Practice Update – Social-psychological emergency response during Wuhan lockdown: Internet-based crisis intervention

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Abstract

Wuhan was completely locked down in 2020 because of the COVID-19 pandemic. Its residents were isolated, depressed. They were badly in need of information, advice, and psychological support. However, social and psychological services could only be provided by distance. The Social Workers Across Borders trained and supervised more than 120 volunteers to offer e-counselling services through WeChat platforms. The digital environment was very different from real life or even hotline settings. Wechat platforms, similar to that of WhatsApp, enabled multi-players, multi-media, and multi-directional exchanges for as many as 500 participants. They could raise questions, share information and offer opinions. Volunteers, composed of medical students, psychological counsellors, social workers, community workers, and lay community volunteers, were understandably not ready for the challenge. The teams found that traditional crisis intervention skills training, designed for face-to-face emotional support, was no longer sufficient to ensure satisfactory results in the digital environments. The current study, based on the analysis of the supervision records of the volunteers, discussed the hindering factors in providing Social Psychological e-services and proposed their respective solutions. A new mode of Social Psychological Emergency Response has emerged and our traditional training for respective responders needs to be revolutionized.

Keywords: *E-counselling, COVID-19, social work*

Introduction

The City of Wuhan, with a population of over 11 million, was locked down on January 23, 2020, due to the outbreak of a novel coronavirus, later named the COVID-19 by World Health Organization (WHO, 2021). Up to April 17, 2020, the total number of confirmed cases in Wuhan alone was recorded at 50,333, and the number of deaths reached 3,869, (XinhuaNet, 2020). Facing life-threatening risks, infected persons rushed for emergency care, leading to serious hospital cross-infection.

The Social Workers Across Borders (SWAB) trained and supervised more than 120 volunteers to provide Social Psychological e-counselling (SoPsy e-services) through WeChat group platforms from early January to April 2020. These teams attended a minimum of two and up to a maximum of eleven sessions. Some eager-to-learn volunteers hopped from one supervision session to another whenever they were available (Wong, 2020). In supervision, some members preferred to arrange the sessions within the same professional background, while others opted to maintain the composition of their original interdisciplinary team.

All supervisions were properly recorded by assigned secretaries mainly social work students. As supervisions were highly frequent, brief summaries were recorded instead of verbatim. There were altogether 38 sessions and the average length of supervision records counted up to 2,500 Chinese characters. Assistants were trained to identify Hindering Conditions and Unsatisfactory Effects, deriving from 38 supervision recordings with a total of 75,000 Chinese characters.

During supervisions, volunteers reported tremendous difficulties encountered at different stages of emergency response to this public health crisis. The nature of these difficulties was identified through analysing supervision records.

Social Psychological Emergency Response

Early studies on social psychological emergency response

The development of modern technologies has made it possible to study natural disasters in a global context since the 1980s (Seroka et al., 1986; Dufka, 1988; Banerjee & Gillespie, 1994). Early studies on disasters focused mainly on the roles and functions of the rescue aspects. The Kobe earthquake occurred on Jan 17, 1995, and the Chi-chi earthquake in Taiwan occurred on September 21, 1999, sparked more studies on the roles and functions social and psychological workers played in restoring survivors' mental health. In 2001, the United States 911 Terrorist Attack further exposed the need to develop a more systematic set of mental health guidelines to handle future catastrophes.

Iravani and Ghojavand (2005) identified, through the Iran earthquake experience, techniques social workers can apply in disaster settings. Situational supporting, hopefulness making, consoling, assuring, concentrating, and solution developing were ranked high on his list.

Table 1.
Albert Robert's ACT Model

A (Assessment):
1. Assessment/Appraisal of Immediate Medical Needs, Threats to public safety, and property damage
2. Triage Assessment, Crisis Assessment, Trauma Assessment and
3. Biopsychosocial and Cultural Assessment
C (Crisis response):
1. Connecting to support groups, the Delivery of Disaster Relief and Social Services,
2. Critical Incident Stress Debriefing (verly & Mitchell, 1999)
3. Crisis Intervention (Albert Roberts' Seven-Stage Model) Implemented,
4. Through Strengths Perspective and Coping Attempts Bolstered
T (Treatment):
1. Traumatic Stress Reaction, Sequelue, Posttraumatic Stress Disorders (PTSD);
2. Ten Step Acute Trauma and Stress Management Protocol (Lerner & Shelton);
3. Trauma Treatment Plan and Recovery Strategies Implemented;
4. Traumatic Stress Reaction, Sequelue, Posttraumatic Stress Disorders (PTSD);
5. Ten Step Acute Trauma and Stress Management Protocol (Lerner & Shelton);
6. Trauma Treatment Plan and Recovery Strategies Implemented;

Social work educators and practitioners in Asia, by developing the Disaster Actions Guidebook, stressed the importance of all disaster management stages from rescue to reconstruction. Chou et al. (2001) highlight the social workers' roles in her three stages of disaster social work: emergency response, recovery response, and preparedness response. Feng (2000) also stressed the significant functions social workers can perform in disaster work such as management of resources, planning, and advocacy, support to rescue workers, assessing clients' needs, and providing case management. These studies helped social workers to better master their roles when responding to disasters.

Albert R. Roberts, after experiencing the 911 Incident, presented an intervention framework superbly in his article: Assessment, Crisis intervention, and Trauma Treatment: the Integrative ACT Intervention Model. Robert's (2005, p150) ACT Model can be summarized in terms of the following components (See Table 1):

There are seven stages according to Roberts' technique of Crisis Intervention (CI), namely, assess lethality, establish rapport, identify problems, deal with emotions, explore alternatives, develop an action plan (including signing a contract for safety), and follow up. The ACT Model is an expansion of crisis intervention (CI), so to speak, and CI remains the core technique in the Model (Roberts & Everly, 2006).

Another technique listed in the ACT Model of Albert Robert was Critical Incident Stress Debriefing. In fact, George Everly and Jeffrey Mitchell (1999), by integrating knowledge from military psychology, have developed a full package of intervention tools—the Critical Incident Stress Management (CISM). Notably, the Crisis Management Briefing (CMB), among other tools is very useful in SoPsy e-services. CMB composes of 3 major steps: Introduction, Information, and Education. *Information* refers to the latest development of the incident and *Education* is about effective coping to mitigate stressful reactions. As CMB can be repeated and conducted through writing, voice messages, or video clips, it is particularly adaptable to the digital environment.

Procedure: Developing Digital SoPsy E-Services for Wuhan

SWAB provided supervision to a group of volunteers, using the ACT Crisis Intervention Model from Roberts (2000). The volunteers included community workers, medical students, psychological counsellors, and

professional social workers. They were recruited by a number of social work educators in Wuhan under the initiation of the China Association of Social Work Education. Later, they named themselves The Good Companion Team (Yuo, 2020).

The situation in Wuhan City lockdown posed significant restrictions to disaster response as all services needed to be migrated online with minimal support on the ground. There were also knowledge and training gaps for offering consultation and counselling in a digital environment. The resulting SoPsy e-services taken by SWAB and the volunteer teams are listed in Table 2.

Actions began with training

From January 23rd of 2020, citizens were not supposed to leave Wuhan without special reason by land, water, and air. This comprehensive and strict control over personnel outflow for the whole Hubei province was intended to contain the flow of the coronavirus. The city lockdownt marked the impact stage of the epidemic and SWAB was immediately drawn into action.

Formation of Interdisciplinary Teams

In organizing those information and counselling WeChat groups, social work educators and leaders in Wuhan realized that it was necessary to involve different areas of expertise. As this is a new coronavirus and we have little knowledge of its path and characteristics of infections. In the end, a *4+1 Structure* was adopted for these WeChat service teams (Yuo, 2020). There were four types of volunteers: one medical or nursing practitioner, one social worker normally as a team leader, one psychological counsellor, one social work assistant who took care of logistics plus one lay volunteer from the community who can help to provide material assistance on grounds (Yuo, 2020). Altogether, 120 volunteer counsellors were divided into 10 teams, and 38 supervision sessions were offered to these teams.

Table 2.
Training and supervision arranged by SWAB from January to April 2020

Date (2020)	Actions
Jan 22	*On-line Advocacy* SWAB published on the website The Appeal to Social Workers Action in response to the Novel Corona Virus 2019. It was advocated that social workers must rise to meet the challenges of this epidemic to protect and help the vulnerable groups.
Jan 25	*Online Volunteer Training* The training session was provided to the first batch of professional volunteers including medical students, social workers, and psychological counselors, with the theme of Conducting Crisis Interventions through web-based platforms.
Jan 28	*Recruiting Online Crisis intervention Supervisors* Around 20 experienced social workers, with CISM Basic Certificates in Assisting individuals and Group Crisis Intervention, were recruited to serve as supervisors, also on a voluntary basis. The supervision approach emphasizing “emotional support function” and the use of defusing techniques to lead supervision sessions was reiterated in supervisors' training.
Jan 29	*Online Training on Community Crisis Intervention* Second web-based training was provided for professional volunteers of Wuhan on the theme of Community based Crisis Intervention.
Jan 30	*Onsite Material Support* With the support of a Hong Kong Charitable Fund, SWAB was able to donate 120 Life Support Respirators and delivered them to 13 hospitals in Wuhan. Some medical protection supplies like hats and shoes wraps were also sent to these hospitals timely.
Feb 8	*Online Educational Resources* Two series of online courses on Crisis Intervention, one for social work educators and the other for healthcare social workers, were released through East China Institute of Technology Publishers. The series was commissioned by the China Association of Social Work Education. Each series is composed of 5 one-hour lectures.
Feb 15	*Online Community Resilience Training* Online training on Community Resilience was delivered to social workers and community workers serving on the ground in Wuhan. A Model of Community Emergency Response (AtCER) was formally introduced. Positive psychology programs (PPP) were also introduced and experiences were shared on how these programs could be organized to promote community recovery in Wuhan.
Feb 19 - 20	*Extended Online Social-Psychological Services* Social and psychological support was provided to 6 groups of Hong Kong residents in Hubei. Twenty-three social workers who had Hong Kong experience were recruited to help. Hong Kong residents had a lot of anxiety these days as they also experienced difficulties in getting daily supplies like milk powder, masks, and the prescribed medicine.
Feb 7 to Mar 15	*Online Supervisions* Supervision services were provided to professional volunteers groups including members of medical students, social workers, and psychological counselors. Up to March 15, more than 38 sessions of group supervision, averaging one hour per session, were conducted. Over 120 volunteers participated in the supervision sessions.

Hybrid Mode of Services

The primary aims of crisis intervention in the Wuhan single case were to connect medical care, save lives, provide shelters, maintain social distancing, provide food and restore a sense of security. These objectives could not be met by services entirely online. A hybrid model combing e-services and volunteers on the ground was adopted.

Both CMB and defusing techniques were used to develop helping relationships, through reference to Everly & Mitchell (1999). Ehrenreich and McQuaide (2001) suggested was targetting vulnerable groups such as women, children, and the elderly in disasters. There were 21.46% of Wuhan residents aged 60 (hb.qq.com, 2020). The SoPsy e-services targeted the older people in the community by forming special WeChat rooms for them.

Life-Saving Services and Subsistence Supplies

The response was developed primarily for the purpose to save lives and provide personal safety. The most pressing need belonged to medical care. To connect availability of hospital beds and solicit supplies of medical equipment were urgently demanded. In the meantime, quarantine enforcement had imposed tremendous strains on the city's capacity to assist vulnerable groups. Older people living by themselves, families with disabled persons, single parents who needed to look after their children when schools were closed, and people suffering from chronic diseases who could not go to regular hospital visits, all needed assistance. There were problems with getting food and daily supplies.

Connecting People and People and Psychological Comforting

Social-psychological services emphasized, first, social measures like linking resources, connecting people, particularly family members, friends and relatives, and bridging public and private capitals. People were under extreme stress. Quarantined people were uncertain about when normal life could be resumed, waiting patients were uncertain whether a hospital bed would be available and those hospitalized had good reasons to worry about whether they would die or recover.

Cultural Sensitive Modifications, Triage and Follow-Up

Another factor related to social and cultural assessment was the resistance to help-seeking. Wuhan people were proud of their history and considered help receiving as losing face. The SoPsy e-services tried to include volunteers who could speak the local dialects in order to break the cultural barriers. Crisis intervention put a lot of emphasis on assessments. A pressing task social workers had was to identify those who needed psycho-social support most. Eventually a non-structured, interactive mode of the general health questionnaire (GHQ12) was adopted to detect psychosomatic symptoms. The oriental culture found questions related to physical health easier to respond to and share with strangers. The SoPsy e-services were carried out from mid-January to the end of April when the city lockdown was lifted.

Observations: Difficulties in providing SoPsy e-services

There were many barriers reported by the volunteers for SoPsy e-services. Some clients did not have a stable network and many were multi-tasking while listening to the group chats. The WeChat group members were heterogeneous in the background and did not know each other. Lack of social trust among group members and towards volunteers made interventions even more difficult.

It was mentioned that the counsellors were not used to intervening online. Moreover, they were facing the clients not individually but in a big group setting. To man the online services, volunteer teams worked almost around the clock. The problems volunteers met in SoPsy e-services, the reasons for these problems, and the intended outcomes of the volunteers are discussed below.

Hindering Conditions

Hindering conditions refers to certain digital environments that inhibit e-services of either social and psychological nature. A list of derived from the analysis is shown in Table 3.

Unsatisfactory Effects

Unsatisfactory effects are the kind of social and psychological services the volunteers intended to do but were unable to deliver. More importantly, the volunteers reported the unsatisfactory effects of the digital environment that hinder their interventions. The above conditions provided definitions for research assistants to code the types of intended interventions reflected in the recordings. The resulting set of unsatisfactory effects are listed in Table 4.

Table 3.
Hindering Conditions in digital environments for SoPsy e-services

	Hindering Conditions
1	Group members did not have a stable network;
2	Group members did not know how to use their i-phones or applications efficiently, for example, the digital map;
3	Group members came and left the group chat without notifying the volunteers;
4	Group members who wanted to be anonymous did not even show their faces;
5	Some group members spoke dialects and it was impolite to ask them to repeat or ask others to interpret;
6	Group members did not show their social and economic background;
7	Group members did not want to start a dialogue;
8	Some group members did not show emotions through voice tunes;
9	Group members often kept silent at the volunteers' comments;
10	Group members, though living or working in Wuhan, did not know how to access public resources online;
11	Some group members did not trust the volunteers and showed help-shopping behaviors such as hopping from one to another WeChat group;

Table 4.
Unsatisfactory effects in digital environments for SoPsy e-services

	Unsatisfactory Effects
1	Could not fully understand the emotional state of the clients;
2	Difficult to conduct the cognitive and emotional assessment;
3	Difficult to build trust;
4	Difficult to express empathy;
5	Could not protect clients' privacy and confidentiality;
6	When group members quarreled and were in conflict, it was not possible to stop them by non-verbal means or other IT means;
7	Difficult to organize condolence services with proper symbolic logistics;
8	Difficult to provide grief counseling;
9	Difficult to work together as an interdisciplinary team without non-verbal interactions among the volunteers;
10	Difficult to follow up on individual needs etc.

Personal Privacy Concerns

Last but not least, in order to respect personal privacy, it was not possible to conduct grief counselling and assessment of Post Traumatic Stress Disorder (PTSD). This was regarded as the greatest handicap by psychological volunteers. Death is taboo in many cultures. In Chinese culture, it is also inappropriate to ask people to talk about the deaths of their loved ones. Culturally acceptable condolences, therefore, were important for emotional ventilation. Encouraging family members of the deceased patients to ventilate their emotions, under appropriate conditions, was not an easy task.

One of the ways to show condolences was to deliver concern messages under the umbrella of community information through the WeChat groups. Education on coping with grief was also provided in the form of written CMB. In case group members were facing emotional turmoil, volunteers would invite them for individual chatting. The use of individual counselling online increased in time after March 2020.

Nature of Difficulties

Although the teams provided SoPsy e-services as professionally as possible, numerous difficulties were reported by the volunteers when it was brought online. From Table 2, several hindering conditions could be categorized into the following areas:

1) Technical, relating to network and efficient use of digital devices;
2) Social, the social barriers created by digital devices for relationship building; and
3) Cultural, relating to the unwillingness to express emotions in public and the digital distance created greater social distance, particularly if they could be identified by other members of the group.

The list of *Unsatisfactory Effects* from Table 4 was also informative. They could be categorized also into the following areas:

1) Assessment: enabling the volunteers to understand the cognitive and emotional states of the group members;
2) Social supports: providing material resources or appropriate information;
3) Psychological comforting: to show empathy, condolences, emotionally supporting and comforting, etc.
4) Problem-solving: setting priorities and discussing alternatives.

Recommendations to Overcome Digital Barriers

Summary of Digital Barriers

As reported in Tables 3 and 4, there were three types of conditions and four types of unsatisfactory effects identified. Among hindering conditions, 1) technical, 2) social, and 3) cultural conditions appeared to be

Table 5
Barriers in digital environments for SoPsy e-services

Hindering Conditions	• Technical problems with the internet; • Language barriers and Social distances; • Amplified Cultural gaps between volunteers and service recipients
Undesirable Effects	• Inaccurate assessment; • Unabled social support; • Weakened psychological confronting; • Incomplete problem-solving discussion

prominent. A range of unsatisfactory effects, on the other hand, happened in 1) assessment, 2) social support, 3) psychological comforting, and 4) problem-solving.

To summarize both the hindering conditions and undesirable effects, obstacles facing Social and Psychological e-services could be categorized into three major areas. Consequently, solutions can be targeted at technical obstacles, social and cultural obstacles, and competence obstacles, as outlined below.

Technical Solutions

Purposefully designed e-Counselling Platform and Tools

To overcome technical hindrances to social psychological services, advancement of technologies and better education can help to eliminate the digital divide between populations different degrees of readiness for digital services. For example, the popularization of 5G technologies and the development of user-friendly mobile applications, definitely help. Technology is a road of no return and e-counselling must catch up with innovations.

Victims of disaster always wish to find their relatives and friends (Leung & Wong, 2005). Digital devices could facilitate the efficiency of connecting people other than resources. The WeChat platform appears to have strengthened bonding, bridging, and linking social capital for residents of Wuhan. As numerous medical professionals went online to provide free advice to Wuhan residents, proper branding through a reputable and professional digital platform would enhance social trust and facilitate their contribution.

Volunteers in the Wuhan e-service relied heavily on the WeChat platform. However, the social media platform was designed only for daily use. For e-services, it should include functions of individual chats and chat control like those of an online meeting room. Social workers could express their needs to platforms managers and promote the platform. To solve the problems of case follow-up, a kind of continuous chat could also be included. To facilitate assessment the social work platform could include certain tools of psychological tests. In short, there is much room for improvements in digital social work.

Digital Disaster Social Services

One major issue suggested by the findings of this single case study was the lagging behind and slow development of digital social work. In all disaster responses, the most important task at the impact stage is to allocate extremely scarce resources to the people who needed them most. Medical treatment, health information, and quarantine shelters are the most important needs among the residents of Wuhan, as reflected in this study. However, volunteers serving online had no access to information about the availability of these resources. An effective GIS platform showing a map of medical resources definitely helps. The GIS map could also allow people in need to input their demands for resources.

Social and Cultural Solutions

Local and external volunteers partnership

This concerns the need for partnership between local and non-local volunteers. Regional, national and international volunteers must collaborate with local NGOs and volunteers. Obviously, external social and psychological agencies will be more experienced in emergency responses. However, their weaknesses lie in the lack of local knowledge. They may need more time to tune in to the local contexts. Local volunteers, on the other hand, may have little experience in an emergency. They may not know how to intervene. Therefore, as early as the impact stage, advocacy for local and external intervention partnerships is required.

Formation of SoPsy Emergency Response Network

A long-term solution for overcoming social and cultural barriers requires the development of a standing volunteer network designed especially for social and psychological responses. Through regular conferences and other forms of exchange, mutual understanding can be enhanced for local culture and sub-cultures.

Competency Solutions

Special Training in online counselling skills

There is abundant literature on the effectiveness of e-counselling (Anderson et al., 2005; Vernmark et al., 2010). Reduction of resistance to professional counselling online can be achieved by sharpening e-communication skills among counsellors through proper training offered by counsellors with similar experiences.

Online courses on internet-based counselling skills

In the long run, specially designed courses on internet-based counselling can also be offered online. Recognition of these courses by professional bodies in the social work and counselling fields should be attained through proper accreditation.

Conclusion

In addition to practical measures outlined in the current paper, SoPsy e-service is also an emerging field for future research. Ann Wolbert Burgess, in her foreword for the Crisis Intervention Handbook 3rd edition (Roberts, 2005, p. vii) wrote: "But all mental health practitioners and graduate students have an overriding concern over community-wide disasters especially massive terrorist attacks and how to assess and provide crisis intervention services." In the same handbook, Dziegielewski and Powers highlighted the importance of evaluating crisis interventions and explains how to design respective research. Without a doubt, the COVID-19 outbreak was a massive community crisis in which innovative and pragmatic community crisis interventions were required. Post-disaster SoPsy e-service integrating medicine, digital technologies, sociology, psychology social work, and media technologies has established a new approach to emergency response in the digital society. Findings from the current study point to the need for further research in relevant areas of community crisis intervention.

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