021), where the healthcare professionals' hesitation toward receiving support also led to an adaptation in the form of precisely the same, that is, increased presence and accessibility, which in turn led to an increase in the motivation to receive support as well as an increased trust in it.

Something that was also emphasized as crucial for reaching the healthcare staff with the work was to be able to offer different forms of support, as well as various ways of finding it, to meet varying needs at different stages during the pandemic. The results from several previous studies have also highlighted the importance of individual adaptations and having different options available to increase the motivation to seek help. For example, Shechter et al. (2020), Cao et al. (2020), Santarone et al. (2020), among others, have shown that coping strategies and perceived support needs differed, and because of that, it was important to be able to influence the type of support received based on each individual's perceived needs. Something else that became evident was the perception of having an increased need for professional crisis support because of the decreased social support in people's private lives, paired with the increased workload. This result was echoed by a study by Frias et al. (2020) as well. In the case of possible prolonged societal crises in the future, it might be important to pay attention to a point in time when the social support decreases while the workload increases.

This leads us to another result, which indicated the importance of group discussions; to increase the collegial support in times of restrictions on peoples' private social lives and to create an understanding community to provide relief and support, to increase work motivation and to make the most of the common learning in a crisis situation. According to Powley (2009), the perceived ability to handle crisis, that is, resilience, increased through group counselling sessions. In a study by Walton et al. (2020), the importance of collegial support was also highlighted as one of several factors that could increase resilience among the staff. According to Powley (2009), the learning and development gained from a crisis may lead to improved readiness for future crises, and the study by Wang et al. (2021) pointed to a possible risk for increased emotional exhaustion by sharing one's experiences in a group. That kind of risk was, however, never mentioned in the present study.

Considering the research (Luceño-Moreno et al. 2020) on how different groups of staff seemed to be affected in different ways during the pandemic depending on their professional roles, gender, and family situation, different kinds of groups might also need different kinds of targeted support. The present study does not investigate closer how the crisis support was adapted to specific individual needs. These could be important

factors to take into consideration in future similar situations and to investigate in more specific research studies.

Another area highlighted in the study was the symbolic and culture-changing power of crisis support efforts. It could both be seen as a signal that the management and the organization itself valued it and acknowledged the needs of the staff as well as their important contributions in the face of a societal crisis, but also seemed to achieve a shift in the overall culture. Through the perceived dispersion effect of the crisis support, people dared to tell their colleagues about seeking support for themselves, the attitude towards seeking crisis support seemed to change. This could indicate a certain level of culture change overall. The results cannot say anything about either the current prevalent culture in the healthcare system or the long-term effect of the extended crisis support efforts.

2. External focus areas

Considering both the results from this study and previous research, group counseling sessions overall seem to be a powerful intervention that could increase the resilience and improve the prerequisites to handle an extended crisis for employees in the healthcare system. However, there will always be the need for an assessment of group counselling on a case-to-case basis, focusing on the resulting dynamics and whether this could lead to an increased workload for the members of the group. According to the results, crisis support seemed to be of great importance and fulfil several different functions for the healthcare professionals. This is something that can also be seen in previous research and can be compared to, for example, the studies by Digby et al. (2021) and by Walton et al. (2020), which focused on the psychological support for medical staff as one of several important factors for reducing the risk of mental health problems, increasing resilience.

One thing that was regarded as a central aspect of the crisis support, was strengthening the perception of being able to master the situation and increasing their sense of self-sufficiency, for example, through activating adaptive coping strategies. This has also been confirmed by previous research. Gillberg et al. (2023) and Maunder et al. (2021), among others, have highlighted the perception of self-sufficiency or self-efficacy as an important factor for reducing the risk of mental health problems. The results from this study also emphasized the importance of crisis support for recuperation, sustainability, and stamina among the staff, and how the crisis support was focused on increasing the resilience of the staff.

The results highlight manager support as an important part of the crisis support, where managers needed support both as individuals, just like any other member of staff in the healthcare system, as well as in their roles as managers. The stress on the managers increased significantly during the pandemic due to major organizational challenges paired with a strained staff situation. The importance of managerial support has also been confirmed by previous research, where several studies have pointed out the importance of having good leadership in times of crisis. Among others, Juvet et al. (2021) have highlighted the possibilities of increasing the resilience and adaptability among both the individual members of staff and the organization as a whole through increasing the support available for managers, and in doing so improving their problem-solving and

communication skills. Walton et al. (2020) point out a humble and humane leadership style with strong communication skills as important factors having a positive effect on the resilience of both individuals and the organization. Another aspect that became evident was the effect of the leadership on the ethical climate. The healthcare system had to face some very ethically difficult decisions during the pandemic. According to Azoulay et al. (2020), the pandemic meant a massive increase in ethically difficult decisions, where unethical decision-making and a worsened ethical climate was intimately connected to mental health issues among healthcare professionals. This further puts the focus on the importance of good leadership in a crisis and therefore also on the support offered to managers, who are facing difficult ethical decisions affecting the organization. Through providing managers with the right kind of support during extended crisis periods, it is highly likely that the ethical climate, and therefore also the work situation and health of the healthcare professionals, could be influenced in a positive way.

An additional aspect was the importance of collaboration between the crisis managers and other managers, among other things as a way of identifying members of staff in need of additional support and treatment to avoid developing chronic issues. Previous studies have shown increased mental health issues among healthcare professionals during the pandemic (e.g., Björk et al. 2023; Veje et al. 2023; Zhang et al. 2020; Zhou et al. 2020). A study by Malik et al. (2021) described how vulnerable members of staff were identified precisely in collaboration with their managers to be able to offer them extra support. It is therefore not unreasonable to think that close cooperation between crisis managers and regular managers, as well as efficient manager support, should be prioritized measures during a lengthy crisis, as these measures could improve the organizational work environment, facilitate identifying members of staff who risk developing chronic issues, as well as securing the sustainability of the managers in a very demanding situation.

Regarding the theme concerning structure, and the lack of structure, it is not entirely unthinkable that frustration and a sense of powerlessness among the healthcare staff also affected the perception of the situation and their own assignment among the crisis managers. In such a long-term crisis as the pandemic, it is possible that one important aspect is ensuring continuous guidance for the crisis managers themselves, to facilitate their own reflections concerning possible parallel processes.

3 Internal perspective

The results highlighted the theme of seeing the self as an important tool for crisis management. This included both knowledge and skills acquired through education and training, as well as something connected to each person's own personality in the form of personality traits that were important prerequisites for the assignment. In parallel with emphasizing the importance of using the self as a tool, the scientific methods used seemed difficult to grasp and challenging to recount and refer to for the crisis managers. Even in previous research on support measures during the pandemic very little was disclosed about which scientific methods constituted the basis for various support measures. In some cases, references were made to efforts such as support groups, psychiatric long-term support, crisis support, etc. (e.g., Ripp et al. 2020), however, relatively little was disclosed about which theories or scientific methods these efforts were based on. In another study by

Malik et al. (2021), the term ‘psychological first aid’ was used, but any more detailed description concerning how this was applied was not provided. Other studies described how psychological support by phone was provided (Chen et al. 2020; Kang et al. 2020; Wei et al. 2020), and how webinars on different themes, as well as online courses and group activities to reduce stress were offered (Chen et al. 2020). However, no further information about the scientific method behind these measures was given either, or any detailed description of their execution, adaptation, or implementation.

A slightly more detailed description was provided by Presti et al. (2020), who referred to several evidence-based, stress-reducing interventions being used to support the healthcare staff. Among these measures were things such as providing information about self-care, mindfulness exercises, mindfulness-based psychoeducational materials, and psychological support through a phone line manned by psychotherapists were described, as well as outreach support activities aimed at healthcare staff in positions of responsibility, plus group interventions and debriefing support for intensive care units. Such interventions can also be found in the results from the present study, in the accounts from the different participants. However, the fact remains that the scientific basis or theory behind the support measures is difficult for the participants to recount. The question is whether this relatively unexplored context of support for healthcare professionals during a pandemic necessitates a pragmatic way of working in the form of a continuous exploration and testing of methods as well as the use of oneself as a tool. As there is not enough research and proven experience to rely on when choosing methods and ways of working, it could be the case that a pragmatic approach and an explorative way of working must fill that void, and that crisis managers must base their methods on general knowledge about crisis management and on proven experience from similar situations. In this area, there is a great need for further research, above all concerning the choice of methods and the actual effect of those methods.

The theme of using the self as a tool leads us to the question about suitable knowledge and personality traits for being a crisis manager, as well as the assessment of which crisis managers might be suitable for similar assignments, which is an aspect that was raised by several participants. What kind of qualifications are most suitable for similar assignments in a long-term crisis? Skills and experiences that were emphasized were the ability to perform a highly qualified psychological assessment to be able to identify individuals in need of support, to assess their mental status, and refer them to the correct entity, which can be presumed to be more closely connected to their profession and formal qualifications than to their personal traits. Other qualifications mentioned had to do with experience from and knowledge about crisis management, managerial support, as well as psychological first aid and having experience from previous occupational crises, which seems to be more connected to their education or previous work experience. Overall, from previous research, very little was evident about how the recruitment of certain staff for similar assignments had been conducted or what had been the deciding factor for choosing certain professions over others. The question regarding what formal qualifications and prior learning that are needed for similar assignments will be important to assess for future long-term crisis situations.

One special aspect of crisis management during the pandemic was that the crisis managers themselves were a part of the ongoing crisis too, with everything that entailed in the form of fear of contagion, worrying about relatives, and maintaining social distancing. To listen to difficult stories from the healthcare professionals daily at the same

time must have affected the crisis managers as well. For some, this seemed to constitute a substantial stress factor, whereas for others, it might have touched them, but still did not seem to affect their work to any greater extent. The importance of securing enough support for the crisis managers too seems crucial in future similar situations, as it could influence both their own wellbeing and their work performance when fulfilling their task, as well as the ability to be able to handle it for an extended period of time.

Method discussion

Considering that the purpose was to gain as broad an understanding as possible of the crisis managers' impressions and experiences on the topic of their way of working and their adaptations to a unique situation, a qualitative and exploratory research approach was decided on (Braun & Clarke 2006, 2021). The qualitative approach can provide a broader kind of knowledge which then can form the basis for further quantitative generalizable research focusing on specific parts of the subject matter. For this purpose, semi-structured interviews were best suited. According to Bryman (2018), a semi-structured interview provides the possibility to get a broad, overarching picture, at the same time as you can dive deeper into important focus areas. The exploratory and qualitative approach is regarded as having worked suitably well on the whole. The study provided a more in-depth understanding and a widened picture of crisis support for healthcare professionals during an extended period of crisis. Follow-up interviews could also possibly have provided a deeper understanding of the issue, as they would have given the crisis managers an opportunity to think more in detail about their ways of working, impressions, and experiences.

Analytical method

To thematize the interviews, a thematic analysis process was decided on, as this analytical method according to Braun and Clarke (2006, 2021) provides the possibility of exploring the subject area as widely and as deeply as is deemed relevant from the interview material based on the research question. To explore the material with an open mind and be able to focus on each individual participant's experience, an inductive thematic analysis was considered to provide a better basis than a stricter approach of applying line-by-line coding. Because the analytical process was not based on any predetermined framework or theoretical approach, an inductive analytical method was preferred over a deductive one (Braun & Clarke 2021). The analysis was also not based on any predetermined themes, which made a thematic analysis more suitable than a content-based one.

Perspective consciousness

To ensure that all the themes were clearly anchored in the textual content, the authors repeatedly returned to the transcriptions of the original materials. The authors' own knowledge, both being psychologists and based on previous work involving crisis support, might of course have influenced the focus of the analysis and the choice of

important themes and hindered a more open analysis disconnected from presuppositions. At the same time, the understanding of the authors can also be an advantage, as this might bring a deeper understanding of the perspectives of the participants.

Generalizability

The study is considered to provide valuable insights about crisis support in five Swedish hospitals in the specific context that it focused on. However, it might be difficult to draw any general conclusions based on the results. The study included 10 crisis managers who all worked for one and the same organization, which could influence their views on the crisis support assignment. At the same time, the selection of interviewees is relatively heterogeneous, as it includes participants from different kinds of occupational categories and with varying backgrounds, which very likely can make their approach to crisis support as well as their choice of methods quite diversified. The crisis support was implemented in one Swedish region, but in five different emergency hospitals, that individually are surely characterized by their own organizational culture affecting both the need for support among the healthcare staff, as well as the implementation and adaptation of the crisis support provided. Each participant also worked with various degrees of frequency in their respective assignments. This is a difference that might also have influenced their experiences of the assignment and their application of different methods. Since the selection of participants only included 10 respondents, it is not possible to discern any tendencies based on the assignment frequency or make any kinds of conclusions about whether this might have affected the results. The participants also staffed different hospitals in various constellations, and their internal collaborations may also have influenced their views on the crisis support efforts.

Despite all of the above, the results from the present study should still be able to provide some important information and in some part be possible to generalize for similar situations in the Swedish healthcare system in the event of future long-term crises, and as a consequence be able to provide ideas for different ways of implementing crisis support. This study should also be useful as a basis for more in-depth, generalizable research in future.

Conclusion

The aim of this study was to gain knowledge about the work of crisis managers in healthcare during the COVID-19 pandemic. The analysis showed that an exploratory approach was required to be able to reach the healthcare staff, who were perceived as a target group that was difficult to reach, but still one that had great needs of support. An individualized, flexible, and adaptive approach to the crisis support work was perceived to increase the possibilities to reach the goal group with adequate support measures. Actively reaching out, as well as being physically present alongside the staff, was highlighted as being of special importance. The support was adapted to meet the needs at different levels within the organization and for different staff groups, whose needs in many cases could be similar, but also disparate, and which above all changed continuously as the crisis progressed. The results also demonstrated the crisis managers' different kinds



of need for a clear structure for the assignment, where clear guidance was essential. The self was an important tool for the crisis management task, where both formal as well as informal qualifications, along with personal traits, were of great importance. Because the societal crisis affected everyone, the crisis managers were also at times in need of support for themselves to various extents, during the extended crisis that the pandemic constituted.

Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

References

- Azoulay, E., De Waele, J., Ferrer, R., Staudinger, T., Borkowska, M., Pova, P., Iliopoulou, K., Artigas, A., Schaller, S., Har, M., Pellegrini, M., Darmon, M., Kesecioglu, J., & Cecconi, M. (2020). Symptoms of burnout in intensive care unit specialists facing the COVID-19 outbreak. *Annals of Intensive Care*, 10(1), 110. <https://doi.org/10.1186/s13613-020-00722-3>
- Björk, L., Corin, L., Åkerström, M., Jonsdottir, I., Innocenti, A., Wijk, H., & Åhlström, L. (2023). Under pressure – The working situation of Swedish healthcare managers during the first wave of COVID-19. *Frontiers In Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1052382>
- Braun, V., & Clarke, V. (2021). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches. *Counselling and Psychotherapy Research*, 21(1), 37–47. <https://doi.org/10.1002/capr.12360>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bryman, A., & Nilsson, B. (2018). *Social Science Methods* (7th ed.). Liber. ISBN 9789147090686
- Bundy, J., Pfarrer, M. D., Short, C. E., & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. *Journal of Management*, 43(6), 1661–1692. <https://doi.org/10.1177/0149206316680030>
- Campo-Arias, A., Jiménez-Villamizar, M. P., & Caballero-Domínguez, C. C. (2021). Healthcare workers' distress and perceived discrimination related to Covid-19 in Colombia. *Nursing & Health Sciences*, 23(3), 763–767. <https://doi.org/10.1111/nhs.12854>
- Cantu, L., & Listy, L. (2020). Baseline well-being, perceptions of critical incidents, and openness to debriefing in community hospital emergency department clinical staff before Covid-19, a cross-sectional study. *BMC Emergency Medicine*, 20(1), 82–88. <https://doi.org/10.1186/s12873-020-00372-5>
- Cao, J., Wei, J., Zhu, H., Duan, Y., Geng, W., Hong, X., & Zhu, B. (2020). A study of basic needs and psychological wellbeing of medical workers in the fever clinic of a tertiary general hospital in Beijing during the Covid-19 outbreak. *Psychotherapy and Psychosomatics*, 89(4), 252–254. <https://doi.org/10.1159/000507453>
- Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., He, L., Sheng, C., Cai, Y., Li, X., Wang, J., & Zhang, Z. (2020). Mental health care for medical staff in China during the Covid-19 outbreak. *The Lancet Psychiatry*, 7(4), 15–16. [https://doi.org/10.1016/S2215-0366\(20\)30078-X](https://doi.org/10.1016/S2215-0366(20)30078-X)

- Digby, R., Winton-Brown, T., Finlayson, F., Dobson, H., & Bucknall, T. (2021). Hospital staff well-being during the first wave of Covid-19: Staff perspectives. *International Journal of Mental Health Nursing*, 30(2), 440–450. <https://doi.org/10.1111/inm.12804>
- Foster, K. (2020). Resilience in the face of adversity: A shared responsibility. *International Journal of Mental Health Nursing*, 29(1), 3–4. <https://doi.org/10.1111/inm.12688>
- Frias, C., Cuzco, C., Frias Martin, C., Perez-Ortega, S., Trivino Lopez, J., & Lombrana, M. (2020). Resilience and emotional support in health care professionals during the Covid-19 pandemic. *Journal of Psychosocial Nursing and Mental Health Services*, 58(6), 5–6. <https://doi.org/10.3928/02793695-20200506-02>
- Gadolin, C., Skyvell Nilsson, M., Larsman, P., Pousette, A., & Törner, M. (2022). Managing health care under heavy stress: Effects of the COVID-19 pandemic on care unit managers' ability to support the nurses—A mixed-methods approach. *Journal of Nursing Management*, 30(8). <https://doi.org/10.1111/jonm.13857>
- Gillberg, N., Ahlstrom, L., Erichsen Andersson, A., Fallman, S., Degl'Innocenti, A., Jonsdottir, I., Wijk, H., & Wikström, E. (2023). Resilience capability and capacity in unexpected crises: Experiences and lessons learned in a healthcare organisation during the COVID-19 pandemic. *Journal of Nursing Management*, 1–10. <https://doi.org/10.1155/2023/6418267>
- Juvet, T., Corbaz-Kurth, S., Roos, P., Benzakour, L., Cereghetti, S., Moullec, G., Suard, J., Vieux, L., Wozniak, H., Pralong, J., & Weissbrodt, R. (2021). Adapting to the unexpected: Problematic work situations and resilience strategies in healthcare institutions during the COVID-19 pandemic's first wave. *Safety Science*, 139, 105277. <https://doi.org/10.1016/j.ssci.2021.105277>
- Kang, L., Li, Y., Hu, S., Chen, M., Yang, C., Yang, B., Wang, Y., Hu, J., Lai, J., Ma, X., Chen, J., Guan, L., Wang, G., Ma, H., & Liu, Z. (2020). The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. *The Lancet Psychiatry*, 7(3), 14. [https://doi.org/10.1016/S2215-0366\(20\)30047-X](https://doi.org/10.1016/S2215-0366(20)30047-X)
- Kim, S., Shin, D., Oh, K., Kim, E., Park, Y., Shin, Y., & Lim, S. (2018). Gender differences occupational stress associated with suicidal ideation among South Korean employees: The Kangbuk Samsung Health Study. *Psychiatry Investigation*, 15(2), 156–163. <https://doi.org/10.30773/pi.2017.05.31.1>
- Klawitter, M. (2021). Pandemic related crisis support 2020–2021. *Falck Healthcare's Customer Report*. Stockholm.
- Lefèvre, H., Stheneur, C., Cardin, C., Fourcade, L., Fourmaux, C., Tordjman, E., Touati, M., Voisard, F., Minassian, S., Chaste, P., Moro, M., & Lachal, J. (2021). The Bulle: Support and prevention of psychological decompensation of health care workers during the trauma of the Covid-19 epidemic. *Journal of Pain and Symptom Management*, 61(2), 416–422. <https://doi.org/10.1016/j.jpainsymman.2020.09.023>
- Luceño-Moreno, L., Talavera-Velasco, B., García-Albuérne, Y., & Martín-García, J. (2020). Symptoms of posttraumatic stress, anxiety, depression, levels of resilience and burnout in Spanish health personnel during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 17(15), 5514. <https://doi.org/10.3390/ijerph17155514>
- Malik, M., Peirce, J., Van Wert, M., Wood, C., Burhanullah, H., & Swartz, K. (2021). Psychological first aid well-being support rounds for frontline healthcare workers during Covid-19. *Frontiers in Psychiatry*, 12. <https://doi.org/10.3389/fpsy.2021.669009>
- Manzano, G., & Calvo, J. (2021). The threat of Covid-19 and its influence on nursing staff burnout. *Journal of Advanced Nursing*, 77(2), 832–844. <https://doi.org/10.1111/jan.14642>
- Maunder, R., Heeney, N., Kiss, A., Hunter, J., Jeffs, L., Ginty, L., Johnstone, J., Loftus, C., & Wiesenfeld, L. (2021). Psychological impact of the COVID-19 pandemic on hospital workers over time: Relationship to occupational role, living with children and elders, and



- modifiable factors. *General Hospital Psychiatry*, 71, 88–94. <https://doi.org/10.1016/j.genhosppsych.2021.04.012>
- Powley, E. (2009). Reclaiming resilience and safety. *Human Relations*, 62(9), 1289–1326. <https://doi.org/10.1177/0018726709334881>
- Presti, G., Dal Lago, B., Fattori, A., Mioli, G., Moderato, P., Sciarretta, L., & Costantino, M. (2020). Mental health support to staff in a major hospital in Milan (Italy) during the Covid-19 pandemic: A framework of actions. *General Psychiatry*, 33(4). <https://doi.org/10.1136/gpsych-2020-100244>
- Ripp, J., Peccoraro, L., & Charney, D. (2020). Attending to the emotional well-being of the health care workforce in a New York City health system during the Covid-19 pandemic. *Academic Medicine*, 95(8), 1136–1139. <https://doi.org/10.1097/ACM.0000000000003414>
- Rodriguez-Vega, B., Palao, A., Munoz-SanJose, A., Torrijos, M., Aguirre, P., Fernandez, A., Amandor, B., Rocamora, C., Blanco, L., Marti-Esquitino, J., Ortiz-Villalobos, A., Alonso-Sanudo, M., Cebolla, S., Curto, J., Villanueva, R., De-la-Iglesia, M., Carracedo, D., Casado, C., Vidal, E., Trigo, D., Iglesias, N., Cabanas, D., Mellado, L., Garcia, D., Frenandez-Encinas, C., Navarro, R., Mediavilla, R., Vidal-Villegas, M., Bravo-Ortiz, M., & Bayon, C. (2020). Implementation of a mindfulness-based crisis intervention for frontline healthcare workers during the Covid-19 outbreak in a public general hospital in Madrid, Spain. *Frontiers in Psychiatry*, 11, 562578. <https://doi.org/10.3389/fpsyt.2020.562578>
- Santarone, K., McKenney, M., & Elkbuli, A. (2020). Preserving mental health and resilience in frontline healthcare workers during COVID-19. *The American Journal of Emergency Medicine*, 38(7), 1530–1531. <https://doi.org/10.1016/j.ajem.2020.04.030>
- Shechter, A., Diaz, F., Moise, N., Anstey, D., Ye, S., Agarwal, S., Birk, J., Brodie, D., Connone, D., Chang, B., Claassen, J., Cornelius, T., Derby, L., Dong, M., Ficens, R., Hochman, B., Homma, S., Kronish, I., Lee, S., Manzano, W., Mayer, L., Laurel, EMcMurry., Moitra, V., Pham, P., Rabbani, L., Rivera, R., Schwartz, A., Schwarz, J., Shapiro, P., Shaw, K., Sullivan, A., Vose, C., Wasson, L., Edmondson, D., & Abdalla, M. (2020). Psychological distress, coping behaviors, and preferences for support among New York healthcare workers during the Covid-19 pandemic. *General Hospital Psychiatry*, 66, 1–8. <https://doi.org/10.1016/j.genhosppsych.2020.06.007>
- Swedish Ethical Review Authority (2024). *About the Authority*. 2024-02-02 <https://etik-provningsmyndigheten.se/en/about-the-authority/>
- Veje, M., Linden, K., Sengpiel, V., Carlsson, Y., Jonsdottir, I., Degl’Innocenti, A., Ahlstrom, L., Wijk, H., & Åkerström, M. (2023). Working conditions for healthcare workers at a Swedish University Hospital Infectious Disease Department during the COVID-19 pandemic: barriers and facilitators to maintaining employee wellbeing. *Frontiers In Psychology*, (14). <https://doi.org/10.3389/fpsyg.2023.1183084>
- Walton, M., Murray, E., & Christian, M. (2020). Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. *European Heart Journal: Acute Cardiovascular Care*, 9(3), 241–247. <https://doi.org/10.1177/2048872620922795>
- Wang, H., Zhou, X., Jia, X., Song, C., Luo, X., Zhang, H., Wu, H., & Ye, J. (2021). Emotional exhaustion in front-line healthcare workers during the Covid-19 pandemic in Wuhan, China: The effects of time pressure, social sharing and cognitive appraisal. *BMC Public Health*, 21(1), 829. <https://doi.org/10.1186/s12889-021-10891-w>
- Wei, E., Segall, J., Villanueva, Y., Dang, L., Gasca, V., Gonzalez, M., Roman, M., Mendez-Justiniano, I., Cohen, A., & Cho, H. (2020). Coping with trauma, celebrating life: Reinventing patient and staff support during the Covid-19 pandemic. *Health Affairs Web Exclusive*, 39(9), 1597. <https://doi.org/10.1377/hlthaff.2020.00929>
- Zhang, W., Wang, K., Yin, L., Zhao, W., Xue, Q., Peng, M., Min, B., Tian, Q., Leng, H., Du, J., Chan, H., Yang, Y., Li, W., Shanguan, F., Yan, T., Dong, H., Han, Y., Wang, Y., Cosci, F.,

- & Wang, H. (2020). Mental health and psychosocial problems of medical health workers during the Covid-19 epidemic in China. *Psychotherapy and Psychosomatics*, 89(4), 242–250. <https://doi.org/10.1159/000507639>
- Zhou, Y., Wang, W., Sun, Y., Qian, W., Liu, Z., Wang, R., Qi, L., Yang, J., Song, X., Zhou, X., Zeng, L., Liu, T., Li, Z., & Zhang, X. (2020). The prevalence and risk factors of psychological disturbances of frontline medical staff in China under the Covid-19 epidemic: Workload should be concerned. *Journal of Affective Disorders*, 277, 510–514. <https://doi.org/10.1016/j.jad.2020.08.059>