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FRESH FOCUS

COVID-19 Epidemic Peer Support and Crisis Intervention Via Social Media

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Abstract

This article describes a peer support project developed and carried out by a group of experienced mental health professionals, organized to offer peer psychological support from overseas to healthcare professionals on the frontline of the COVID-19 outbreak in Wuhan, China. This pandemic extremely challenged the existing health care systems and caused severe mental distress to frontline healthcare workers. The authors describe the infrastructure of the team and a novel model of peer support and crisis intervention that utilized a popular social media application on smartphone. Such a model for intervention that can be used elsewhere in the face of current global pandemic, or future disaster response.

Keywords COVID · Social media · Smart phone · Crisis intervention · Healthcare personnel · Peer support · Mental health · Emotional stage

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Introduction

China was the first country hit by the COVID-19 pandemic. The currently known first reported case was recorded on Dec 8, 2019. It was not officially announced as a human-to-human transmitted disease by the Chinese government until Jan 20, 2020. Prior to that, many local physicians noticed a new kind of pneumonia caused by an unknown pathogen and Ai Fen, known as the "whistle distributor", initiated the reporting procedure to the local contagious disease control agents. Other physicians, including the soon to be well-known whistle-blower, Dr. Li Wenliang, posted their concerns about SARS-like cases on WeChat, a Chinese social media and messaging application, but received administrative warnings and were summoned by local police. On Feb 7, 2020, Dr. Li WenLiang died from COVID-19 pneumonia. It has been reported that more than 3300 healthcare professionals contracted the Coronavirus while on duty, including at least 13 of them who lost their lives (https://www.businessinsider.com/healthcare-workers-getting-coronavirus-500-infected-2020-2). In addition, many more healthcare professionals have faced intense stressors leading to mental health crises.

Wuhan is the major transit hub of China. Two days before the traditional Chinese New Year Lunar Spring Festival on Jan 25 2020, when millions were traveling in the "biggest human migration on our planet," the entire city with a population of 11 million was suddenly closed down. As a result of the lack of systematic crisis response infrastructure, information transparency, and clear guidelines, the remaining nine million people in Wuhan fell into a chaotic panic. Tens of thousands of people flooded into the local hospitals requiring acute health care and the local health system was overloaded to the edge of breakdown. Frontline health care workers faced this crisis with inadequate resources.

At this point, a group of Chinese speaking mental health professionals from the USA, Canada and Australia assembled a team to provide peer-to-peer psychological support for the Wuhan healthcare professionals who were fighting at the front line of this epidemic crisis. We recognized the urgent need to provide crisis psychological support and intervention for the frontline medical care providers. Hence this project was initiated immediately.

Project Description

Infrastructure and Organization

1. The first tier of volunteers started to communicate informally within their social circles using online networks. On Jan 23, 2020, a group of professionals formed a team whose mission was to help Chinese healthcare workers who were fighting the Coronavirus pandemic on the frontline.
2. An early leading member quickly built a group on WeChat. The team grew quickly and the project began operation on Jan 24, 2020, the day after Wuhan was placed on lockdown.
3. Further recruitment continued using the following criteria:

    (a) Licensed Mental Health Professionals or qualified preliminarily licensed professionals
    (b) Training and experience in CBT (Cognitive Behavioral Therapy), MI (Motivational Interviewing), and/or Crisis Intervention

4. A model of interdisciplinary team was established, while the scope is defined as short term peer support
5. Members signed up for shifts based on their own availability.
6. Soon after the initiation of operation, the members elected a five-person committee to oversee daily administration issues in a timely manner.
7. The volunteer group integrated professionals from different mental health disciplines based on the belief that their work would be more effective with diversified clinical experiences and trainings. This was derived from experiences from inpatient interdisciplinary team and ACT model.
8. The group eventually included a total of 45 members, which included psychiatrists, psychologists, Licensed Clinical Social Workers (LCSW), Licensed Professional Counselors (LPC), Licensed Mental Health Counselors (LMHC) and Registered Nurses (RN). The majority of our members were located in the US, with several from Canada and Australia. One member was located in Wuhan.

Work Environment, Guidelines, Platform, Operation, and Limitations

In consideration of the Chinese political environment and the safety of the front-line medical personnel in Wuhan, we maintained strict political neutrality and restricted or minimized sensitive political topics in our discussions. This was a grassroots independent project. We were not affiliated with any official or unofficial organization. We were aware of Chinese official licensure regulations and the possibility of being monitored by Tencent, a Chinese company who owns WeChat.

Guidelines

1. Do no harm
2. Keep strict confidentiality as dictated by professional licenses
3. Strictly confine our work to peer-to-peer support
4. Following crisis intervention principles, provide only short-term crisis support and interventions rather than long-term therapy
5. No conflict of interest

Group Operation

1. We established and managed two online chat groups in tandem.

    (a) Group 1—named "Top Gun Peer Support Volunteer" consisted only of our volunteer group members and served as the forum where our members discussed the work.
    (b) Group 2—named "Wuhan Frontline Healthcare Professional Peer Support" included about 300 local healthcare workers from hospitals in Wuhan and surrounding cities in Hubei province, China. This was the platform for encountering Chinese healthcare professionals.

2. The volunteer team held weekly meetings to share experiences and concerns, discuss adjustments to current work to better serve the needs of group members, and develop future plans.
3. The volunteers held routine case discussions and had lectures from outside speakers.
4. The group provided peer support to our volunteer team members.

Service Operations

(1) Members signed up for 2-h shifts, covering up to 16 h daily. Most of our team members worked during the day and provided online psychological support primarily in the evening of their local time. Hours were reduced as the epidemic slowed down and eventually the project was closed.
(2) Due to the WeChat setting, once joining the group, one's avatar remained in the chat room till one left the group. There was no indication of one's status (if online or not), hence volunteers could not determine who might be a candidate for a private session. Hence, the strategy was that the volunteer would try to engage HCPs in the group setting, which contained 300 + members, then invited HCPs into a private chat after receiving some response. HCP could also contact a volunteer for a private chat.
(3) Members offered both individual and group support. We focused on engagement and general/group intervention in the group, then did individual intervention in private chats, which were shielded from the main group. Engaging the participants was the most challenging issue, especially at the beginning. This was due to following reasons:

    (a) *Culture* unlike Western culture, traditional Chinese culture does not encourage complaining, which is considered a sign of weakness
    (b) *Trust* it takes time to establish rapport with strangers
    (c) Stigmatization toward mental health conditions: considered as "weak" or "crazy"
    (d) Fear of government scrutiny or political repercussion
    (e) Burn-out from overloaded work

(4) Strategies and tools used:

    (a) Useful strategies of engagement:

    - Healthcare workers from Wuhan could use an alias in order to conceal their real identities (volunteer group members used real names). They could communicate with texting or talking, instead of by face to face
    - Volunteers strived to provide a loving, caring, and relaxing environment
    - Volunteers intentionally offered a certain amount of self-disclosure to help participants become more familiar with their peers
    - Volunteers coordinated, organized, and connected with local and national authorities to help the flow of information in an effort to get basic needs met
    - Volunteers sent messages daily with the content that "we are here, we care, we are listening…"

    (b) Psychological support tools:

    - Self-care, including eating and sleeping hygiene
    - Mindfulness techniques to relax and manage emotions
    - Active listening, empathy, and validation
    - Music therapy, sharing literature, traveling stories, personal anecdotal, etc.
    - Internal counseling and problem-solving among ourselves

Below is a description of the challenge we faced in the early phase of the project:

It was a very different situation we were encountering, which can be imagined in the following way: You are running a group, and you know who signed on, but you don't know who will come. When the time comes, you start the group with a blindfold covering your eyes. You can't see if there's anyone sitting in the room, nor you can hear anyone talking. You can't reach anyone, but can only wait till someone in the group reaches out to you.

So you start the group. You know participants are suffering, anxious, angry, distressed and devastated, afraid. You want to build up a safe harbor for them, a place where they can feel safe and supported. You need to think about a way to engage your silent audience, as you know they are there (although you don't know who) and you want to provide help.

You start to try different methods to engage them, such as playing some soothing music, talking about your life experience or previous relevant clinical situations, or giving tips about techniques for relaxing or sleep improvement. You also promise confidentiality and remind them gently that you are here to help and listen. Step by step, one by one, they reach out to you and talk to you in private, open up to you about their struggle, and you utilize your knowledge, experience, and heart to provide comfort. You get feedback from those with whom who you talked and much of the feedback is positive.

You feel somewhat overwhelmed about what you hear, which confirms some of the rumors circulating on various social medias which is not consistent with official news report. You appreciate that you have other teammates who support one another. You know it's a long battle.

Other Considerations

Exit Strategy and Referral

Crisis intervention is time-limited and therefore an exit plan or strategy should be in place. Connection with local mental health resources needs to be established for referrals, although the majority of the cases may not need long term follow up. There are two types of local referral sources, one is traditional local mental health agencies, and the other one is China-based mental health hotline.

Licensure Issue Needs to be Considered

Since this was a peer support service, it is not considered as "treatment" and thus protects professionals from being viewed as operating without proper licensure. We did not establish patient-professional relationships, we did not keep notes. This was strictly social support from a caring and concerned network. If clinical interventions are involved, then proper license would be required by different regulatory bodies.

Malpractice Insurance

This normally is not an issue when only crisis intervention of this type is involved, but we would recommend obtaining legal consult before starting such a service. If further clinical services are to be provided, malpractice insurance may be required.

Conflict of interest

Our group initiated this project out of a desire to help colleagues in Wuhan. There were no other interests involved, including political or monetary ones.

Discussion

As Elisabeth Kübler-Ross described the seven-stages of emotional responses to acute stressful events resulting in grief and loss (https://en.wikipedia.org/wiki/K%C3%BCbler-Ross_model), we have encountered these similar stages among people in Wuhan in general and in our served medical staff. In addition, we have observed other changes that may be unique to this particular epidemic.

Stage 1: Bewilderment	This occurs in the very early stage of the epidemic. There have been significant uncertainties, lack of transparency, critical deviation of perception from actual facts, and even accusatory sanction toward clinicians who shared their suspicion of some forms of infectious respiratory disease emerging in the early stage of the COVID-19 epidemic in Wuhan (December 8th 2019 to January 19th 2020). Such measures had increased bewilderment in general population, more specifically in health care providers.
Stage 2: Shock	This was a relatively brief, although it varies among individuals. The change from being rumor to verification of the COVID-19 infection occurred dramatically and reflected wrongdoing among certain provincial

and municipal administration and authorities. With an abrupt decision to lock down Wuhan, an emotional shock was inevitable and lasted in various durations.

Stage 3: Anger — Anger exists throughout the following several stages, especially after Dr. Li, Wenliang's tragic death. People continued to demonstrate more anger when more medical providers and citizens succumbed to COVID-19. Healthcare professionals were upset that they were not informed about the truth, and many of them were not aware of the severity of the illness and did not or were unable to take full actions to protect themselves and their families.

Stage 4: Anxiety

This stage lasts the longest and continued for the duration of this project. It included many worries:

1. Concern about one's own safety when directly face patients with COVID-19. This was heightened by the scarcity of PPE (Personal Protective Equipment) at the beginning stage when there were frequent close contacts with patients and coworkers who were infected.
2. Concern about one's own family members who might get infected and not receive adequate care
3. Concern about family members' wellbeing, especially when there was extended separation due to work duties and/or quarantines
4. Concern about the unknown, this was a new illness with no established treatment guidelines or known treatment
5. Concern about healthcare system overload and ineffective management
6. Concern about the locking down of the city
7. Concern about the political repercussion

Stage 5: Burn out

1. Hospital systems were overloaded and malfunctioning
2. Working for long hours exacerbated by the lack of PPE. In order to preserve the limited supplies, doctors and nurses would choose not to eat or drink so that they did not have to get changed while using bathroom.
3. Facing traumatic events, such as witnessing entire families die in succession after contracting the disease
4. Limited availability of lodging, heating, water, and food

Stage 6: Desperate

1. Thinking about giving up as a result of no prediction of end of the situation
2. Feeling hopeless and helpless
3. Passive death thoughts (rarely actual suicidal ideation)
4. Fear of getting infected and dying
5. Feeling abandoned (especially at the beginning of lockdown and other special situations)

Stage 7: Acceptance — Rising to face the reality, elevating hope as progress occurred—the entire nation was mobilized; the city and province changed leadership, new hospitals were built in stunning speed, and assistance from healthcare workers from other provinces arrived.

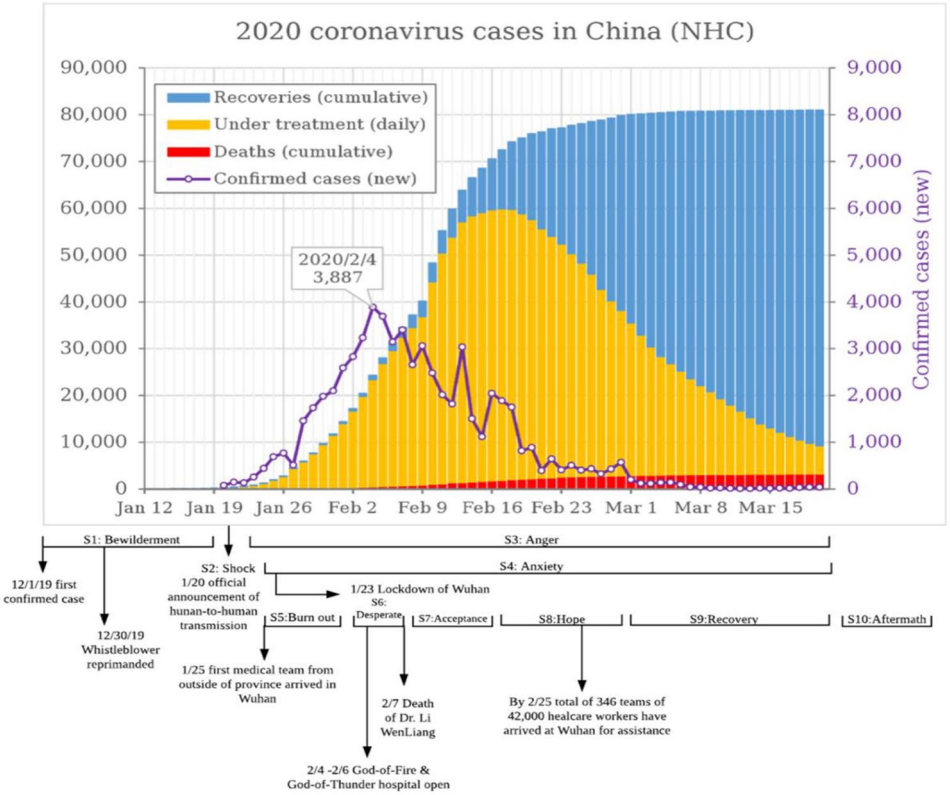
Stage 8: Hope — With more resources pouring in from all around the nation, by February 25, 2020, over 42,000 healthcare workers from other provinces had arrived in Wuhan to help fight the epidemic.

More effective procedures were put into place. With the growing number of recoveries, healthcare workers started to regain hope and confidence.

Stage 9: Recovery — Life starts to get back to normal. Physical and mental symptoms are mitigated as the situation improved. Healthcare providers present as less anxious and depressed; many are more hopeful. They start to review what happened and plan for the future.

Stage 10 (presumptive) — Aftermath. Most people get back to baseline; however, some of them progressed into long-term mental illness, such as PTSD (Maunder et al. 2006).

Our group started to intervene at Stage 3/4. By the end of this project most healthcare providers we were serving were in Stage 8/9.



Modified on original graph (https://en.wikipedia.org/wiki/2019%E2%80%9320_coronavirus_pandemic_in_mainland_China)

Conclusion

This was a unique experience. First, this crisis has lasted for months in China and continued to progress globally. This is unlike the other crises such as earthquake or volcano eruption, which last for shorter periods of time and leaving people to deal primarily with the aftermath. Therefore, people are exposed to continuous loss and trauma for a long period of time. Second, our approach was novel. There is little research on the use of social media for crisis intervention, despite the growing popularity of social media among all age groups. A PubMed search using key word "crisis intervention" and "social media" only found one article (Bailey et al. 2018). Although there are quite few very recently published articles discussing the mental health consequences of COVID-19 for both general public (Dong et al. 2020; Wang et al. 2020; Li et al. 2020; Ho et al. 2020) and healthcare personnel (Lai et al. 2020; Chen et al. 2020), including other online mental health services or telehealth approaches in China (Liu et al. 2020; Zhou et al. 2020), but our practice model is unique. Finally, this was a grassroots international effort comprised of volunteers. This demonstrates the value of peer support, even when the peers are fellow professionals.

Although we did not collect formal outcome data, and the results can only be considered anecdotal, there is some evidence indicating this might be a helpful intervention. The total number of the counseling group was stable at around 300 members throughout the whole course of the project. To our knowledge, this is the largest and most stable group of its kind in the country. Preliminary review suggests that many of those served found the intervention helpful.

Our experience has its limitation. First, the situation in China is unique. The outcome is influenced by the Chinese political and social infrastructure and cultural beliefs. While the central government was able to eventually mobilize and re-distribute a great number of healthcare professionals to support Wuhan, its censorship had a noticeable impact on the healthcare professionals, social media peer support group, and the particular modality of our intervention.

Culture was another factor. Traditional Chinese culture tends to value collectivism, and self-sacrificing for the society's good and dismisses emotional expression. This created more difficulty for engagement, especially at the beginning of our work. Furthermore, some of the topics raised in the chats were not considered appropriate for various of reasons, such as religious ones. The difference in time zones was also a barrier.

The World Health Organization declared Coronavirus as global pandemic on March 11, 2020. Many countries eventually had various degrees of lockdown. Hence, we believe that healthcare workers elsewhere would experience the similar mental health crises. The degree of impact will vary according each region or country's unique situation; therefore, we believe development of interventional strategies based on local experience might be needed.

Several important lessons were learned from this experience. First, was that "do no harm" was the top priority. We needed to consider both clinical and non-clinical factors to ensure we were providing help not harm. We found that stage 3/4 might be the best time point to intervene, as earlier, HCPs might not have the need, but later, HCPs already have experienced significant impairment. Social media provided easy accessibility, and anonymity to HCPs, it reduced barriers and resistance and improved engagement. But, the clinical skill we utilize during routine work, such as interviewing and psychotherapy techniques, were not directly applied to this setting without adjustment and flexibility.

In summary, our group mobilized quickly in response to the COVID-19 epidemic in Wuhan, China. We organized a group of active clinical mental health providers who were familiar with Chinese culture and were willing to voluntarily provide crisis peer-to-peer psychological support to the frontline healthcare providers in Wuhan. We utilized an existing social media platform. We found that it was, despite many challenges, an effective way to implement mental health support. This form of disaster outreach via social media requires further study for development and improvement in different settings. Nevertheless, in the time of COVID-19 pandemic, psychological support to the frontline responders and community is of paramount importance. Thus, we hope our work can shed some lights on effective mental health disaster outreach utilizing existing cyber technology to help workers fighting this unprecedented pandemic.

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