

Case Report

A Mental Health First Aid Service in an Italian University Public Hospital during the Coronavirus Disease 2019 Outbreak

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Abstract: The recent outbreak of coronavirus disease 2019 (COVID-19) has been extremely stressful and has produced fear and anxiety throughout the population, representing a psychological emergency. This work aimed at presenting a mental health first aid service established within an Italian university public hospital context to address four different population targets (i.e., people vulnerable to mental health problems, health-care professionals, people in isolation, and general citizenship). Specifically, the organizational structure comprising four different areas (i.e., management, clinical, communication, and research) and first data collected from the foundation of the service until 3 May 2020 are presented. Findings indicated that anxiety and fear of contagion were the main motivations prompting both the general population and health-care professionals to ask for a psychological help. Furthermore, findings indicate that clients' current quality of life was perceived as lower than in the past but also that imagined in the future, highlighting the importance of psychological first aid interventions. This service may represent an example for helping mental health professionals in developing similar services in their local realities, promoting health and individual and community resilience.

Keywords: COVID-19; first aid; mental health; quality of life; psychological intervention

1. Introduction

According to the European Centre for Disease Prevention and Control (ECDC) [1], 4,766,468 cases of coronavirus disease 2019 (COVID-19) have been reported worldwide from 31 December to 19 May 2020, including 318,201 deaths. In Europe, until 19 May 2020, 1,317,267 cases were diagnosed, of which 157,312 of those infected died [2]. According to the latest statistics of the ECDC [3], in the European Union/ European Economic Area (EU/EEA) countries, 32% of the diagnosed cases were hospitalized, and among these, 2.4% suffered from severe symptoms. Hospitalization rates were higher in subjects 60 years of age or older.

In January 2020, the World Health Organization (WHO) defined the outbreak of COVID-19 as a public health emergency of international concern, a time when the infection was mostly limited to China. In March 2020, when COVID-19 was widespread in Europe and the USA, the WHO defined such an outbreak as a pandemic. Among European countries, Italy was reporting the highest number of COVID-19 cases after Spain, especially in the northern regions. Specifically, until 19 May 2020, among the 225,886 diagnosed cases, 32,007 persons died [2]. The Italian government declared the lockdown of the whole country on 9 March 2020, implementing restrictive measures (e.g., isolation, quarantine, social distancing) to contain the infection.

As the outbreak of COVID-19 may be stressful, producing fear and anxiety throughout the population [4,5], we established a mental health first aid service in an Italian university public hospital at the beginning of the COVID-19 outbreak in Italy, specifically at University of Naples Federico II. Thus, this case report aims at presenting the service, without attempting to report a validated model of intervention, for which the application of a rigorous research methodology would be necessary.

1.1. COVID-19 Outbreak and Mental Health

Regardless of physical suffering, it is not uncommon for individuals with confirmed or suspected COVID-19 to suffer from severe psychological pressure and serious health problems. Indeed, people with a real or suspected diagnosis of COVID-19 may experience loneliness, rejection, anxiety, depression, insomnia, and despair [6,7]. A potential increase in aggression and suicidal ideation or attempt has also been observed [5]. People in isolation (i.e., people forced to stay at home due to mild symptoms of COVID-19 or due to suspected, but not certified, infection) may suffer from anxiety due to uncertainty about their health and develop obsessive-compulsive symptoms, such as repeated temperature control and/or sterilization [5].

In addition, mandatory quarantine and frequent scrutiny by local authorities could cause social rejection, financial collapse, discrimination, and stigma [8,9]. Individuals with previous and serious mental illnesses are inevitably affected by the COVID-19 epidemic [6]. For example, inpatients, especially those needing long-term hospitalization, may experience severe anxiety about the risk of contagion. In addition, due to severe territorial restrictions and containment measures, outpatients with serious mental illnesses face challenges in obtaining maintenance treatment and may have significant relapses, experiencing hyperactivity, agitation, and self-harm [5]. Furthermore, first aid health-care professionals have close contact with infected patients and suffer from excessive workload. For this reason, they may be highly vulnerable to stress, fear, emotional disturbances, and sleep problems [10]. Moreover, health-care professionals are often dismissed as a potential source of contagion, being targeted as "contagious" or "dangerous" and, thus, they may experience additional sources of stress due to social prejudice and discrimination [10,11].

Due to the psychological emergency produced by the containment measures and the COVID-19 outbreak itself, from the beginning of the outbreak, many Italian psychological centers, both public and private, have opened online services aimed at providing psychological help to affected patients, their family members, and health-care professionals. The Italian Council of Psychologists Order launched a call for action for local task forces to dedicate services to health-care professionals working in COVID-19 units, citizens, and relatives of infected people. At the same time, many single private practitioners opened online platforms to provide psychological help. However, the offer became sparse and there was neither communication between services nor uniform communication to the population. It was only towards the end of the first phase of the outbreak that the Ministry of Health and the Civil Protection consolidated services for psychological support at a national level within the national health system to provide citizens with first-level psychological assistance. This service also provide the option of second-level psychological assistance through the involvement of the major national scientific psychotherapeutic societies.

During pandemics, mental health professionals should establish mental health services to provide support to people in need [6]. In this context, similar to COVID-19, psychological first aid (PFA) represents a crucial intervention, as it focuses on the mental health of people by providing psychosocial support [12]. PFA aims to mitigate acute distress and to provide immediate support [13]. Several PFA clinical protocols are available. As reported by Shah et al. [14], one of the most predominant protocols is the Johns Hopkins RAPID-PFA [15]. However, the National Child Traumatic Stress Network and National Center for PTSD protocol [16] and the protocol by McCabe et al. [16] are also recommended in the international literature.

The Johns Hopkins RAPID-PFA [15] protocol consists of five steps: (1) Rapport and reflective listening—this step is aimed at establishing rapport through reflective and active listening techniques; (2) Assessment—a step aimed at evaluating psychological and physical needs; (3) Prioritization, or rather evaluating the severity of cases needing emergent care; (4) Interventions—a step aimed at mitigating distress through cognitive and behavioral techniques; and (5) Disposition and follow-up—the final step ending with stabilization of the situation, which is accomplished by providing support, satisfying needs, and monitoring.

The National Child Traumatic Stress Network and National Center for PTSD protocol [16] consists of eight PFA core actions: (1) Contact and engagement, that is, initiating contacts in a nonintrusive and compassionate way; (2) Safety and comfort, or rather providing physical and emotional comfort; (3) Stabilization, which is aimed at calming and emotionally orienting people; (4) Information gathering on current needs and concerns, identifying immediate needs and concerns; (5) Practical assistance by addressing immediate needs and concerns; (6) Connection with social support through establishing contacts with primary support persons and other support sources (i.e., family members, friends, and/or community resources); (7) Information on coping, which is achieved by providing information about stress and coping strategies that may be used to reduce distress and increase adaptation; and (8) Providing links with collaborative services.

The protocol by McCabe et al. [17] is a competency-based model of PFA developed under the auspices of the Centers for Disease Control and Prevention and the Association of Schools of Public Health. This protocol highlights six PFA competency domains: (1) Initial contact, rapport building, and stabilization; (2) Brief assessment and triage; (3) Intervention; (4) Triage; (5) Referral, liaison, and advocacy; and (6) Self-awareness and self-care. For each competency domain, McCabe et al. [17] provided basic knowledge principles, skills to develop to address that competence, and attitudes to adopt in PFA.

To our knowledge, the only model of mental health first aid service specifically developed for the COVID-19 outbreak and described in an international paper is that by Zhang et al. [18]. This service was developed within the West China Hospital and represents an integrated model, as it involved physicians, psychiatrists, clinical psychologists, and social psychologists into internet platforms to provide psychological intervention to patients and their families, as well as to medical staff. Specifically, under the guide of mental health professionals, physicians provided psychological help to their patients, whereas social psychologists provided interventions aimed at addressing the difficulty in adaptation. Thus, interventions were developed to mitigate the fear of disease, increase adaptation, and address serious mental health problems. However, it is not clear which PFA clinical protocols were used by the authors. Through the app Huayitong and the applet Psyclub, the authors immediately had the possibility to register users, set appointments, and deliver PFA interventions. Additionally, the authors used a telephone line and the WeChat platform to get in contact all the physicians in the hospital with the psychologists working within the local territory.

In Italy, which is the context of the current work, to the best of our knowledge no other PFA services have been described until now. In the following, we will describe the architecture of the service, providing an explorative overview of first data achieved from the foundation of the service until 3 May 2020.

2. The Mental Health First Aid Service of the Federico II University Public Hospital: Architecture of the Service

The COVID-19 Emergency Psychological Service was established within the Intradepartmental Program of Clinical Psychology of the Federico II University Hospital in Naples (Italy), and has been delivering services to the Campania region, with a population of approximately 5,820,000 people. The service was officially launched on 10 March 2020, the day after the Italian government declared the lockdown of the whole country.

The team was comprised of 10 clinical psychologists with different backgrounds and specializations. Concerning theoretical backgrounds, team members practiced under psychodynamic, systemic-relational, or phenomenological clinical approaches, covering all developmental stages (i.e., children, adolescents, adults, and elders). Regarding specializations, four members were also researchers or university professors in clinical psychology and two were also psychiatrists. We chose to maintain clearly diversified functions, with the aim of covering the four main areas of the service, which were: (1) Management, (2) Clinical, (3) Communication, and (4) Research (Figure 1).



Figure 1. Architecture of the service.

2.1. Management

This part of the team handled all the bureaucratic issues that the service implied, such as liaising with the public hospital administration and overseeing the organizational structure of the service. The whole team held a meeting once a week on an online platform, with three objectives: (1) through an intervision structure, the team discussed the most challenging cases and the most appropriate procedures to adopt; (2) a representative of each area (i.e., management, clinical, communication, and research) provided updates on the work done during the previous week; and (3) every decision to be made was shared and a consensus was reached on how to proceed. In addition to meetings, we created a WhatsApp group to allow for constant contact and the making of urgent decisions.

As part of the Intradepartmental Program of Clinical Psychology of the Federico II University Hospital (approved by the General Direction of the University Public Hospital of Naples with resolution no. 3 of 9 January 2019), we automatically had the consent from hospital administrators to collect data in the same way we did for offline services. Data were collected after receiving informed consent from all users, who were informed about the research area of the service (see Research area). All users gave their oral consent to publish data in aggregate and anonymous form. The service was structured according to the EU General Data Protection Regulations and the principles of the Declaration of Helsinki on Ethical Principles for Medical Research Involving Human Subjects

2.2. Clinical Area

Members of this area had over 20 years of experience working in public mental health services and were responsible for providing PFA interventions to people who had access to the service. Primarily inspired by previous PFA clinical protocols [15–17], the general aims of PFA interventions were the following: (1) To assess the immediate needs and concerns of individuals, as well as their mental health status; (2) To provide emotional containment, or rather exploration, labeling, and first elaboration of emotions; (3) To promote safety and stabilization (if needed); (4) To connect individuals to existing sources of psychosocial well-being and mental health (e.g., religious groups, friends, or family members); (5) To provide information about stress and coping strategies useful for reducing distress and promoting adaptive functioning. Following in particular McCabe et al. [17], clinicians' interventions aimed at reducing a person's distress by using simple distraction, guidance, and advice. In some specific cases, clinicians performed more advanced clinical interventions, such as cognitive reframing and psychophysiological self-regulation approaches, providing guided relaxation techniques (e.g., breath focus, body scan, and guided imagery [19]); (6) To offer practical assistance (e.g., information about local services for specific needs); and (7) To explore family members' relationships and, when needed, provide practical advices and teach coping strategies to reduce the family's emotional burden.

Following the suggestions of Li et al. [5], we focused the PFA interventions on different segments of the population, differentiated by the degree of the psychological need, as reported in Figure 2. Due to the specific health needs of the health-care professionals working in COVID-19 units or in general hospitals [20], a team member was designated to be exclusively dedicated to this segment of the population.



Figure 2. Target population addressed by the service.

At an organizational level, people could call the telephone number or write an email to reach help when needed. The psychiatrist was available for consulting, if the clinical psychologist evaluated such a need (e.g., in case of suicide risk or for individuals with previous major psychiatric disorders and/or in psychopharmacological treatment). In this case, users were contacted by the psychiatrist after the clinical interview, with the aim of assessing the degree of the real suicide risk and/or to put users in contact with their local psychiatric services. Based on the service protocol, we offered one clinical interview, although in specific cases (e.g., severe vulnerability and distress), we had to offer more than one interview.

Members working in the communication area were responsible for disseminating information about the service to the public. To this end, contact was made with local newspapers, television channels, social networks, and local institutions (e.g., the Municipality of Naples), as well as the main national institutions, such as the website of the Ministry of Health. The service was also disseminated through the official website of the University Public Hospital Federico II of Naples and the University of Naples Federico II. Furthermore, almost every week, a popular article containing different psychological issues related to COVID-19 (e.g., psychological protective and risk factors for people in quarantine) was published on the official website of the Intradepartmental Program of Clinical Psychology. Finally, all local professional orders of health professions were informed about the service and were asked to share this information among their members. The service was disseminated throughout different segments of the population and, therefore, messaging was tailored for each segment. For example, information shared in newspapers and on television channels was addressed to the public and was particularly focused on the possible detrimental psychological effects of the quarantine. Local health professionals' orders were informed about the existence of a psychological service developed for health-care professionals working in COVID-19 units or in general hospitals. For this segment, potential psychological negative effects of workload, burnout, anxiety, and fear of contagion were stressed. The weekly articles published on the website of the Intradepartmental Program of Clinical Psychology were addressed to different segments of the population depending on content.

2.4. Research Area

This section of the team was tasked with creating an assessment procedure to depict the characteristics of the users who had access to the service. Due to the emergency condition, the team did not consider it appropriate to assess the effectiveness of the psychological intervention through a pre-, post-, and follow-up assessment procedure. Indeed, the urgency of aid applications did not allow us to ask users to complete questionnaires. However, the research team created a clinician-report sheet that allowing the clinical team to collect information on users' socio-demographic information, clinical dimensions detected by the clinician (e.g., anxiety, depression, suicidal ideation, etc.), and quality of life (QoL).

Regarding clinical dimensions, a series of predetermined options based on the scientific literature were provided [5,6,8–10,20]. However, clinicians were offered the possibility to specify in greater detail and describe other aspects of the clinical situation they detected. This allowed us to create other clinical dimensions, such as loneliness. Concerning QoL, we transformed a validated single-item question to assess the perceived current QoL [21] in three questions that asked the respondent to rate their QoL on a Likert scale ranging from 0 (*worst possible QoL*) to 10 (*best possible QoL*) before COVID-19, their current QoL, and their imagined QoL one year after the COVID-19 outbreak. We used these questions with two objectives: (1) as a prompt to activate a reflective thought on the actual situation compared with the past and the future, and to show users their potential psychological resources and increase hope for the future; and (2) as a validated measure to assess current QoL. All data were gathered using an online survey protected by a secure gateway to which only the team members had access and where they could easily include users' sociodemographic information, existential or clinical reasons leading them to contact the service, and QoL information.

3. Current Overview of the Service

3.1. Characteristics of Users

From 10 March to 3 May 2020, 135 users (41 men and 94 women) accessed the PFA interventions provided by the service. The total sample ranged from 18 to 84 years of age (M = 45.81, SD = 16.89).

Most users (n = 98; 72.6%) were from the public (Level 4), 7 were (5.18%) family members of a hospitalized relative (Level 3), and 30 (22.2%) were health-care professionals (Level 1). No people in

strict isolation (Level 2) contacted our service. Among the health-care professionals, 24 were nurses (1 of whom worked in an intensive care department), 4 were physicians, 1 was a social-health worker, and 1 was a retired radiology technician. Of the 30 health-care professionals, 46.6% (n = 14) worked in a unit specifically dedicated to COVID-19.

The main way to get in contact with the service was via telephone (n = 126; 93.3%) and the interviews lasted an average of 29.18 (SD = 10.49) minutes. Users declared to have obtained information about our service from different sources. Specifically, 28.1% (n = 38) learned about the service via social networks, 12.6% (n = 17) through internet research, 10.4% (n = 14) through the website of the Municipality of Naples, 14.1% (n = 19) through an acquaintance, 20.7% (n = 28) through the emails sent to them by Health Professional Orders, and 14.1% (n = 19) through television or institutional channels (e.g., official website of the University Public Hospital of Naples).

3.2. Clinical Dimensions Detected

During the clinical interviews, psychologists assessed what prompted users to ask for psychological help. They determined that anxiety was the main motivation (n = 69; 51.1%), followed by loneliness (n = 35; 25.9%), depressive symptoms (n = 28; 20.7%), fear of contagion (n = 23; 17%), stress symptoms (n = 22; 16.3%), sleep disorders (n = 19; 14.1%), trauma (n = 16; 11.8%), social disease (n = 11; 8.1%), suicidal ideation (n = 7; 5.2%), and psychomotor agitation (n = 5; 3.7%). No users expressed the intention to attempt suicide. Two clinical reasons were detected for 33 (24.4%) users, and three or more clinical reasons were detected for 24 (17.8%) users.

Due to the evidence that health-care professionals experience specific health and social needs during the COVID-19 outbreak [19], we split the sample into two main categories (health-care professionals vs. general population) with the aim of detecting potential differences (see Table 1). Due to the relatively low number of users belonging to Level 3 and the absence of users belonging to Level 2, it was not possible to split the sample into the four levels differentiated by Liu et al. [20].

Clinical Reasons	Health-Care Professionals	General Population	χ^2
	n(%)	n(%)	
Anxiety symptoms	13(43.3)	56(53.3)	0.95
Loneliness	4(13.3)	31(23.5)	2.78 *
Depressive symptoms	_	28(26.6)	_
Fear of contagion	15(50)	8(7.6)	20.25 ***
Stress symptoms	3(10)	19(18.1)	1.65
Sleep disorders	1(3.3)	18(17.1)	2.63
Trauma	—	16(15.2)	—
Social disease	_	11(10.5)	_
Suicidal ideation		7(6.6)	_
Psychomotor agitation	2(6.6)	3(2.8)	0.86

Table 1. Clinical dimensions detected by psychologists differentiated by general population and health-care professionals.

*** p < 0.001; * p < 0.05. Note: Dashes indicate that clinicians did not detect that specific clinical reason.

As shown in Table 1, anxiety was the main motivation prompting the general population to ask for psychological help. For health-care professionals, their main motivation to access the service was to address their fear of contagion, followed by anxiety symptoms. However, anxiety and fear of contagion may be considered as strongly related dimensions, as anxiety might arise from fear of contagion [8]. Furthermore, it seemed to emerge that fear of contagion was higher in health-care professionals than in the general population (50% vs. 7.6%), while loneliness was higher in the general population than in health-care professionals (23.5% vs. 13.3%).

3.3. Past, Present, and Future Quality of Life

Future QoL

As reported in Table 2, it seems that actual QoL was perceived by users as worse than both in the past and what they imagine for the future. However, users imagined (hope for) a better QoL than both the present and the past, F = 27.85, p < 0.001. After splitting the sample, this trend seems to be confirmed only for the general population, but not for health-care professionals. Notably, QoL was imagined in the future as better than the current state but worse than the past for this segment. Indeed, using the student's t-test, contrary to both the past QoL, t (133) = -0.36, p = 0.826, and the present QoL, t (133) = -0.34, p < 0.651, for which no differences between sub-groups were detected, the values attributed to future QoL resulted higher in general population than in health-care professionals, t (133) = 2.93, p < 0.001. These findings are reported in graphic form in Figure 3. However, such differences must be read with caution, as the sample size is small and the measures, apart from the assessment of current QoL, are not previously validated.

	Total	General Population	Health-Care Professional
QoL	M(SD)	M(SD)	M(SD)
Past QoL	6.62(2.32)	6.60(2.38)	6.71(2.14)
Present QoL	4.02(2.51)	4.01(2.59)	4.05(2.28)

7.29(2.15)

Table 2. Past, present, and future quality of life.

Note: QoL = Quality of Life; M = Mean; DS = Standard Deviation.

7.64(1.28)

6.12(1.32)



Figure 3. Past, present, and future quality of life in general population and health-care professionals.

4. Discussion

The current work presents the architecture of a mental health first aid service founded within the University Public Hospital Federico II of Naples. As described, we developed a structured system with clear roles and functions, which until now has guaranteed the possibility to answer very different requests and psychological difficulties. However, due to the emergency nature of the service, it was not possible to implement a complex system allowing us assess the real effectiveness of our actions. Notwithstanding, all members involved in the service have a wealth of experience in the mental health field and clinical research. Despite this limitation, our data show interesting trends that could help improve mental health first aid services during the COVID-19 outbreak.

The service described in the current work is in line with previous PFA clinical protocols objectives and techniques [15–17], as it grounded within the tradition of the psychological crisis interventions [12,13]. However, compared with the service described by Zhang et al. [18], our service was lacking a strong informatic background. For example, no app has been created to support PFA interventions or to put physicians of the hospital in contact with psychologists working within the local territory, as the team itself provided PFA interventions. Similarly, we have neither involved social psychologists nor trained physicians to psychologically support patients. However, it is not possible to affirm that one method was more effective than the other, as neither of the two services focused on evaluating the effectiveness of the interventions. Future studies should consider assessing the actual success of their interventions and evaluate the role of different professionals and methods in that success.

Concerning users' characteristics, our data seemed to show that a strong effort should be made to engage individuals belonging to Level 2 (i.e., people in isolation). It is highly probable that people in isolation did not have access to our service due to the relatively low number of such individuals in our specific region. To illustrate, on 12 May 2020, a total of 1443 people out of a population of almost 6 million living in Campania were in isolation, indicating that few people were forced into isolation. Another interesting point is that users preferred to contact the service via telephone rather than Skype or WhatsApp, which may indicate an immediate need to contact the clinician. This may also have been an effect of our communication procedures, as we particularly highlighted the possibility of calling or leaving a voicemail message. Importantly, a recent systematic review reported that no scientific evidence was found demonstrating that clinical interviews conducted by telephone have a negative effect on the interactional aspects on which vis-à-vis psychotherapies are based, thus supporting their effectiveness [22].

Regarding the clinical reasons that prompted users to contact the service, team members reported that anxiety was the main motivation, as more than half of users declared to have anxiety symptoms. This is in line with findings from Wang et al. [23], who found that, among 1210 Chinese respondents, anxiety (28.8%) was reported in higher rates compared with depressive symptoms (16.5%) and stress (8.1%). Concerning health-care professionals, the reason for the higher prevalence of fear of contagion (and its associated anxiety) among this group may be that they work in contexts where the likelihood of being infected by coronavirus is extremely high and personal protective equipment for COVID-19 is not always effective. Moreover, access to such equipment has often been lacking in healthcare settings [24], as denounced by Italian health-care professionals and the International Council of Nurses [25]. Another important finding is that no users declared to have attempted suicide. This finding is not easy to interpret. However, a possible explanation is that people (i.e., caregivers), in the face of a suicide attempt, prefer to refer to a psychiatric service rather than a psychological one. Notwithstanding, every effort must be made to reach this high-risk population, possibly through advertisements that inform readers the service also deals with this problematic issue.

Our findings also seem to reveal that current QoL was perceived as lower than in the past and what is imagined for the future. This finding is in line with the scientific literature highlighting the detrimental role of COVID-19 on both physical and mental health [8–10]. Notably, health-care professionals seemed to be less optimistic about their future QoL than the general population. This may be explained through the fact that health-care professionals work on the frontline and they represent the population most at risk of all the others. Indeed, as reported by Remuzzi and Remuzzi [26], approximately 20% of Italian health-care professionals have become infected, and some have died. However, our findings must be read with caution, as only current QoL was measured through a validated single-item question. Future studies should consider including validated measures and/or questions about respondents' hope towards the future.

5. Conclusions and Future Perspectives

The COVID-19 Emergency Psychological Service of the University Public Hospital of Naples was created to provide a psychological response to the COVID-19 outbreak. However, the service was created during the first phase of the COVID-19 emergency, in a period in which stricter containment measures were adopted by the Italian government. The situation is constantly changing, and containment measures will be gradually reduced. Notwithstanding, we believe that our service, due to its flexibility, may be easily applied even in the later stages of the virus containment measures. However, it is very likely that, in the near future, vis-à-vis psychological interviews will be possible but, at the same time, avoiding an excessive rate of physical contacts will become equally necessary to contain the risk of a second wave of infections. If so, we would suggest adopting the recommendations by Jiang et al. [27], who stated that vis-à-vis psychological interventions should be performed only with people belonging to Levels 1 and 2; otherwise, online or telephone psychological interventions should be recommended for individuals included in Levels 3 and 4.

Our experience suggests that a great effort must be made to reach health-care professionals. Indeed, it seems urgent to help such a population to increase their hope about the future, gaining leverage through their psychological resources. To this end, as suggested by the WHO and the International Labour Organization [28], local task forces of psychologists should provide training and supervision for the health-care professionals and help them reflect on how to emotionally and psychologically respond during a catastrophic event, such as the COVID-19 outbreak. In addition, as suggested by the International Federation of Red Cross and Red Crescent Societies [29], health-care providers should be trained in optimally managing their psychological responses to disasters to activate personal and social protective factors that may improve their resilience. On the other hand, it is known that stress and anxiety are also strongly related to one's work environment and that developing interventions that consider work environments may be effective for reducing burnout [30]. As suggested by Dewey et al. [31], health-care organizations should provide information on how to manage stress and reduce burnout and make a point of sharing stories of success rather than of stress and failures. Dewey et al. [31] suggested professionals develop evidence-based interventions and adapt them to specific workplace settings, as a supportive work culture is considered vital to increasing the resilience of health-care professionals during a crisis, such as COVID-19. Sultana et al. [32] provided useful suggestions to develop evidence-based intervention addressing burnout during this pandemic. To summarize, such interventions may include increasing the awareness of burnout and work-related stress, ensuring efficient mental health services, promoting mindfulness, using digital technologies to deliver mental health interventions and address work-related stress, and improving organizational practices and policies addressed to emphasize the need of coping with stress and anxiety among health-care providers. Additionally, as anxiety and stress experienced by health-care professionals may be due to different individual and/or organizational sources, future research should consider investigating in more detail what exactly causes their distress, such as assessing the role of leadership, hostility from the population, work overload, lack of protective clothes, family support, and other factors placed at an individual level.

We hope that our service description may help mental health professionals in developing similar services in their local realities to promote health and individual and community resilience.

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References

- 1. European Centre for Disease Prevention and Control. Situation Update Worldwide. Available online: https://www.ecdc.europa.eu/en/geographical-distribution-2019-ncov-cases (accessed on 12 May 2020).
- 2. European Centre for Disease Prevention and Control. Situation Update for the EU/EEA and the UK. Available online: https://www.ecdc.europa.eu/en/cases-2019-ncov-eueea (accessed on 12 May 2020).
- 3. European Centre for Disease Prevention and Control. Rapid Risk Assessment: Coronavirus Disease 2019 (COVID-19) Pandemic: Increased Transmission in the EU/EEA and the UK–Seventh Update. Available online: https://www.ecdc.europa.eu/sites/default/files/documents/RRA-seventh-update-Outbreak-of-coronavirus-disease-COVID-19.pdf (accessed on 18 April 2020).
- 4. World Health Organization. Mental Health and Psychosocial Considerations during the COVID-19 Outbreak. Available online: https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf (accessed on 18 April 2020).
- Li, W.; Yang, Y.; Liu, Z.H.; Zhao, Y.J.; Zhang, Q.; Zhang, L.; Cheung5, T.; Xiang, Y.T. Progression of mental health services during the COVID-19 outbreak in China. *Int. J. Biol. Sci.* 2020, *16*, 1732–1738. [CrossRef] [PubMed]
- 6. Xiang, Y.T.; Yang, Y.; Li, W.; Zhang, L.; Zhang, Q.; Cheung, T.; Ng, C.H. Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. *Lancet Psychiatry* **2020**, *7*, 228–229. [CrossRef]
- 7. Yao, H.; Chen, J.H.; Xu, Y.F. Patients with mental health disorders in the COVID-19 epidemic. *Lancet Psychiatry* **2020**, *7*, 21. [CrossRef]
- 8. Brooks, S.H.; Webster, R.K.; Smith, L.E.; Woodland, L.; Wessely, S.; Greenberg, N.; Rubin, G.J. The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *Lancet* **2020**, *395*, 912–920. [CrossRef]
- 9. Shigemura, J.; Ursano, R.J.; Morganstein, J.C.; Kurosawa, M.; Benedek, D.M. Public responses to the novel 2019 coronavirus (2019-nCoV) in Japan: Mental health consequences and target populations. *Psychiat. Clin. Neuros.* **2020**, *74*, 281–282. [CrossRef] [PubMed]
- Kang, L.; Li, Y.; Hu, S.; Chen, M.; Yang, C.; Yang, B.X.; Wang, Y.; Hu, J.; Lai, J.; Ma, X.; et al. The mental health of medical workers in Wuhan, China dealing with the 2019 novel coronavirus. *Lancet Psychiatry* 2020, 7, e14. [CrossRef]
- 11. Ramaci, T.; Barattucci, M.; Ledda, C.; Rapisarda, V. Social Stigma during COVID-19 and its impact on HCWs outcomes. *Sustainability* **2020**, *12*, 3834. [CrossRef]
- 12. Yeager, K.R.; Roberts, A.R. *Crisis Intervention Handbook. Assessment, Treatment, and Research,* 4th ed.; Oxford University Press: New York, NY, USA, 2015.
- 13. Everly, G.S.; Flynn, B.W. Principles and practical procedures for acute psychological first aid training for personnel without mental health experience. *Int. J. Emerg. Ment. Health* **2006**, *8*, 93–100.
- 14. Shah, K.; Kamrai, D.; Mekala, H.; Mann, B.; Desai, K.; Patel, R.S. Focus on mental health during the Coronavirus (COVID-19) pandemic: Applying learnings from the past outbreaks. *Cureus* **2020**, *12*, e7405. [CrossRef]
- 15. Everly, G.S.; Barnett, D.J.; Links, J.M. The Johns Hopkins model of psychological first aid (RAPID-PFA): Curriculum development and content validation. *Int. J. Emerg. Ment. Health* **2012**, *14*, 95–103.
- 16. National Center for Child Traumatic Stress Network and National Center for PTSD, U.S. Department of Veterans Affairs. *Psychological First Aid: Field Operations Guide*, 2nd ed.; 2006. Available online: http://www.ncptsd.va.gov/ncmain/index.jsp (accessed on 6 May 2020).
- McCabe, O.L.; Everly, G.S., Jr.; Brown, L.M.; Wendelboe, A.M.; Abd Hamid, N.H.; Tallchief, V.L.; Links, J.M. Psychological first aid: A consensus-derived, empirically supported, competency-based training model. *Am. J. Public Health* 2014, 104, 621–628. [CrossRef] [PubMed]
- Zhang, J.; Wu, W.; Zhao, X.; Zhang, W. Recommended psychological crisis intervention response to the 2019 novel coronavirus pneumonia outbreak in China: A model of West China Hospital. *Precis. Clin. Med.* 2020, 3, 3–8. [CrossRef]
- 19. Corliss, J. Six Relaxation Techniques to Reduce Stress. Harvard Health Publishing, 2019. Available online: https://www.health.harvard.edu/mind-and-mood/six-relaxation-techniques-to-reduce-stress (accessed on 18 April 2020).
- 20. Liu, S.; Yang, L.L.; Zhang, C.X.; Xiang, Y.T.; Liu, Z.; Hu, S.; Zhang, B. Online mental health services in China during the COVID-19 outbreak. *Lancet Psychiatry* **2020**, *7*, e17–e18. [CrossRef]

- 21. de Boer, A.G.E.M.; van Lanschot, J.J.B.; Stalmeier, P.F.M.; van Sandick, J.W.; Hulscher, J.B.F.; de Haes, J.C.J.M.; Sprangers, M.A.G. Is a single-item visual analogue scale as valid, reliable and responsive as multi-item scales in measuring quality of life? *Qual. Life Res.* **2004**, *13*, 311–320. [CrossRef] [PubMed]
- 22. Irvine, A.; Drew, P.; Bower, P.; Brooks, H.; Gellatly, J.; Armitage, C.J.; Barkham, M.; McMillan, D.; Bee, P. Are there interactional differences between telephone and face-to-face psychological therapy? A systematic review of comparative studies. *J. Affect. Disord.* **2020**, *26*, 120–131. [CrossRef]
- 23. Wang, C.; Pan, R.; Wan, X.; Tan, Y.; Xu, L.; Ho, C.S.; Ho, R.C. Immediate psychological responses and associated factors during the initial stage of the 2019 Coronavirus Disease (COVID-19) epidemic among the general population in China. *Int. J. Environ. Res. Public Health* **2020**, *17*, 1729. [CrossRef]
- 24. Mason, D.J.; Friese, C.R. Protecting health care workers against COVID-19—And being prepared for future pandemics. *JAMA Health Forum* **2020**, *1*, e200353. Available online: https://jamanetwork.com/channels/health-forum/fullarticle/2763478 (accessed on 18 April 2020).
- 25. International Council of Nurses. High Proportion of Healthcare Workers with COVID-19 in Italy Is a Stark Warning to the World: Protecting Nurses and Their Colleagues Must Be the Number One Priority. Available online: https://www.icn.ch/news/high-proportion-healthcare-workers-covid-19-italy-stark-warning-world-protecting-nurses-and (accessed on 18 April 2020).
- 26. Remuzzi, A.; Remuzzi, G. COVID-19 and Italy: What next? Lancet 2020, 395, 1225–1228. [CrossRef]
- 27. Jiang, X.; Deng, L.; Zhu, Y.; Ji, H.; Tao, L.; Liu, L.; Yang, D.; Ji, W. Psychological crisis intervention during the outbreak period of new coronavirus pneumonia from experience in Shanghai. *Psychiatry Res.* **2020**, *286*, 112903. [CrossRef]
- 28. WHO and the International Labour Organization. Occupational Safety and Health in Public Health Emergencies: A Manual for Protecting Health Workers and Responders. Available online: https://www.who.int/occupational_health/Web_OSH_manual.pdf (accessed on 18 April 2020).
- 29. International Federation of Red Cross and Red Crescent Societies. Mental Health and Psychosocial Support for Staff, Volunteers and Communities in an Outbreak of Novel Coronavirus. 2020. Available online: https://pscentre.org/wp-content/uploads/2020/02/MHPSS-in-nCoV-2020_ENG-1.pdf (accessed on 18 April 2020).
- 30. Yeager, K.R. Trauma support services for healthcare workers: The Stress, Trauma and Resilience (STAR) program. In *Crisis Intervention Handbook. Assessment, Treatment, and Research,* 4th ed.; Yeager, K.R., Roberts, A.R., Eds.; Oxford University Press: New York, NY, USA, 2015; pp. 609–633.
- 31. Dewey, C.; Hingle, S.; Goelz, E.; Linzer, M. Supporting clinicians during the COVID-19 pandemic. *Ann. Intern. Med.* **2020**. Epub ahead of print. [CrossRef]
- 32. Sultana, A.; Sharma, R.; Hossain, M.D.M.; Bhattacharya, S.; Purohit, N. Burnout among healthcare providers during COVID-19 pandemic: Challenges and evidence-based interventions. *SocArXiv* **2020**. Available online: https://ideas.repec.org/p/osf/socarx/4hxga.html (accessed on 7 May 2020). [CrossRef]



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